

Registration form

Spider Control CEU Training \$150.00
48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00
Rush service does not include overnight delivery or FedEx fees.

Start and finish dates: _____

You will have 90 days from this date in order to complete this course

Print Name _____

I have read and understood the disclaimer notice found on pages 4 & 7. Signature is required.
You can electronically sign with XXX

Signature _____

Address: _____

City _____ State _____ Zip _____

Phone:

Home (____) _____ Work (____) _____

Fax (____) _____ Email _____

License or

Operator ID # _____ Exp. Date _____

Class/Grade _____

Please circle/check which certification you are applying the course CEU's.

Commercial Applicator _____ Residential Applicator _____ Industrial Applicator _____

Pesticide Handler _____ Agricultural Applicator _____ Adviser _____ Other _____

Your certificate will be mailed to you in about two weeks.

Technical Learning College
P.O. Box 420, Payson, AZ 85547-0420
Toll Free (866) 557-1746 Fax (928) 272-0747 E-Mail info@tlch2o.com

Discover card _____ CCV code on card _____

American Express

Master Card / Visa Card # _____ Exp. Date _____

If you've paid on the Internet, please write your Customer # _____

We will stop mailing the certificate of completion we need your e-mail address. We will e-mail the certificate to you, if no e-mail address; we will mail it to you.

DISCLAIMER NOTICE

I understand that it is my responsibility to ensure that this CEU course is either approved or accepted in my State for CEU credit. I understand State laws and rules change on a frequent basis and I believe this course is currently accepted in my State for CEU or contact hour credit, if it is not, I will not hold Technical Learning College responsible. I also understand that this type of study program deals with dangerous conditions and that I will not hold Technical Learning College, Technical Learning Consultants, Inc. (TLC) liable for any errors or omissions or advice contained in this CEU education training course or for any violation or injury caused by this CEU education training course material. I will call or contact TLC if I need help or assistance and double-check to ensure my registration page and assignment has been received and graded.

State Approval Listing Link, check to see if your State accepts or has pre-approved this course. Not all States are listed. Not all courses are listed. If the course is not accepted for CEU credit, we will give you the course free if you ask your State to accept it for credit.

State Approval Listing URL...

<http://www.tlch2o.com/PDF/CEU%20State%20Approvals.pdf>

You can obtain a printed version of the course manual from TLC for an additional \$79.95 plus shipping charges.

AFFIDAVIT OF EXAM COMPLETION

I affirm that I personally completed the entire text of the course. I also affirm that I completed the exam without assistance from any outside source. I understand that it is my responsibility to file or maintain my certificate of completion as required by the state or by the designation organization.

Grading Information

In order to maintain the integrity of our courses we do not distribute test scores, percentages or questions missed. Our exams are based upon pass/fail criteria with the benchmark for successful completion set at 70%. Once you pass the exam, your record will reflect a successful completion and a certificate will be issued to you.

For security purposes, please fax or e-mail a copy of your driver's license and always call us to confirm we've received your assignment and to confirm your identity.

Thank you...

CUSTOMER SERVICE RESPONSE CARD

Spider Control Training Course

NAME: _____

E-MAIL _____ PHONE _____

PLEASE COMPLETE THIS FORM BY CIRCLING THE NUMBER OF THE APPROPRIATE ANSWER IN THE AREA BELOW.

1. Please rate the difficulty of your course.
Very Easy 0 1 2 3 4 5 Very Difficult

2. Please rate the difficulty of the testing process.
Very Easy 0 1 2 3 4 5 Very Difficult

3. Please rate the subject matter on the exam to your actual field or work.
Very Similar 0 1 2 3 4 5 Very Different

4. How did you hear about this Course? _____

5. What would you do to improve the Course?

How about the price of the course?

Poor _____ Fair _____ Average _____ Good _____ Great _____

How was your customer service?

Poor _____ Fair _____ Average _____ Good _____ Great _____

Any other concerns or comments.

Important Information about this Course (Disclaimer Notice)

This CEU course has been prepared to educate pesticide applicators and operators in general safety awareness of dealing with the often-complex and various pesticide treatment sprays, devices, methods, and applications. This course (manual) will cover general laws, regulations, required procedures and accepted policies relating to the use of pesticides and herbicides. It should be noted, however, that the regulation of pesticides and hazardous materials is an ongoing process and subject to change over time. For this reason, a list of resources is provided to assist in obtaining the most up-to-date information on various subjects. This manual is not a guidance document for applicators or operators who are involved with pesticides. It is not designed to meet the requirements of the United States Environmental Protection Agency or your local State environmental protection agency or health department. This course manual will provide general pesticide safety awareness and should not be used as a basis for pesticide treatment method/device guidance. This document is not a detailed pesticide informational manual or a source or remedy for poison control.

Technical Learning College or Technical Learning Consultants, Inc. makes no warranty, guarantee or representation as to the absolute correctness or appropriateness of the information in this manual and assumes no responsibility in connection with the implementation of this information. It cannot be assumed that this manual contains all measures and concepts required for specific conditions or circumstances. This document should be used for educational purposes only and is not considered a legal document. Pesticides are poisonous. Always read and carefully follow all precautions and safety recommendations given on the container label. Store all chemicals in the original labeled containers in a locked cabinet or shed, away from food or feeds, and out of the reach of children, unauthorized persons, pets, and livestock.

Confine chemicals to the property or plants being treated. Avoid drift onto neighboring properties, especially gardens containing fruits and/or vegetables ready to be picked. Dispose of empty containers carefully. Follow label instructions for disposal. Never reuse containers. Make sure empty containers are not accessible to children or animals. Never dispose of containers where they may contaminate water supplies or natural waterways. Do not pour down sink or toilet. Consult your county agricultural commissioner for correct ways of disposing of excess pesticides. You should never burn pesticide containers.

Individuals who are responsible for pesticide storage, mixing and application should obtain and comply with the most recent federal, state, and local regulations relevant to these sites and are urged to consult with the EPA and other appropriate federal, state and local agencies.

USE PESTICIDES WISELY: ALWAYS READ THE ENTIRE PESTICIDE LABEL CAREFULLY, FOLLOW ALL MIXING AND APPLICATION INSTRUCTIONS AND WEAR ALL RECOMMENDED PERSONAL PROTECTIVE GEAR AND CLOTHING. CONTACT YOUR STATE DEPARTMENT OF AGRICULTURE FOR ANY ADDITIONAL PESTICIDE USE REQUIREMENTS, RESTRICTIONS OR RECOMMENDATIONS.

NOTICE: MENTION OF PESTICIDE PRODUCTS IN THIS COURSE DOES NOT CONSTITUTE ENDORSEMENT OF ANY MATERIAL OR HERB OR HERBAL SUPPLEMENT. ALWAYS FOLLOW THE PRODUCT'S LABEL INSTRUCTIONS.

NOTICE

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Spider Control Answer Key

Name _____

Phone# _____

**Multiple Choice. Pick only one answer per question.
Circle or Mark off or Bold the answer. Please circle or underline the
number of the assignment version 1 or 2 or 3 or 4 or 5**

- | | | |
|---------------|---------------|----------------|
| 1. A B C D E | 39. A B C D E | 77. A B C D E |
| 2. A B C D E | 40. A B C D E | 78. A B C D E |
| 3. A B C D E | 41. A B C D E | 79. A B C D E |
| 4. A B C D E | 42. A B C D E | 80. A B C D E |
| 5. A B C D E | 43. A B C D E | 81. A B C D E |
| 6. A B C D E | 44. A B C D E | 82. A B C D E |
| 7. A B C D E | 45. A B C D E | 83. A B C D E |
| 8. A B C D E | 46. A B C D E | 84. A B C D E |
| 9. A B C D E | 47. A B C D E | 85. A B C D E |
| 10. A B C D E | 48. A B C D E | 86. A B C D E |
| 11. A B C D E | 49. A B C D E | 87. A B C D E |
| 12. A B C D E | 50. A B C D E | 88. A B C D E |
| 13. A B C D E | 51. A B C D E | 89. A B C D E |
| 14. A B C D E | 52. A B C D E | 90. A B C D E |
| 15. A B C D E | 53. A B C D E | 91. A B C D E |
| 16. A B C D E | 54. A B C D E | 92. A B C D E |
| 17. A B C D E | 55. A B C D E | 93. A B C D E |
| 18. A B C D E | 56. A B C D E | 94. A B C D E |
| 19. A B C D E | 57. A B C D E | 95. A B C D E |
| 20. A B C D E | 58. A B C D E | 96. A B C D E |
| 21. A B C D E | 59. A B C D E | 97. A B C D E |
| 22. A B C D E | 60. A B C D E | 98. A B C D E |
| 23. A B C D E | 61. A B C D E | 99. A B C D E |
| 24. A B C D E | 62. A B C D E | 100. A B C D E |
| 25. A B C D E | 63. A B C D E | 101. A B C D E |
| 26. A B C D E | 64. A B C D E | 102. A B C D E |
| 27. A B C D E | 65. A B C D E | 103. A B C D E |
| 28. A B C D E | 66. A B C D E | 104. A B C D E |
| 29. A B C D E | 67. A B C D E | 105. A B C D E |
| 30. A B C D E | 68. A B C D E | 106. A B C D E |
| 31. A B C D E | 69. A B C D E | 107. A B C D E |
| 32. A B C D E | 70. A B C D E | 108. A B C D E |
| 33. A B C D E | 71. A B C D E | 109. A B C D E |
| 34. A B C D E | 72. A B C D E | 110. A B C D E |
| 35. A B C D E | 73. A B C D E | 111. A B C D E |
| 36. A B C D E | 74. A B C D E | 112. A B C D E |
| 37. A B C D E | 75. A B C D E | 113. A B C D E |
| 38. A B C D E | 76. A B C D E | 114. A B C D E |

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|------|-----------|------|-----------|------|-----------|
| 115. | A B C D E | 145. | A B C D E | 175. | A B C D E |
| 116. | A B C D E | 146. | A B C D E | 176. | A B C D E |
| 117. | A B C D E | 147. | A B C D E | 177. | A B C D E |
| 118. | A B C D E | 148. | A B C D E | 178. | A B C D E |
| 119. | A B C D E | 149. | A B C D E | 179. | A B C D E |
| 120. | A B C D E | 150. | A B C D E | 180. | A B C D E |
| 121. | A B C D E | 151. | A B C D E | 181. | A B C D E |
| 122. | A B C D E | 152. | A B C D E | 182. | A B C D E |
| 123. | A B C D E | 153. | A B C D E | 183. | A B C D E |
| 124. | A B C D E | 154. | A B C D E | 184. | A B C D E |
| 125. | A B C D E | 155. | A B C D E | 185. | A B C D E |
| 126. | A B C D E | 156. | A B C D E | 186. | A B C D E |
| 127. | A B C D E | 157. | A B C D E | 187. | A B C D E |
| 128. | A B C D E | 158. | A B C D E | 188. | A B C D E |
| 129. | A B C D E | 159. | A B C D E | 189. | A B C D E |
| 130. | A B C D E | 160. | A B C D E | 190. | A B C D E |
| 131. | A B C D E | 161. | A B C D E | 191. | A B C D E |
| 132. | A B C D E | 162. | A B C D E | 192. | A B C D E |
| 133. | A B C D E | 163. | A B C D E | 193. | A B C D E |
| 134. | A B C D E | 164. | A B C D E | 194. | A B C D E |
| 135. | A B C D E | 165. | A B C D E | 195. | A B C D E |
| 136. | A B C D E | 166. | A B C D E | 196. | A B C D E |
| 137. | A B C D E | 167. | A B C D E | 197. | A B C D E |
| 138. | A B C D E | 168. | A B C D E | 198. | A B C D E |
| 139. | A B C D E | 169. | A B C D E | 199. | A B C D E |
| 140. | A B C D E | 170. | A B C D E | 200. | A B C D E |
| 141. | A B C D E | 171. | A B C D E | | |
| 142. | A B C D E | 172. | A B C D E | | |
| 143. | A B C D E | 173. | A B C D E | | |
| 144. | A B C D E | 174. | A B C D E | | |

You are finished with your assignment. Please fax this answer key and your registration page along with the customer survey to TLC.

We will require a photocopy of your driver's license.

Fax Number (928) 272-0747

Rush Grading Service

If you need this assignment graded and the results mailed to you within a 48-hour period, prepare to pay an additional rush service handling fee of \$50.00. This fee may not cover postage costs. If you need this service, simply write RUSH on the top of your Registration Form. We will place you in the front of the grading and processing line.

INSTRUCTIONS

1. We will require all students to fax or e-mail a copy of their driver's license with the registration form.
2. You will need to pick one of the following three assignments to complete. This selection process is based upon your last name.

Assignment #1 for whose last name begins with A-E you will find your assignment on pages 9-40.

Assignment #2 for whose last name begins with F-K you will find your assignment on pages 41-67.

Assignment #3 for whose last name begins with letter L-P, your assignment is found on pages 69-100.

Assignment #4 for whose last name begins with letter Q-R, your assignment is found on pages 101-132.

Assignment #5 for whose last name begins with letter S-Z, your assignment is found on pages 133-164.

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Spider Control CEU Training Awareness Assignment #1 For Last Names A-E

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services, Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Assignment # 1 for whose last name begins with A-E

Assignment #2 for whose last name begins with F-K

Assignment #3 for the last name starting with the letter L-P

Assignment #4 for the last name starting with the letter Q-R

Assignment #5 for the last name starting with the letter S-Z

Multiple Choice Section, Spider Terms.

1. Despite its reputation, this spider often attempts to escape rather than bite, unless it is guarding an _____ or if it is cornered and pressed.

- A. Instar
- B. Egg Mass
- C. Escape rather than bite
- D. Tearing an opening
- E. None of the Above

American Recluse Spiders

2. Eleven species of _____ are native to the United States, and a few non-natives have become established in circumscribed areas of the country.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. Recluse Spiders
- E. None of the Above

3. The _____ is the proper common name for only one species, *Loxosceles reclusa*.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. Brown Recluse Spider
- E. None of the Above

4. Although the _____ does not live in California, they do have four species of native recluse spiders.
- Tarantula(s)
 - Wolf Spider(s)
 - Web Spiders(s)
 - Brown Recluse
 - None of the Above
5. The most common Californian recluse spider is the _____. It is found mostly in the Sonoran and Mojave deserts, in the foothills of the lower San Joaquin Valley, and in adjacent areas of Mexico, all of which are sparsely populated by humans.
- Tarantula(s)
 - Wolf Spider(s)
 - Desert recluse, *L. deserta*
 - Brown Recluse Spiders
 - None of the Above
6. There are additional species (_____), but they are so uncommon that they are of scientific interest only.
- Tarantula(s)
 - Wolf Spider(s)
 - L. russelli*, *L. palma*, *L. martha*
 - Brown Recluse Spiders
 - None of the Above
7. Distribution of populations of the brown recluse, _____, in the United States. Areas around the borders of the shaded area may also have brown recluses, but they will be less common.
- Tarantula(s)
 - Loxosceles reclusa*
 - Web Spiders(s)
 - Brown Recluse Spiders
 - None of the Above
8. In addition to these native species, a South American recluse spider, _____ (pronounced "LEE-ta"), has become established in portions of Los Angeles (Alhambra, Sierra Madre, Monterey Park). This spider, however, seems to be confined to a very limited area in Los Angeles County, even though it has lived there for over 30 years.
- Mediterranean recluse
 - Loxosceles reclusa*
 - Loxosceles laeta*
 - Violin spiders
 - None of the Above
9. Occasional interceptions of the _____, *L. rufescens*, are found in commercial goods shipped from out-of-state, but no populations of this spider have been found in California.
- Mediterranean recluse
 - Loxosceles reclusa*
 - Loxosceles laeta*
 - Violin spiders
 - None of the Above

10. Over the years, the group of spiders to which the brown recluse belongs has been known by various colloquial names: " _____ " spiders, "fiddleback" spiders, "recluse" spiders, and "brown" spiders.

- A. Mediterranean recluse
- B. *Loxosceles reclusa*
- C. *Loxosceles laeta*
- D. Violin
- E. None of the Above

11. The scientific name for the recluse spider group is *Loxosceles* (lox-SOS-a-leez). All known members of the group have a scientific name, and the more familiar members of this group also have a common name (e.g., brown recluse, desert recluse, _____).

- A. Mediterranean recluse
- B. *Loxosceles reclusa*
- C. Arizona recluse
- D. Violin spiders
- E. None of the Above

12. The spider is golden brown, with the _____ being dark brown or black. This spider is not hairy and the fiddle pattern is often shiny. They are about 1/4 to 3/4 inch long. Members of this small family are known for their poisonous venom. They have six eyes in three pairs.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

13. The most definitive physical feature of recluse spiders is their eyes: most spiders have eight eyes that typically are arranged in two rows of four, but recluse spiders have six equal-sized eyes arranged in three pairs, called _____.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

14. There is a dyad at the front of the cephalothorax (the first main body part to which the legs attach) and another _____ on each side, further back.

- A. Dyad
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

15. Many publications refer to the _____ on the dorsal surface of the cephalothorax as the most important diagnostic feature.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin
- E. None of the Above

16. Although this marking is fairly consistent in mature brown recluses and Texan recluses (*L. devia*), it can vary in intensity and sometimes fades in preservative, and it is _____ in several recluse species found in the southwestern United States (e.g., the desert recluse).

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

17. Therefore, checking the eye pattern will eliminate almost all suspect recluse spiders from consideration, whereas the presence or absence of the _____ may lead to misidentifications.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

18. The abdomens of all recluses are covered with fine hairs and are uniformly colored, although the coloration can vary from _____, depending on what they have eaten.

- A. Dyads
- B. Very faint to nonexistent
- C. Light tan to dark brown
- D. Violin marking
- E. None of the Above

19. There is never a _____ on the abdomen.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

20. Finally, the legs are similarly covered with _____, whereas many nonrecluse spiders have stout spines on their legs.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

21. Some spiders share each of these physical characteristics (six eyes in dyads, dark pattern near the eyes, uniformly colored abdomen with fine hairs, _____).

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

22. No nonrecluse spider has all _____.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

23. On this basis, more than 99% of the spiders found by Californians can be identified as something other than a _____.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
24. If you do find a recluse spider in California, it will most likely be the native desert recluse, _____.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
25. To further identify _____ to species requires a high-power microscope and the skills of a spider expert (arachnologist).
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
26. The _____ is rather flat above and has a conspicuous, lengthwise furrow in the midline at the rear third. Each foot has two claws.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Cephalothorax
 - D. Wolf spiders
 - E. None of the Above
27. Many of the _____ are similar in appearance and have similar markings as the brown recluse. They are large, robust, hairy, and therefore, they can be distinguished from the brown recluse.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
28. _____ spin small, irregular webs under bark, stones, or other secluded areas. Their venom is especially poisonous to people; those bitten often become ill and find that the wound does not heal quickly.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Brown Recluse spiders
 - D. Wolf spiders
 - E. None of the Above
29. Both male and female brown recluse spiders, as well as their spiderlings, are capable of injecting venom that may result in serious lesion formation or _____.
- A. Systemic reactions
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above

30. The _____ may vary. The symptoms may vary from no harm at all to a reaction that is quite severe.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
31. Usually, the brown recluse spider bite is not felt and the pain sets in from six to eight hours later. A typical bite area may resemble a pimple, pustule, or blister formation within six to 12 hours later. _____, accompanied by swelling, may occur during this interval.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
32. The surrounding tissue begins to darken, _____, and has sharply raised edges, resulting in a sunken area which may be several centimeters in diameter.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Is irregular in shape
 - D. Mild to severe pain
 - E. None of the Above
33. Often there is _____ within 24-36 hours, characterized by restlessness, fever, chills, nausea, weakness, and joint pain.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
34. Where the bite occurs, there is often tissue death, and _____. In some severe cases, a wound may develop that lasts several months. In all cases, a physician should be notified. If at all possible, kill and take the spider to the physician for positive identification.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Skin is sloughed off
 - D. Mild to severe pain
 - E. None of the Above
35. The Brown Recluse has _____. They are commonly found in the storage areas of residences, including areas such as attics, closets, bedrooms and other dark recesses.
- A. Adapted quite well to indoor habitats
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. None of the Above
36. This spider _____ clothing, toys, books, boxes, and furniture, as well as transport trucks, tool sheds, tree houses, and little-used or abandoned dog houses.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above

37. Bites often occur when the spiders _____ hide in towels or old clothes left in those areas.
- A. Hide in towels
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
38. The brown recluse spider is _____ food such as firebrats, crickets, Arachnides, and other soft-bodied creatures.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
39. Earning their name well, the brown recluse spider _____ ceases its wanderings at first light.
- A. Ceases its wanderings
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
40. People are most _____, while changing clothes, or cleaning storage areas. Not only will this spider hide in cracks and crevices of the home, they will often climb into clothing or shoes that someone has laid out to wear the following day.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
41. A female deposits eggs in off-white silken cases about 1/3 inch in diameter _____, dark areas.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
42. Spiderlings _____ 24-36 days and abandon the egg case.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
43. _____, influenced by weather conditions and food availability.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above

44. They reach maturity in 10 to 12 months and _____ can survive long periods of time without food or water. Immature spiderlings resemble adult brown recluse spiders but have lighter coloration.
- Development is slow
 - Can survive long periods
 - In sheltered
 - Will vary
 - None of the Above
45. Adult males and females _____ from light tan to dark brown.
- Development is slow
 - Emerge in
 - In sheltered
 - Will vary
 - None of the Above
46. There are two types of spiders _____: ground dwellers and web makers.
- Development is slow
 - Emerge in
 - Found around the home
 - Will vary
 - None of the Above
47. Spiders which thrive on the ground are _____ than their web building cousins.
- Development is slow
 - Emerge in
 - In sheltered
 - Usually much stronger
 - None of the Above
48. _____, usually nocturnal, great hunters and rely on their strong grip and bite.
- Web builders
 - Some species
 - They stalk food
 - These brutes are aggressive
 - None of the Above
49. _____ at night and will feed on just about anything which moves.
- Web builders
 - Some species
 - They stalk food
 - These brutes are aggressive
 - None of the Above
50. _____ may have toxins to assist in their hunting. When prey is identified, they will usually stalk within pouncing distance, crouch, leap, rip, shred, bite, grab and kill – all within a few moments.
- Web builders
 - Some species
 - They stalk food
 - These brutes are aggressive
 - None of the Above

51. _____ are spiders which are not built to be on the ground. They are usually fragile, weak, slow, lacking grip and not able to defend themselves when out of their webs.
- Web builders
 - Some species
 - They stalk food
 - These brutes are aggressive
 - None of the Above
52. What they lack in physical body they more than make up for with bite. In most cases, they are equipped with toxins that can kill insects quickly and in some cases _____ they can be fatal to humans!
- These toxins are so strong
 - Some species
 - They stalk food
 - These brutes are aggressive
 - None of the Above
53. The _____ is one of the most dangerously venomous spiders in the United States.
- Spitting spider(s)
 - Hobo Spider(s)
 - Necrotic arachnidism
 - Recluse spider(s)
 - None of the Above
54. The _____ "stronghold territory" ranges from extreme southern Alaska through southern B.C. and Alberta, Canada, to central and southern California, and east into central Colorado.
- Spitting spider(s)
 - Hobo Spider(s)
 - Necrotic arachnidism
 - Recluse spider(s)
 - None of the Above
55. The _____, originating from Europe, began its infestation of the continental USA in the Port of Seattle some time before the 1930's.
- Spitting spider(s)
 - Hobo Spider(s)
 - Necrotic arachnidism
 - Recluse spider(s)
 - None of the Above
56. Most poisonous spider bites in the western half of the USA are due to the Hobo spider. A venomous bite from a Hobo or Brown _____ can be severe.
- Spitting spider(s)
 - Hobo Spider(s)
 - Necrotic arachnidism
 - Recluse spider(s)
 - None of the Above
57. _____ results from envenomation (venom poisoning) from the bite of Hobo, or Recluse. It occurs due to the venom's ability to clot blood which results in an area of tissue receiving inadequate blood flow and thus dying secondary to oxygen starvation.
- Spitting spider(s)
 - Hobo Spider(s)
 - Necrotic arachnidism
 - Recluse spider(s)
 - None of the Above

58. Up to 50% of bites by dangerously venomous spiders are "dry," with _____ and no signs of poisoning developing.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. No venom injected
- D. Recluse spider(s)
- E. None of the Above

59. Most people bitten and envenomated by _____ or Recluse spiders do not feel the initial bite and do not see the biting spider.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

60. Bites that are more serious occur when the _____ gets between clothes or bedding and skin and is trying to get away.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

61. Keeping clothes, bedding, and storage boxes off the floor is a wise precaution, since they are preferred hiding places for the _____.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

62. People often _____, sleeping on couches or floors, when putting on clothes, coats, gloves or shoes that have been on the floor, and when picking up piles of laundry.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Get bitten in bed
- D. None of the Above

63. Seek medical attention if you think you have a Hobo or Brown _____ bite. If possible, collect up the spider or what remains of it and take with you to your doctor or emergency clinic.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

Six-Eyed Spiders

64. The _____ (Scytodes spp.) are closely related to recluse spiders and have six eyes arranged in a similar pattern. However, they also have many black spots or lines on their bodies that would exclude them as recluses.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

65. _____ lacks any markings on its body.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

66. The woodlouse spider, *Dysdera crocata*, has six eyes arranged in two groups of three (triads) and no bodily markings; nonetheless, it is commonly mistaken for a _____ in the United States.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

Spiders with Violin-Shaped or Other Dark Markings

67. Many common tan or gray spiders have dark markings on the head region, which convinces people that they have caught a bona fide recluse spider. These spiders include cellar spiders (*Psilochorus* spp., *Physocyclus* spp.), _____ (*Mimetus* spp.), and sheet web spiders (*Linyphiidae*).

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Pirate spider(s)
- D. Recluse spider(s)
- E. None of the Above

68. The _____ *Holocnemus pluchei*, also confuses people even though the dark marks are on the ventral (underside) not the dorsal (top) surface of the body.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

69. _____ have a darkened area on their cephalothorax (head region) but have 8 eyes.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

Ubiquitous Brown Spiders

70. Virtually every spider that is tan or brown has been turned in as a potential _____. There are hundreds of species of these spiders. They include ground spiders (*Gnaphosidae*), sac spiders (*Cheiracanthium* spp., *Trachelas* spp., and many of the *liocranoid* spiders), wolf spiders (*Lycosidae*), grass spiders (*Agelenidae*), orb weavers (*Araneidae*), and male crevice spiders (*Filistatidae*).

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Brown Recluse spider(s)
- E. None of the Above

71. More specifically, males of both the western black widow (*Latrodectus hesperus*) and the _____ are frequently brought in for recluse verification. All of these brown spiders have eight eyes and can quickly be eliminated from consideration.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. False black widow (*Steatoda grossa*)
- D. Brown spider(s)
- E. None of the Above

72. Seek medical attention if you think you have a _____. If possible, collect up the spider or what remains of it and take with you to your doctor or emergency clinic.

- A. Spider bite
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

Orb weavers (*Araneidae*)

73. Individual spiders' coloring can range from extremely light yellow to very dark grey, but all European _____ have mottled markings across the back with five or more large white dots forming a cross.

- A. Garden spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

74. The white dots result from cells that are filled with guanine, which is a byproduct of protein metabolism. The third pair of legs of _____ are specialized for assisting in the spinning of orb webs. These spiders also use them to move around on their web without getting stuck.

- A. Garden spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

Nervous System

75. Most arthropods have a central nervous system made up of a long chain of nerve cell centers, called _____, that run throughout the body.

- A. Spider's brain
- B. Ganglia
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

76. In spiders, the ganglia are concentrated in the cephalothorax, where they condense into two compact masses: the _____, and the supra-esophageal ganglion.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

77. The _____, directs spider locomotion.
- A. Spider's brain
 - B. Sub-esophageal ganglion
 - C. Supra-esophageal ganglion
 - D. Sense organs
 - E. None of the Above
78. The _____, is considered the brain of the spider.
- A. Spider's brain
 - B. Sub-esophageal ganglion
 - C. Supra-esophageal ganglion
 - D. Sense organs
 - E. None of the Above
79. _____, throughout the body send information to this nerve center, where information processes and complex functions begin.
- A. Spider's brain
 - B. Sub-esophageal ganglion
 - C. Supra-esophageal ganglion
 - D. Sense organs
 - E. None of the Above
80. Spider's Brain
- A _____, is relatively highly developed, enabling spiders to easily adapt to changes in their environment.
- A. Spider's brain
 - B. Sub-esophageal ganglion
 - C. Supra-esophageal ganglion
 - D. Sense organs
 - E. None of the Above
81. Some scientists believe spiders can learn, and some have observed that spiders can remember where in their web they have _____; if the prey is removed, the spiders will continue searching for it in the same place for hours.
- A. Stored captured prey
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Tiny adults
 - E. None of the Above
82. Spider Reproduction
- All species of spiders have two separate sexes, and the _____, are usually smaller than the females.
- A. Stored captured prey
 - B. Male spider or Males
 - C. Female Spider or Female
 - D. Tiny adults
 - E. None of the Above
83. The _____, spider has two sperm-producing testes.
- A. Stored captured prey
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Tiny adults
 - E. None of the Above

84. A sexually mature _____, spider uses its large palps to transfer sperm cells into the female during mating.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
85. In this process, the _____, builds a small, triangular sperm web, onto which he deposits a drop of sperm from his abdomen.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
86. The _____, dips both palps into this droplet, drawing sperm cells into the palps as if by a tiny pipette.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
87. The _____, reproductive system includes two egg-producing ovaries.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
88. After the male transfers sperm cells into the _____,'s genital opening, located on her abdomen, they are stored, sometimes for months, in tiny receptacles.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
89. These sperm cells fertilize the _____, egg cells just before she deposits her eggs into a silky cocoon.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
90. Life Cycle
The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a _____, or spiderling), and adult. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Nymph
 - None of the Above

91. In each molting stage, young spiderlings resemble _____, a process known as incomplete metamorphosis.

- A. Stored captured prey
- B. Male spider or Male
- C. Female Spider or Female
- D. Tiny adults
- E. None of the Above

92. Courting and Mating

Spiders become sexually mature after their last molt, at which time females have developed functional ovaries and males have mature testes. In most spider species, the _____ courts the female before mating occurs.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

93. After a _____ has filled its palps with sperm cells, he begins searching for a female.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

94. A male begins by identifying himself to a female so that she does not mistake him for potential prey. In some spiders, such as American tarantulas, this identification process involves the _____ repeatedly touching the female.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

95. More often, a male courting a _____ communicates with her over larger distances using vibrations.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. None of the Above

96. For instance, a male wolf spider uses its legs to _____ on the ground. In some web spiders, the male attaches a special signal thread to the female's web.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drum
- E. None of the Above

97. The male then _____ the thread in a rhythm that indicates the vibration is caused by another spider of the same species and not by an ensnared insect.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

98. If a female is ready to accept a courting _____, she may send signals back to him.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
99. Locating the right _____ can be tricky for a male spider.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
100. Fortunately, female spiders produce certain chemical substances, known as _____, that aid spider courtship.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
101. A female may release these _____ through the air (like a perfume) or she may deposit them on her silk threads.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
102. When a male spider encounters _____ from a female of the same species, he becomes excited, even if the female is not present.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
103. Spiders with better eyesight may rely mostly on _____ during courtship.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Visual signals
 - E. None of the Above
104. When a male notices a female, he starts a _____ in front of her in which he raises his front legs, vibrates his palps, and twitches his abdomen.
- A. Zigzag dance
 - B. Sperm-containing palp
 - C. Movements specific to that species
 - D. Kill her partner after mating
 - E. None of the Above

105. Each species uses a different courtship dance with unique movements. A female will only accept a male who performs a dance with _____.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

106. When a male finds an interested female, he inserts his _____ into the female's genital opening. The process of mating can be very brief (a matter of seconds), or it can last several hours, depending on the species. In most species, both sexes separate peacefully after mating.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

107. Contrary to popular belief, the female black widow spider does not necessarily _____. Depending on the species, a female may mate only once or she may mate with several males during her lifetime.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

108. Eggs and Brood Care

In most spider species, a female determines when _____ from the female's receptacles will fertilize her egg cells.

- A. Cocoons
- B. Sperm cells
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

109. _____ may occur a few weeks after mating, a strategy that enables the female to lay her eggs when she deems external conditions are best. The female then lays her eggs.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

110. Most spider species lay several hundred _____; species of large spiders deposit several thousand within just a few minutes.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

111. Typically, the female spider lays her _____ in a silky case called a cocoon, which provides a protective and insulating environment for the developing spiders.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilized eggs
- D. Newly hatched spiderlings
- E. None of the Above

112. Many females abandon their _____ right after they deposit their eggs, although they may camouflage them or hang them in hidden locations. Other spiders guard and defend their cocoons until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

113. Some spiders exhibit special brood care. Female wolf spiders attach their _____ to their spinnerets and carry them around until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

114. The _____ then climb onto their mother's back, where they stay for about a week before they leave to survive on their own.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

115. Occasionally, young spiderlings stay in their mother's web for weeks. During this time, the mother feeds her _____, transferring regurgitated food from her mouth to their mouths.

- A. Cocoons
- B. Egg cells or Eggs
- C. Brood
- D. Young spiderlings
- E. None of the Above

116. Development and Growth

Spider eggs hatch inside the _____. The first stage hatches from the egg as an immobile, milky white larva.

- A. Cocoon
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

117. _____ are covered by an embryonic membrane and receive nourishment from yolk material within their abdomen.
- A. Cocoon
 - B. Egg cells or Eggs
 - C. Fertilization
 - D. Larvae
 - E. None of the Above
118. After one to two molts over about a two-week period, the _____ changes into a mobile spiderling, also referred to as a nymph.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larva
 - E. None of the Above
119. In order to grow to an adult size, spiderlings undergo a series of _____ that enables them to increase in size. During molting, the old cuticle slowly lifts off, while a thin new cuticle forms underneath.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
120. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body. It later hardens into a new rigid exoskeleton that encases the larger _____.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
121. The number of _____ between the spiderling and adult stage varies according to the size of the species. Small species may molt about five times, while some large tarantulas may molt as many as 40 times.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
122. For most spiders, a spiderling's last molt marks adulthood, when functional sexual organs have developed and growth halts. Some adult female spiders, such as American tarantulas, continue to _____ repeatedly.
- A. Spiderling
 - B. Molt
 - C. Mating
 - D. Larvae stage
 - E. None of the Above

123. Most spiders live only 1 or 2 years. Notable exceptions are large female tarantulas, which can live up to 20 years. Male tarantulas live only 2 to 3 years. Many male spiders die soon after

- _____.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above

124. Silks, Threads, and Webs

Nearly all spiders produce silk composed of the protein fibroin. This is the same protein produced by silkworms, the _____ of certain silk moths.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

125. Each spider has four to eight different kinds of _____ in its abdomen, and each gland produces a different type of silk with different properties.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

126. Other _____ produce cocoon threads that blanket and protect fertilized eggs. Still other glands produce sticky capture threads that ensnare prey.

- A. Glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

127. Types of Spider Webs

Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the almost circular orb web, in which an outer framework supports a continuous spiraling thread and a series of _____ from the center of the web.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

128. Other web types may have a more irregular shape. Some spiders build irregular, flimsy webs. Common house spiders construct funnel webs, flat silk sheets with a _____ that serves as a retreat for the spider.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

129. Cobweb spiders build an irregular _____ with sticky threads at the bottom that trap insects. Sheet web spiders construct a horizontal silk sheet with a dome, from which the small spider hangs upside down.

- A. Silk meshwork
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

130. Many spider webs are found near the ground or in low vegetation, although orb webs often span the open spaces between bushes or trees _____.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. In order to trap flying insects
- D. Raised tube in the corner
- E. None of the Above

131. The size of a web depends on the size of the spider. Whether the web has a _____ depends on the size of the prey the spider expects to capture.

- A. Silk glands or glands
- B. Tight or wide mesh
- C. In order to trap flying insects
- D. Raised tube in the corner
- E. None of the Above

132. Web Building

Web building is a _____, but some spiders can complete a web in less than 30 minutes.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

133. Spiders typically build their webs at night, _____ on their sense of touch, not eyesight, during construction.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

134. Each type of spider uses a different procedure when building a web. Spiders that weave orb webs generally begin by _____ that is carried by air currents until it catches on a tree limb or other firm support.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

135. From this thread, the spider lays down another thread to _____ that is the basic framework of the web.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

136. The spider then _____ of the Y-structure, known as the hub, and begins creating radius lines, or spokes, around the web.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

137. As the spider builds _____, it connects these lines with a few narrow circles of thread in the center of the web that forms the auxiliary spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Radius lines
- D. Climbs to the midpoint
- E. None of the Above

138. The _____ prevents radius lines from sagging when the spider walks on them. Using the auxiliary spiral as scaffolding, the spider begins the formation of the catching spiral, fastening sticky threads to each radius line. As the spider constructs the catching spiral, it dismantles the auxiliary spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral
- E. None of the Above

139. The catching spiral extends from the periphery of the web and stops short of the web's hub. In the finished web, only remnants of the _____ and there is an empty space in the web's center known as the free zone.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

140. The spider may _____ with its legs placed in the center of its web to detect vibrations in the web when prey gets caught in the sticky catching spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

141. Others may hide nearby under a curled leaf and use the vibrations from a signal thread attached to the hub to stay informed when _____. The orb web is built anew every day.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

142. Some species _____ before starting a new web, while others roll up the web and discard it as a tiny silk ball.

- A. Discard it as a tiny silk ball
- B. Eat their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

143. Spider Identification Section: Ground Spiders

True tarantulas are a type of _____ that belongs to the family Lycosidae in the suborder Araneomorphae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

144. Sometimes known as American tarantulas, they are found in tropical regions throughout the world, with many species in the southwestern United States.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

145. As ground hunters, _____ are typical sit-and-wait predators—they wait for insects or small vertebrates to come near before they pounce and kill the prey with their strong chelicerae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

146. Many _____ brush off their abdominal hairs when they feel threatened. These barbed hairs fly through the air and can penetrate skin and the mucous membranes of the nose, causing a strong burning sensation.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

147. Wolf Spider

About 2,000 species of wolf spiders belong to the family Lycosidae in the suborder _____. Found throughout the world, these spiders have dull brown or black coloration, stout bodies, and long, thick legs. Some species have hairy bodies.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Araneomorphae
- E. None of the Above

148. _____ are ground hunters, but their name inaccurately suggests that they actively hunt their prey just like their wolf namesake. However, like tarantulas, most wolf spiders usually sit in a hidden spot. When prey happens by, they ambush the prey by jumping on it.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

149. _____ are sensitive to vibrations, such as the buzzing wings of insects, as well as to visual signals.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

150. For instance, during courtship males drum their legs on the ground or wave their _____ in a rhythmic dance in order to catch a female's attention.

- A. Pedicel
- B. Chelicerae
- C. Palps
- D. Legs and palps
- E. None of the Above

DPR Supplement

The following questions are from California DPR rules and regulations to ensure that you have downloaded and read your rules, these rules are also found in the back of the text. California Code of Regulations (Title 3. Food and Agriculture) Division 6. Pesticides and Pest Control Operations

151. _____ means an objective committee whose purpose is to review protocols of human pesticide exposure studies to ensure the safety and general welfare of the human participants, and to guarantee that their human rights are not violated.

- A. Fieldworker Review Board
- B. Qualified applicator Review Board
- C. Industrial use Review Board
- D. Institutional Review Board
- E. None of the Above

152. _____ means use within the confines of, or on property necessary for the operation of, buildings such as hospitals, schools, libraries, auditoriums and office complexes.

- A. Net irrigation requirement
- B. Leaching ground water protection areas
- C. Institutional use
- D. Nursery
- E. None of the Above

153. _____ are sections of land designated as "leaching" in the Department of Pesticide Regulation document EH03-05 (Est.08/03), hereby incorporated by reference, entitled "Ground Water Protection Areas," where pesticide residues move from the soil surface downward through the soil matrix with percolating water to ground water.
- A. Net irrigation requirements
 - B. Leaching ground water protection areas
 - C. Institutional uses
 - D. None of the Above
154. _____ means a person who owns the property and/or is legally entitled to possess or use the property through terms of a lease, rental contract, trust, or other management arrangement.
- A. Pest management applicator
 - B. Employer
 - C. Person
 - D. Operator of the property
 - E. None of the Above
155. _____ means organophosphorus esters which inhibit cholinesterase.
- A. Pest management spraying
 - B. Crop dusting
 - C. Pesticide
 - D. Insecticide
 - E. None of the Above
156. _____ means any operation engaged in the outdoor commercial or research production of cut flowers or ornamental cut greens or any plants that will be used in their entirety in another location.
- A. Net growing
 - B. Crops
 - C. Greenhouse
 - D. Nursery
 - E. None of the Above
157. _____ is the amount of water needed to bring the soil in the crop root zone to field capacity at the time of irrigation. It can be determined by direct measurements of soil moisture, such as by using tensiometers, or indirect measurements of soil moisture, such as by estimating evapo-transpiration that has accumulated since the last irrigation.
- A. Net irrigation requirement
 - B. Leaching ground water protection areas
 - C. Institutional use water
 - D. Field irrigation
 - E. None of the Above
158. _____ means oral or written notification to the commissioner, as specified by the commissioner, prior to the use of a pesticide pursuant to a permit.
- A. Permit requirement
 - B. Permission
 - C. Institutional use permit
 - D. NOV
 - E. None of the Above

159. _____ means a structure or space, of sufficient size to permit entry, that is enclosed with a nonporous covering and used in the commercial or research production of an agricultural plant commodity. The term includes polyhouses, mushroom houses, rhubarb houses and similar structures.

- A. Greenhouse
- B. Nursery
- C. Enclosed cab
- D. Early entry
- E. None of the Above

160. _____ means an area of land that has been determined by the Director to be vulnerable to the movement of pesticides to ground water, as identified in the Department of Pesticide Regulation document EH03-05.

- A. Greenhouse
- B. Ground water protection area
- C. Restricted land
- D. REI
- E. None of the Above

161. _____ means to take all reasonable measures so that the behavior, activity, or event in question occurs.

- A. Permit
- B. Assure" or "Ensure
- C. Allow
- D. Buffer zone
- E. None of the Above

162. _____ means a chemical resistant barrier that completely surrounds the occupant(s) of the cab and meets those portions of the requirements in American Society of Agricultural Engineers Standard S-525 (Rev. 5/98) that pertain to dermal protection.

- A. Greenhouse
- B. PPE
- C. Enclosed cab
- D. Protection
- E. None of the Above

163. Enclosed cab acceptable for respiratory protection means an enclosed cab that incorporates a dust/mist filtering and /or a vapor or gas removing air purification system, as appropriate for the _____.

- A. Greenhouse
- B. Farm
- C. Enclosed cab
- D. Exposure situation
- E. None of the Above

164. _____ is the combination of water transpired from vegetation and evaporated from the soil and plant surfaces.

- A. Dew
- B. Application
- C. Mist
- D. Spray
- E. None of the Above

165. _____ data can be obtained from the California Irrigation Management Information System (CIMIS) or other local sources.

- A. Crop data
- B. Ground water protection areas
- C. Cotton pests
- D. Respiratory protection
- E. None of the Above

166. _____ This term means the behavior, activity, or event in question involves or concerns an employee, reasonable measures by an employer include determining that the employee has the knowledge to comply; providing the means to comply; supervising the work activity; and having and enforcing a written workplace disciplinary action policy covering the employer's requirements, as well as other measures required by pesticide law or this division.

- A. Permission
- B. Assure" or "Ensure
- C. Acceptance
- D. Buffer zone
- E. None of the Above

167. _____ means a procedure for removing a pesticide from its original container, rinsing the emptied container and transferring the pesticide product, mixtures and dilutions and rinse solution through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of any person to the pesticide or rinse solution. Rinsing is not required when the pesticide is used without dilution.

- A. Chemigation
- B. Allowance
- C. Closed system
- D. Continuous monitoring
- E. None of the Above

168. _____ means the measurement of the air concentration of a specific pesticide on an uninterrupted, real-time basis by instrumental methods.

- A. Measuring
- B. Monitoring
- C. Closed system
- D. Continuous monitoring
- E. None of the Above

169. _____ means entry into a treated field or other area after the pesticide application is complete, but before the restricted entry interval or other restrictions on entry for that pesticide have expired.

- A. Chemigation
- B. Early entry
- C. Early work
- D. Continuous monitoring
- E. None of the Above

170. _____ means any location, other than the principal place of business, operated by a pesticide dealer or agricultural pest control operator to carry out licensed activities in California.

- A. Work zone
- B. Employment
- C. Branch location
- D. Buffer zone
- E. None of the Above

171. _____ means a surface facility, such as an infiltration pond or basin, or spreading ground specifically designed and managed to increase the infiltration of introduced surface water supplies into a ground water basin.

- A. Artificial recharge basin
- B. Pond
- C. Lake
- D. Buffer zone
- E. None of the Above

172. _____ does not include ditches, canals, or reservoirs designed primarily to transport and store water, or stream channels, lakes, and other naturally occurring water bodies that are not principally managed to recharge ground water.

- A. Artificial recharge basin
- B. Pond
- C. Groundwater collection zone
- D. Buffer zone
- E. None of the Above

173. _____ means an area that surrounds a pesticide application block in which certain activities are restricted for a specified period of time to protect human health and safety from existing or potential adverse effects associated with a pesticide application.

- A. Early entry zone
- B. Handler zone
- C. Safety zone
- D. Buffer zone
- E. None of the Above

174. _____ means esters on N-methyl carbamic acid which inhibit cholinesterase.

- A. Chemigation
- B. Carbamates
- C. Pesticide
- D. Poison
- E. None of the Above

175. _____ means the application of pesticides through irrigation systems.

- A. Chemigation
- B. Nozzles
- C. Closed system
- D. Booms
- E. None of the Above

176. _____ means a person who has qualified by examination in one or more pest control categories to supervise the pesticide applications made by a pest control business licensed pursuant to sections 11701 to 11709, inclusive, of the Food and Agricultural Code, and who is responsible for safe and legal operations under such license.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

177. _____ means any person who, for any kind of compensation, performs work, services, or activities covered by this division.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

178. _____ means any person who exercises primary direction and control over the work, services, or activities of an employee. A foreman, crew leader, supervisor, or similarly situated person represents the employer when hiring an employee or when exercising, or having responsibility for exercising, the primary direction and control, but is not considered the employer himself or herself.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

179. _____ means a person who uses or supervises the use of a pesticide for any purpose or on any property other than as provided by the definition of private applicator.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

180. _____ means other chemical or non-chemical procedures which can reasonably accomplish the same pest control function with comparable effectiveness and reliability, taking into account economic, environmental, social, and technological factors and timeliness of control.

- A. Feasible mitigation measures
- B. Field spraying
- C. Feasible alternatives
- D. IPM
- E. None of the Above

181. _____ means a condition attached to the approval of an activity which, if implemented, would substantially reduce any adverse impact, taking into account economic, environmental, social, and technological factors and timeliness of control.

- A. Feasible mitigation measure
- B. Field capacity
- C. Feasible alternatives
- D. Permissions
- E. None of the Above

182. _____ is the amount of water remaining in soil when the downward water flow due to gravity becomes negligible.

- A. Feasible mitigation measure
- B. Field capacity
- C. Dew
- D. Moisture
- E. None of the Above

183. _____ is a monitoring instrument that measures the concentration of methyl bromide inside a structure in ounces per 1,000 cubic feet. (The analytical detection limit of a Fumiscope® is 250 parts per million [ppm]).

- A. Feasible mitigation measurement
- B. Field capacity
- C. Feasible alternatives
- D. Fumiscope
- E. None of the Above

184. _____ means any cultural activity, performed by hand or with hand tools, that causes substantial contact with surfaces (such as plants or soil) that may have pesticide residues. These activities include hand harvesting, detasseling, thinning, hand weeding, topping, planting, sucker removal, pruning, disbudding, roguing, and packing produce into containers in the field. Hand labor does not include operating, moving, or repairing irrigation equipment or performing the duties of a crop advisor, field checker, or scout, making observations of the well being of the plants, or taking samples.

- A. Picking
- B. Hand labor
- C. Weeding
- D. Hoeing
- E. None of the Above

185. _____ means mixing, loading, transferring, applying (including chemigation), or assisting with the application (including flagging) of pesticides, maintaining, servicing, repairing, cleaning, or handling equipment used in these activities that may contain residues, working with opened (including emptied but not rinsed) containers of pesticides, adjusting, repairing, or removing treatment site coverings, incorporating (mechanical or watered-in) pesticides into the soil.

- A. Handling
- B. Hand labor
- C. Ranching
- D. Working
- E. None of the Above

Agricultural Pesticide Section from TLC Text

186. The WPS covers every _____, including livestock producers, who have employees that perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural type of labor
- D. Pesticide exposure event
- E. None of the Above

187. Unlike other laws and regulations affecting agricultural labor, the WPS does not exempt any employment in _____ involving hand labor in fields, but owners or operators and immediate family members are specifically exempt from some provisions.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

188. The WPS expands coverage to include more employees and expands employers' requirements for training employees who handle pesticides, protecting employees from _____, and providing emergency assistance to exposed employees.

- A. Agricultural employers
- B. Agricultural employment dismissal
- C. Agricultural labor disputes
- D. Pesticide exposure
- E. None of the Above

189. Although many laws affecting _____ exempt farming enterprises that employ small numbers of hired farmworkers, the new standard has no exemptions based on the number of employees.

- A. Agricultural employers
- B. Agricultural employment
- C. Agricultural labor standards
- D. Pesticide exposure
- E. None of the Above

Employers covered by the WPS must:

190. Reduce overall exposure to pesticides by prohibiting handlers from exposing workers during pesticide application, excluding workers from areas being treated and areas under a(n) _____, and notifying workers about treated areas.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

191. _____ by requiring decontamination supplies be present and emergency assistance be available.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Assist
- E. None of the Above

192. Inform workers about pesticide hazards by requiring safety training (workers and handlers), safety posters, access to labeling information, and access to _____ (listing of treated areas on the establishment).

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. MSDSs
- E. None of the Above

193. WPS provisions are _____ and are likely to affect a large number of employers and their workers.

- A. Notifying workers
- B. Mitigating exposures
- C. Requiring more safety training
- D. Very complicated
- E. None of the Above

194. States may also issue _____ standards that are stricter than the WPS.

- A. Permission
- B. Worker protection
- C. Various
- D. Permits
- E. None of the Above

195. Therefore, employers should contact their State agency that regulates the Federal Insecticide, Fungicide, and Rodenticide Act _____ with the EPA to determine whether they must comply with the WPS and local regulations.

- A. To notifying workers
- B. Instead
- C. In cooperation
- D. In hopes that OSHA
- E. None of the Above

Four Basic Requirements

196. These regulations contained four basic requirements:

Workers are not to be sprayed with pesticides unless they are notified.

- A. TRUE
- B. FALSE

197. There are specific allowable entry intervals (REI) for 12 pesticides, interim restrictive entry levels for certain pesticides, and a general re-entry interval for all other agricultural pesticides not prohibiting re-entry into treated areas until sprays have dried, dusts have settled, and vapors have dispersed.

- A. TRUE
- B. FALSE

198. Protective clothing is no longer required for any worker entering a treated area before the specific re-entry period has expired.

- A. TRUE
- B. FALSE

199. "Appropriate and timely" warnings are required for re-entry. These warnings may be given orally in appropriate language, placed on the pesticide notice board, or posted in the field.

- A. TRUE
- B. FALSE

1974 Regulations

200. The EPA determined that the 1974 regulations did not adequately protect agricultural workers and pesticide handlers who were occupationally exposed to pesticides. In order to correct these inadequacies, the EPA issued new regulations designed to reduce exposure to _____, mitigate exposure, and inform workers about pesticides.

- A. Pesticides
- B. Limit
- C. Toxins
- D. Decontamination supplies
- E. None of the Above

You are finished with your assignment. Please fax, mail or e-mail your assignment along with your registration form and survey sheet. Always call later to ensure we've received the assignment.

Fax (928) 272-0747 info@tlch2o.com

Spider Control CEU Training Awareness Assignment #2 For last names F-K

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services, Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Assignment # 1 for whose last name begins with A-E

Assignment #2 for whose last name begins with F-K

Assignment #3 for the last name starting with the letter L-P

Assignment #4 for the last name starting with the letter Q-R

Assignment #5 for the last name starting with the letter S-Z

Multiple Choice Section, Spider Terms.

1. The appendage arising just in front of the legs, the coxa of which also forms the maxilla. It has no metatarsal segment and in adult males is greatly modified for the transfer of semen.

- A. Lyriform organ
- B. Palpal organs
- C. Onychium
- D. Palp

2. The more or less complex structures found in the terminal part of the adult male palp. They comprise groups of sclerites separated from each other and the cymbium by up to three haematodochae and contain the semen reservoir which opens via ducts through the tip of the embolus.

- A. Lyriform organ
- B. Palpal organs
- C. Onychium
- D. None of the Above

3. Tapering to a point.

- A. Head
- B. Haplogyne
- C. Haematodocha
- D. Labium
- E. Lanceolata

4. A balloon of elastic connective tissue between groups of sclerites in the male palp which distends with blood during insemination causing the sclerites to separate and rotate.

- A. Head
- B. Haplogyne
- C. Haematodocha
- D. Labium

5. The part of the carapace carrying the eyes which is separated from the thorax by a shallow groove.
- A. Head
 - B. Haplogyne
 - C. Haematodocha
 - D. Labium
 - E. None of the Above
6. The lip, under the mouth opening and between the maxillae, attached to the front of the sternum.
- A. Head
 - B. Haplogyne
 - C. Haematodocha
 - D. Labium
 - E. None of the Above
7. Pertaining to the side.
- A. Lateral
 - B. Haplogyne
 - C. Haematodocha
 - D. Labium
 - E. None of the Above
8. Ventral extension of tip of tarsus bearing the claws.
- A. Lyriform organ
 - B. Palpal organs
 - C. Onychium
 - D. Orb web
 - E. None of the Above
9. A two dimensional web, roughly circular in design (and strictly speaking, a misnomer). Silk threads radiate like spokes from a central hub. These are then overlaid with a spiral of silk, running from the periphery almost to the hub.
- A. Lyriform organ
 - B. Palpal organs
 - C. Onychium
 - D. Orb web
 - E. None of the Above
10. The group of spiders in which the females have no epigyne.
- A. Head
 - B. Haplogyne
 - C. Haematodocha
 - D. Labium
 - E. None of the Above
11. A sensory organ near the distal end of limb segments formed of a group of parallel slit organs.
- A. Lyriform organ
 - B. Palpal organs
 - C. Onychium
 - D. Orb web
 - E. None of the Above
12. The mouthparts on each side of the labium which are the modified coxae of the palps.
- A. Maxilla
 - B. Palpal organs
 - C. Onychium
 - D. None of the Above

13. Longitudinal sclerite on floor of epigynal atrium.
- A. Paracymbium
 - B. Median septum
 - C. Median
 - D. Median apophysis
 - E. None of the Above
14. The sixth segment of the leg, counting from the body.
- A. Paracymbium
 - B. Median septum
 - C. Median
 - D. Median apophysis
 - E. Metatarsus
15. A structure in the male palp branching from, or loosely attached to, the cymbium.
- A. Paracymbium
 - B. Median septum
 - C. Median
 - D. Median apophysis
 - E. None of the Above
16. Said of chelicera extending forwards, with fangs closing towards abdomen.
- A. Paraxial
 - B. Paturon
 - C. Patella
 - D. Pedicel
 - E. None of the Above
17. The fourth segment of the leg or palp, counting from the body.
- A. Paraxial
 - B. Paturon
 - C. Patella
 - D. Pedicel
 - E. Pheromone
18. Median: In the midline or in the middle.
- A. Paracymbium
 - B. Median septum
 - C. Median
 - D. Median apophysis
 - E. None of the Above
19. An sclerite arising from the middle division of the male palpal organs.
- A. Paracymbium
 - B. Median septum
 - C. Median
 - D. Median apophysis
 - E. None of the Above
20. Basal segment of chelicera.
- A. Paraxial
 - B. Paturon
 - C. Patella
 - D. Pedicel
 - E. None of the Above

21. The narrow stalk connecting the cephalothorax and the abdomen.
A. Paraxial
B. Paturon
C. Patella
D. Pedicel
E. None of the Above
22. A chemical secreted by an animal in minute amounts which brings about a behavioral response in another, often of the opposite sex.
A. Paraxial
B. Paturon
C. Patella
D. Pedicel
E. Pheromone
23. Pertaining to evolutionary relationships between and within groups.
A. Procurved
B. Porrect
C. Posterior
D. Process
E. Phylogenetic
24. Said of chelicera directed forwards.
A. Procurved
B. Porrect
C. Posterior
D. Process
E. None of the Above
25. Near the rear end.
A. Procurved
B. Porrect
C. Posterior
D. Process
E. None of the Above
26. A projection from the main structure.
A. Procurved
B. Porrect
C. Posterior
D. Process
E. None of the Above
27. Curved as an arc having its ends ahead of its center.
A. Procurved
B. Porrect
C. Posterior
D. Process
E. None of the Above
28. Projecting from, or on, the side facing forwards.
A. Prolateral
B. Porrect
C. Posterior
D. Process
E. None of the Above

29. Tubes through which air is carried around the body and which open at the spiracles.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. Tegulum
30. A long, fine hair rising almost vertically from a socket on the leg. Trichobothria detect air vibrations and currents.
- A. Trichobothrium
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. None of the Above
31. The second segment of the leg or palp, counting from the body.
- A. Trichobothrium
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. Trochanter
32. Pertaining to the inner end; closest to the body or point of attachment.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. None of the Above
33. Covered with tiny depressions.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. None of the Above
34. Part of the male palp: a discoidal sclerite.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. Tegulum
35. External cuticular skin.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. Tegument
36. The fifth segment of the leg or palp counting from the body.
- A. Tracheae
 - B. Tibia
 - C. Proximal
 - D. Punctate
 - E. None of the Above

37. Aeronautical dispersing by means of air currents acting on strands of silk.
- A. Carapace
 - B. Caput
 - C. Calamistrum
 - D. Ballooning
 - E. None of the Above
38. A sclerotized, hairless plate overlying the book lung.
- A. Carapace
 - B. Caput
 - C. Calamistrum
 - D. Ballooning
 - E. Branchial operculum
39. A comb-like series of hairs on metatarsus IV of cribellate spiders.
- A. Carapace
 - B. Caput
 - C. Calamistrum
 - D. Ballooning
 - E. None of the Above
40. Another name for the cephalic region of the cephalothorax.
- A. Carapace
 - B. Caput
 - C. Calamistrum
 - D. Ballooning
 - E. None of the Above
41. The exoskeleton covering, or shell, over the dorsal (upper) surface of the cephalothorax.
- A. Carapace
 - B. Caput
 - C. Calamistrum
 - D. Ballooning
 - E. Branchial operculum
42. A linear homopolysaccharide found as the characteristic molecule in the cuticle of arthropods. The molecules are layered in chains and cross-linked to form a strong, lightweight basis of the cuticle.
- A. Cephalothorax
 - B. Claw tuft
 - C. Chitin
 - D. Clypeus
 - E. Cardiac mark
43. A bunch of hairs at the tip of the leg tarsus in spiders with only two claws.
- A. Cephalothorax
 - B. Claw tuft
 - C. Chitin
 - D. Clypeus
 - E. None of the Above
44. The area between the anterior row of eyes and the anterior edge of the carapace.
- A. Cephalothorax
 - B. Claw tuft
 - C. Chitin
 - D. Clypeus
 - E. None of the Above

45. An elongate midline mark on the anterior, dorsal surface of the abdomen which overlies the heart.
- A. Cephalothorax
 - B. Claw tuft
 - C. Chitin
 - D. Cardiac mark
 - E. None of the Above
46. The anterior (front) of the two major divisions of the body of a spider.
- A. Cephalothorax
 - B. Claw tuft
 - C. Chitin
 - D. None of the Above
47. The jaws, each one comprising a large basal part and a fang.
- A. Chelicerae
 - B. Claw tuft
 - C. Chitin
 - D. Clypeus
 - E. None of the Above
48. Said of chelicerae in which the fang closes down on a tooth-like process.
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. Colulus
 - E. None of the Above
49. Small sclerite at the base of chelicerae, just under the clypeus.
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. Colulus
 - E. None of the Above
50. A small midline appendage or tubercle arising just in front of the anterior spinners in some spiders.
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. Colulus
 - E. None of the Above
51. A semi-membranous structure in the male palp which supports and guides the embolus in insemination
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. Conductor
 - E. None of the Above
52. A smooth, rounded protuberance sometimes present on the outer side of the chelicera, near its base.
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. None of the Above

53. The segment of legs nearest the body; modified in the palp to form the maxilla.
- A. Coxa
 - B. Chelate
 - C. Chilum
 - D. Cardiac mark
 - E. None of the Above
54. The broadened, hollowed-out tarsus of the male palp within which the palpal organs are attached.
- A. Cryptozoic
 - B. Accessory claws
 - C. Cymbium
 - D. Alveolus
 - E. None of the Above
55. Serrated, thickened hairs near the true claws in some spiders.
- A. Cryptozoic
 - B. Accessory claws
 - C. Cymbium
 - D. Alveolus
 - E. None of the Above
56. A ventral depression in the male palp which receives the basal and middle divisions of the genital bulb. Although usually described as a cup-like depression, the alveolus is actually a ringed depression to the inner margin of which is joined the basal haematodocha.
- A. Cryptozoic
 - B. Accessory claws
 - C. Cymbium
 - D. Alveolus
 - E. None of the Above
57. _____: Rings of pigmentation around leg segments.
- A. Cryptozoic
 - B. Accessory claws
 - C. Cymbium
 - D. Annulations
 - E. None of the Above
58. A spinning organ just in front of the spinners which appears as a transverse plate. Only present in cribellate spiders, which also have a calamistrum.
- A. Condyle
 - B. Chelate
 - C. Chilum
 - D. Cribellum
 - E. None of the Above
59. Living a concealed live.
- A. Cryptozoic
 - B. Accessory claws
 - C. Cymbium
 - D. Alveolus
 - E. None of the Above

60. Derived character.
A. Apex
B. Apophysis
C. Apical Male palp
D. Apomorphy
E. None of the Above
61. The conductor and the embolic subdivision comprise the apical division of the bulb.
A. Apex
B. Apophysis
C. Apical Male palp
D. Apomorphy
E. None of the Above
62. An excrescence or appendage changing the general cylindrical or globular shape of a sclerite; most often used in description of male palp.
A. Apex
B. Apophysis
C. Apical Male palp
D. Apomorphy
E. None of the Above
63. Nearer the front or head.
A. Apex
B. Apophysis
C. Apical Male palp
D. Anterior
E. None of the Above
64. Distal tip.
A. Apex
B. Apophysis
C. Apical Male palp
D. Apomorphy
E. None of the Above
65. Internal chamber at the entrance of copulation tract in female haplogyne spiders.
A. Atrium
B. Apophysis
C. Apical Male palp
D. Apomorphy
E. None of the Above
66. Said of chelicerae extending downwards with fangs closing towards midline.
A. Dionychous
B. Diaxial
C. Distal
D. Dorsal
E. None of the Above
67. Possessing two claws on tarsus.
A. Dionychous
B. Diaxial
C. Distal
D. Dorsal
E. None of the Above

68. Pertaining to the outer end, furthest away from the body or point of attachment.
- A. Dionychous
 - B. Diaxial
 - C. Distal
 - D. Dorsal
 - E. None of the Above
69. Pertaining to the upper surface.
- A. Dionychous
 - B. Diaxial
 - C. Distal
 - D. Dorsal
 - E. None of the Above
70. The upper surface.
- A. Dionychous
 - B. Diaxial
 - C. Distal
 - D. Dorsum
 - E. None of the Above
71. Molting; the periodic casting off the cuticle.
- A. Ecdysis
 - B. Diaxial
 - C. Distal
 - D. Dorsal
 - E. None of the Above
72. Without a cribellum and calamistrum.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. Embolus
 - E. None of the Above
73. Without teeth.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. Embolus
 - E. None of the Above
74. The structure, in the male palp, containing the terminal part of the ejaculatory duct and its opening. It may be very small, or long, whip-like or coiled and is sometimes divided into several structures.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. Embolus
 - E. None of the Above
75. Basal segment of palp, also called the maxilla or gnathocoxa.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. None of the Above

76. The group of spiders in which the females have an epigyne.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. Entelegyne
 - E. None of the Above
77. A fold and groove separating the anterior part of the ventral abdomen (with epigyne and book lungs) from the posterior part.
- A. Ecribellate
 - B. Edentate
 - C. Endite
 - D. Epigastric fold
 - E. None of the Above
78. A more or less sclerotized and modified external structure associated with the reproductive openings of adult females of most spiders.
- A. Exuviae
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the above
79. The hard ,external, supportive covering found in all arthropods.
- A. Exuviae
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the above
80. The parts of cuticle cast off during moulting.
- A. Exuviae
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the Above
81. Teeth having more than one point.
- A. Exuviae
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the above
82. Any pattern of pigment on the dorsum of the abdomen which is fairly broad and leaf-shaped.
- A. Exuviae
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the above

83. A short median groove on the thoracic part of the carapace which marks the internal attachment of the gastric muscle.
- A. Fovea
 - B. Epigyne
 - C. Exoskeleton
 - D. Fissidentate
 - E. None of the above
84. Basal segment of palp, also called maxilla or endite.
- A. Recurved
 - B. Rastellum
 - C. Receptaculum
 - D. Gnathocoxa
 - E. None of the Above
85. A light film of silk threads, or groups of these floating through the air.
- A. Recurved
 - B. Rastellum
 - C. Receptaculum
 - D. Gossamer
 - E. None of the Above
86. Rake-like structure at extremity of chelicerae in Mygalomorpha, often reduced to a few strong spines; use for burrowing.
- A. Recurved
 - B. Rastellum
 - C. Receptaculum
 - D. Gnathocoxa
 - E. None of the Above
87. Curved as an arc having its ends behind its center.
- A. Recurved
 - B. Rastellum
 - C. Receptaculum
 - D. Gnathocoxa
 - E. None of the Above
88. Like network.
- A. Reticulated
 - B. Rastellum
 - C. Receptaculum
 - D. Gnathocoxa
 - E. None of the Above
89. Projecting from, or on, the side facing backwards.
- A. Recurved
 - B. Rastellum
 - C. Receptaculum
 - D. Retrolateral
 - E. None of the Above

90. Rough, wrinkled.
A. Recurved
B. Rastellum
C. Receptaculum
D. Rugose
E. None of the Above
91. A finger-, tongue-, or lip-like projection from the midline of the female epigyne.
A. Scopula
B. Scape
C. Sclerite
D. Sclerotized
E. None of the Above
92. Hair-like, tapered and flexible structures on legs and body (cf. spine and trichobothrium).
A. Scopula
B. Scape
C. Sclerite
D. Seta
E. None of the Above
93. Any separate sclerotized structure connected to the other structures by membranes.
A. Scopula
B. Scape
C. Sclerite
D. Sclerotized
E. None of the Above
94. Hardened or horny; not flexible or membranous.
A. Scopula
B. Scape
C. Sclerite
D. Sclerotized
E. None of the Above
95. A brush of hairs on the underside of the tarsus and metatarsus in some spiders.
A. Scopula
B. Scape
C. Sclerite
D. Sclerotized
E. None of the Above
96. A hard, often shiny, sclerotized plate on the abdomen of some spiders.
A. Spiderling
B. Spermathecae
C. Scutum
D. Septum
E. None of the Above
97. The sacs or cavities in female spiders which receive and store semen
A. Spiderling
B. Spermathecae
C. Scutum
D. Septum
E. None of the Above

98. The nymphal or immature spider, generally resembling the adult, but smaller; fully mobile and no longer dependant on yolk.

- A. Spiderling
- B. Spermathecae
- C. Scutum
- D. Septum
- E. None of the Above

99. A partition separating two cavities or parts.

- A. Spiderling
- B. Spermathecae
- C. Scutum
- D. Septum
- E. None of the Above

100. An impressed, sclerotized spot, often reddish-brown. Often present on the dorsal surface of the abdomen and marking points of internal muscle attachments.

- A. Slit organ
- B. Sigillum
- C. Spinners
- D. Spiracle
- E. None of the Above

101. The life cycle of the spider consists of two stages: egg and adult.

- A. True
- B. False

102. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton. In each molting stage, young spiderlings resemble tiny adults, a process known as incomplete Median apophysis.

- A. True
- B. False

103. Spiders become sexually mature after their last molt, at which time females have developed functional ovaries and males have mature testes. In most spider species the male courts the female before mating occurs.

- A. True
- B. False

104. The Chelicerata includes spiders and scorpions, dogs and cats, horseshoe crabs, daddy-longlegs, and extinct "sea-scorpions", to name a few.

- A. True
- B. False

105. After a male spider has filled its palps with sperm cells, he begins searching for a female. A male begins by identifying himself to a female so that she does not mistake him for potential prey. In some spiders, such as American tarantulas, this identification process involves the male repeatedly touching the female.

- A. True
- B. False

106. A male courting a female communicates with her over larger distances using spiderwebs.

- A. True
- B. False

107. A male wolf spider uses its legs to drum on the ground. In some web spiders, the male attaches a special signal thread to the female's web. The male then drums or plucks the thread in a rhythm that indicates the vibration is caused by another spider of the same species and not by an ensnared insect. If a female is ready to accept a courting male, she may send signals back to him.

- A. True
- B. False

108. Locating the right female can be easy for a male spider.

- A. True
- B. False

109. Fortunately, female spiders produce certain chemical substances known as pheromones that aid spider courtship. A female may release these pheromones through the air (like a perfume) or she may deposit them on her silk threads. When a male spider encounters pheromones from a female of the same species, he becomes excited, even if the female is not present.

- A. True
- B. False

110. Spiders with better eyesight may rely mostly on visual signals during courtship. When a male notices a female, he starts a zigzag dance in front of her in which he raises his front legs, vibrates his palps, and twitches his abdomen.

- A. True
- B. False

111. Each species uses a different courtship dance with unique movements. A female will only accept a male who performs a dance with movements specific to that species.

- A. True
- B. False

112. When a male finds an interested female, he inserts his sperm-containing palp into the female's Lyriform organ opening. The process of mating can be very brief (a matter of hours), or it can last several days, depending on the species. In most species both sexes separate peacefully after mating.

- A. True
- B. False

113. Contrary to popular belief, the female black widow spider does kill her partner after mating. Depending on the species, a female may mate only once or she may mate with several males during her lifetime.

- A. True
- B. False

114. In most species a male determines when sperm cells from the female's receptacles will fertilize her egg cells.

- A. True
- B. False

115. Fertilization may occur a few weeks after mating, a strategy that enables the female to lay her eggs when she deems external conditions are best. The female then lays her eggs. Most spider species lay several hundred eggs; species of large spiders deposit several thousand within just a few minutes.

- A. True
- B. False

116. Typically the female lays her fertilized eggs in a silky case called a cocoon, which provides a protective and insulating environment for the developing spiders.

- A. True
- B. False

117. Many females abandon their cocoons right after they deposit their eggs, although they may camouflage them or hang them in hidden locations. Other spiders guard and defend their cocoon until the eggs hatch.

- A. True
- B. False

118. Some spiders exhibit special brood care.

- A. True
- B. False

119. Female wolf spiders attach their cocoons to their spinnerets and carry them around until the eggs hatch. The newly hatched spiderlings then climb onto their mother's back, where they stay for about a week before they leave to survive on their own.

- A. True
- B. False

120. Occasionally young spiderlings stay in their mother's chelicerae for months. During this time the mother feeds her brood, transferring regurgitated food from her mouth to their mouths.

- A. True
- B. False

121. Spider eggs hatch inside the cocoon. The first stage hatches from the egg as an immobile, milky white larva.

- A. True
- B. False

122. Pupa are covered by an embryonic membrane and receive nourishment from yolk material within their abdomen. After one to two molts over about a two-day period, the larva changes into a mobile spiderling, also referred to as a worker.

- A. True
- B. False

123. In order to grow to an adult size, spiderlings undergo a series of molts that enables them to increase in size. During molting the old cuticle slowly lifts off while a thin new cuticle forms underneath.

- A. True
- B. False

124. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body. It later hardens into a new rigid exoskeleton that encases the larger spiderling.

- A. True
- B. False

125. The number of molts between the spiderling and adult stage varies according to the size of the species. Small species may molt about 5 times, while some large tarantulas may molt as many as 40 times.

- A. True
- B. False

DOES THE WORKER PROTECTION STANDARD APPLY TO YOU?

You need the information in this rule if:

126. You own or manage a farm, forest, nursery, or greenhouse where pesticides are used in the production of agricultural plants.

Even if you are the owner of the farm, forest, nursery, or greenhouse and you or members of your family do all the work there, you are a “WPS employer.”

- A. TRUE
- B. FALSE

127. You must comply with **some** of the requirements described in this manual, such as restricted-entry intervals and personal protective equipment, and forget **all** the specific requirements listed in the pesticide labeling.

- A. TRUE
- B. FALSE

128. You hire or contract for the services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This includes labor contractors and others who contract with growers to supply agricultural laborers.

- A. TRUE
- B. FALSE

129. You operate a business in which you (or people you employ) apply pesticides that are used for the production of agricultural animals like dogs and cats at any farm, forest, nursery, or greenhouse.

- A. TRUE
- B. FALSE

130. Commercial pesticide handlers and their employees are included with respect to such pesticides even if the pesticide handling task (mixing, loading, disposal, etc.) takes place somewhere other than the farm, forest, nursery, or greenhouse — at the commercial handling establishment or an airport hangar, for example.

- A. TRUE
- B. FALSE

131. You operate a business in which you (or people you employ) perform tasks as a military advisor or rent- a-cop on any farm, forest, nursery, or greenhouse.

- A. TRUE
- B. FALSE

132. “Crop advisor” means any person who enjoys eating agricultural plants. Examples include crop consultants, scouts and vegetarinins.

- A. TRUE
- B. FALSE

133. Under the WPS, you may be both a worker and an employer of workers.

- A. TRUE
- B. FALSE

134. Under the WPS, you may be both a handler and an employer of handlers.

- A. TRUE
- B. FALSE

WHO DOES THE WPS PROTECT?

135. The WPS requires employers to take steps to protect two types of agricultural employees: **workers** and **pesticide handlers**. The terms “worker” and “pesticide handler” are defined very specifically in the WPS, and employers of persons who meet these definitions must comply with the WPS.

- A. TRUE
- B. FALSE

136. Depending on the tasks being performed, you may need to provide the same employee with worker protections on some occasions and pesticide handler protections on other occasions.

- A. TRUE
- B. FALSE

137. Owners of agricultural establishments and members of their immediate family are exempt from many WPS requirements.

- A. TRUE
- B. FALSE

WORKERS

138. A worker is anyone who: (1) is employed (including self-employed) for any type of compensation and (2) is doing tasks, such as harvesting, weeding, or watering, relating to the production of agricultural plants on a farm, forest, nursery, or greenhouse. This term does **not** include persons who are employed by a commercial establishment to perform tasks as crop advisors.

- A. TRUE
- B. FALSE

Agricultural Pesticide Section

139. The WPS covers every _____, including livestock producers, who have employees that perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

140. Unlike other laws and regulations affecting agricultural labor, the WPS does not exempt any employment in _____ involving hand labor in fields, but owners or operators and immediate family members are specifically exempt from some provisions.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

141. The WPS expands coverage to include more employees and expands employers' requirements for training employees who handle pesticides, protecting employees from _____, and providing emergency assistance to exposed employees.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

142. Although many laws affecting _____ exempt farming enterprises that employ small numbers of hired farmworkers, the new standard has no exemptions based on the number of employees.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

Employers covered by the WPS must:

143. Reduce overall exposure to pesticides by prohibiting handlers from exposing workers during pesticide application, excluding workers from areas being treated and areas under a _____, and notifying workers about treated areas.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

144. _____ by requiring decontamination supplies be present and emergency assistance be available.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

145. Inform workers about pesticide hazards by requiring safety training (workers and handlers), safety posters, access to labeling information, and access to _____ (listing of treated areas on the establishment).

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

146. WPS provisions are _____ and are likely to affect a large number of employers and their workers.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

147. States may also issue _____ standards that are stricter than the WPS.

- A. Notifying workers
- B. Worker protection
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

148. Therefore, employers should contact their State agency that regulates the Federal Insecticide, Fungicide, and Rodenticide Act _____ with the EPA to determine whether they must comply with the WPS and local regulations.

- A. Notifying workers
- B. Mitigate exposures
- C. In cooperation
- D. Very complicated
- E. None of the Above

149. Four Basic Requirements

These regulations contained four basic requirements:

Workers are not to be sprayed with pesticides unless they are notified.

- A. TRUE
- B. FALSE

150. There are specific allowable entry intervals (REI) for 12 pesticides, interim restrictive entry levels for certain pesticides, and a general re-entry interval for all other agricultural pesticides not prohibiting re-entry into treated areas until sprays have dried, dusts have settled, and vapors have dispersed.

- A. TRUE
- B. FALSE

151. Protective clothing is no longer required for any worker entering a treated area before the specific re-entry period has expired.

- A. TRUE
- B. FALSE

152. "Appropriate and timely" warnings are required for re-entry. These warnings may be given orally in appropriate language, placed on the pesticide notice board, or posted in the field.

- A. TRUE
- B. FALSE

1974 Regulations

153. The EPA determined that the 1974 regulations did not adequately protect agricultural workers and pesticide handlers who were occupationally exposed to pesticides. In order to correct these inadequacies, the EPA issued new regulations designed to reduce exposure to _____, mitigate exposure, and inform workers about pesticides.

- A. Pesticides
- B. Mitigate exposure
- C. During application
- D. Decontamination supplies
- E. None of the Above

154. Reducing overall exposure to pesticides will be accomplished by _____ from exposing workers during application, excluding workers from areas being treated and areas under a REI (some activities are allowed during a REI if workers are properly trained and protected), and notifying workers about treated areas.

- A. Prohibiting handlers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

155. _____ will be accomplished by requiring decontamination supplies and emergency assistance.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

156. Workers will be informed about _____ through required safety training (workers and handlers), safety posters, access to labeling information, and access to specific information (listing of treated areas on the establishment).

- A. Pesticide hazards
- B. Mitigate exposure
- C. During application
- D. Decontamination supplies
- E. None of the Above

Worker Protection Standard for Agricultural Pesticides

Provisions of the WPS apply to:

157. Owners or managers of farms, forests, nurseries, or greenhouses where pesticides are used in the production of agricultural plants.

- A. TRUE
- B. FALSE

158. Those who hire or contract for services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse.

- A. TRUE
- B. FALSE

General Duties of WPS

The general duties of the WPS require an agricultural employer or a pesticide handler-employer to:

159. Assure that each worker and handler _____ receives the required protections.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

160. Assure that any pesticide _____ is used in a manner consistent with the labeling of the pesticide, including the requirements in the standard.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. None of the Above

161. Provide sufficient information and directions to each person who supervises any worker or handler to assure that each worker or handler receives the _____.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

162. The information and directions must specify which persons are responsible for actions required to _____.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

163. Require each person who supervises any worker or handler to assure compliance by the worker or handler with the _____ and to assure that the worker or handler receives the required protection (40 CFR).

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

164. The general duties also prohibit agricultural and handler employers from taking any retaliatory actions against workers attempting to _____, or from taking any action that prevents or discourages any worker or handler from complying or attempting to comply with the WPS.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

165. Requires everyone applying pesticides to _____ printed on the pesticide container's label.

- A. Comply with the standard
- B. Subject to the standard
- C. Provisions of this standard
- D. All of the Above
- E. None of the Above

Summary of WPS Requirements

166. _____ Applicators are prohibited from applying a pesticide in a way that will expose workers or other persons. Workers are excluded from areas while pesticides are being applied.

- A. Restricted-entry intervals
- B. Decontamination supplies
- C. Emergency assistance
- D. Notification to workers
- E. Protection during applications

167. _____ must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide-treated area during the restricted-entry interval, with only narrow exceptions.

- A. Restricted-entry intervals
- B. Notification to workers
- C. Protection during applications
- D. Decontamination supplies
- E. Emergency assistance

168. _____ must be provided and maintained for handlers and early-entry workers.
- A. Emergency assistance
 - B. Restricted-entry intervals
 - C. Personal protective equipment
 - D. Notification to workers
 - E. None of the Above
169. _____ Workers must be notified about treated areas so they may avoid inadvertent exposures.
- A. Emergency assistance
 - B. Restricted-entry intervals
 - C. Decontamination supplies
 - D. Notification to workers
 - E. None of the Above
170. _____ Handlers and workers must have an ample supply of water, soap, and towels for routine washing and emergency decontamination.
- A. Restricted-entry intervals
 - B. Decontamination supplies
 - C. Emergency assistance
 - D. Notification to workers
 - E. None of the Above
171. _____ Transportation must be made available to a medical care facility if a worker or handler may have been poisoned or injured. Information must be provided about the pesticide to which the person may have been exposed.
- A. Restricted-entry intervals
 - B. Decontamination supplies
 - C. Emergency assistance
 - D. Notification to workers
 - E. None of the Above
172. _____ Training is required for all workers and handlers, and a pesticide safety poster must be displayed.
- A. Notification to workers
 - B. Protection during applications
 - C. Pesticide safety training and safety posters
 - D. Emergency assistance
 - E. None of the Above
173. _____ Handlers and workers must be informed of pesticide label requirements. Central posting of recent pesticide applications is required.
- A. Access to labeling and site-specific information
 - B. Notification to workers
 - C. Protection during applications
 - D. Pesticide safety training and safety posters
 - E. None of the Above

174. _____ - Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.

- A. Restricted-entry interval
- B. Agricultural Use Requirements
- C. Worker Protection Standard
- D. Notify Workers Or Worker Notification
- E. None of the Above

175. 40 CFR Part 170 contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, _____, and restricted entry intervals.”

- A. Restricted-entry interval
- B. Notification of Workers
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

176. Some pesticide uses are not covered by WPS, even when the _____ section is on the labeling. For example, if the pesticide labeling bears an Agricultural Use Requirements section, but the product also can be applied to rights-of-way, the rights-of-way use is not covered by WPS.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

177. WPS Requires Restricted Entry to Treated Areas

_____ is the time immediately after a pesticide application when entry into the treated area is prohibited or very limited.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

178. _____ are established for all pesticides used in the production of agricultural plants depending on toxicity.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

179. The REI is listed on the pesticide labeling under the heading “_____” in the “Directions for Use” section of the pesticide labeling or next to the crop or application method to which it applies.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

180. _____ must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide treated area during the REI, with few narrow exceptions.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

181. The duration of _____ ranges from 4 hours to several days.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

182. Some pesticides have one REI, such as 12 hours, for all crops and uses. Other products have different REIs, depending on the crop or _____.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Method of application
- D. Worker Protection Standard
- E. None of the Above

183. When two or more pesticides are applied at the same time and have different REIs, the longer interval must be followed. There is a no-entry period for 4 hours for all products with _____ labeling; this means no early entry.

- A. Restricted-entry interval
- B. Agricultural Use Requirements
- C. Worker Protection Standard
- D. Notify Workers Or Worker Notification
- E. None of the Above

WPS Requires Notification of Applications

184. Employers must _____ about pesticide applications on the agricultural establishment if they will be on or within a quarter (1/4) mile of the treated area.

- A. Restricted-entry interval
- B. Agricultural Use Requirements
- C. Worker Protection Standard
- D. Notify Workers
- E. None of the Above

185. In most cases, employers may choose between oral warnings or posted warning signs, but they must _____ which warning method is in effect. All applications must be additionally recorded and displayed at the central location.

- A. Restricted-entry interval
- B. Notify Workers Or Tell workers
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

186. Most products allow worker notification either orally or by posting a field warning sign, one or the other is acceptable as long as workers are informed of which method is being used. However, you must provide double notification if the pesticide label has this statement in the "Directions for Use" section under the heading "_____":

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

Notify workers of the application by warning them orally AND by posting warning signs at entrances to treated areas.

187. If double is suspected because pesticide workers have been orally notified about REIs and treated fields must be physically posted with warning signs during the REI.

- A. TRUE
- B. FALSE

188. It is the government's responsibility to post warning signs in the field if it is required.

- A. TRUE
- B. FALSE

189. Farms employing ONLY immediate family members are not required to post the field.

- A. TRUE
- B. FALSE

190. Signs must have the words "**Danger-Peligro**" and "**Pesticides-Pesticidas**" at the top and "Keep Out-No Entre" at the bottom.

- A. TRUE
- B. FALSE

191. Signs must be at least 14" x 16", with a minimum letter height of one inch. The Spanish portion of the sign may be replaced with a hand signs read by the majority of non-English speaking workers. In greenhouses and nurseries, smaller signs (4.5" x 5") are acceptable.

- A. TRUE
- B. FALSE

Warning signs must be:

192. Posted 24 days or less before application.

- A. TRUE
- B. FALSE

193. Removed within three (3) days after the end of the harvest.

- A. TRUE
- B. FALSE

194. Posted so they can be seen at all normal entrances to treated areas, including borders adjacent to labor but not prison camps.

- A. TRUE
- B. FALSE

195. If no employees were involved with flying the aircraft, or the employees do not come within a quarter (1/4) mile to a shooting range, no posting is required.

- A. TRUE
- B. FALSE

196. Oral warnings must be delivered in a manner understood by workers, using an interpreter if necessary.
- A. TRUE
 - B. FALSE

Oral warnings must contain the following information:

197. Location and description of the treated area, the length of the REI, specific directions not to enter during the REI.
- A. TRUE
 - B. FALSE

198. The WPS requirement that information be posted (displayed) at a central location is cited by the EPA as one of the most commonly violated provisions.
- A. TRUE
 - B. FALSE

199. WHAT IS THE WORKER PROTECTION STANDARD?

The Worker Protection Standard (WPS) is a regulation issued by the U.S. Environmental Protection Agency. It covers pesticides that are used in the _____ on farms, forests, nurseries, and greenhouses.

- A. Access to specific information or Access to specific labeling information
- B. Production of agricultural plants
- C. Prohibit handlers from applying a pesticide
- D. Reduce the risk of pesticide-related illness
- E. None of the Above

200. The WPS requires you to take steps to _____ and injury if you (1) use such pesticides, or (2) employ workers or pesticide handlers who are exposed to such pesticides.

- A. Access to specific information or Access to specific labeling information
- B. Pesticide safety training or Pesticide safety poster
- C. Prohibit handlers from applying a pesticide
- D. Reduce the risk of pesticide-related illness
- E. None of the Above

You are finished with your assignment. Please fax, mail or e-mail your assignment along with your registration form and survey sheet. Always call later to ensure we've received the assignment. Fax (928) 272-0747 info@tlch2o.com

Spider Control CEU Training Awareness Assignment #2 For Last Names L-P

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services, Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Assignment # 1 for whose last name begins with A-E

Assignment #2 for whose last name begins with F-K

Assignment #3 for the last name starting with the letter L-P

Assignment #4 for the last name starting with the letter Q-R

Assignment #5 for the last name starting with the letter S-Z

Multiple Choice Section, Spider Terms.

1. The Chelicerata includes spiders and scorpions, _____, horseshoe crabs, daddy-longlegs, and extinct "sea-scorpions", to name a few.
 - A. Wasps and Mites
 - B. Mites and ticks
 - C. Crabs and Cockroaches
 - D. All Arthropods
 - E. None of the Above
2. Chelicerata is the second most prominent order of terrestrial arthropods, after the uniramians. Most of its marine representatives are extinct, but were prominent in the _____ and included some fearsome predators.
 - A. Metaphidippus Era
 - B. Prehistoric time
 - C. Paleozoic Era
 - D. Devonian Period
 - E. None of the Above
3. Chelicerata are now distinguished from the other _____ by the possession of (at least) six pairs of appendages. These normally include four pairs of walking legs, a pair of chelicerae and a pair of pedipalps.
 - A. Metaphidippus
 - B. Mites and ticks
 - C. Crabs
 - D. Arthropod groups
 - E. None of the Above

4. Chelicerata have no mandibles and no antennae and the body is divided into two, not three, sections, as in the Uniramia. They are, however, normally _____, have a through gut, have uniramous appendages, a non-calcareous exoskeleton, and are gonochoristic.
- Bilaterally symmetrical
 - Completely relying
 - They spin a thread
 - They form a Y-shaped structure and
 - None of the Above
5. No chelicerates possess jaws for _____, but suck up their food in liquid or semi-liquid form.
- Communication
 - Inject digestive juices
 - Biting and chewing
 - Breathing
 - None of the Above
6. Most species go in for external digestion to some extent, meaning they secrete digestive juices onto the food item as it is held close to the mouth or _____ into their prey's body, and suck up the half-digested soup that results.
- Palps
 - Inject digestive juices
 - Biting and chewing
 - Communication
 - None of the Above
7. The inclusion of the class Pycnogonida in the Chelicerata is _____ but not scientifically proven; the fossil record for pycnogonids is very scant and they differ in many ways from the other chelicerates.
- Control insect populations
 - Feed on detritus
 - Biting and chewing
 - Generally accepted
 - None of the Above
8. The Chelicerata contain more than 80,000 species known to science, most of which are Arachnids divided almost evenly between the _____.
- Spiders and the mites
 - Crabs and wasps
 - Mites and crabs
 - Spiders and crabs
 - None of the Above
9. Chelicerates occupy a variety of roles in the ecology of marine and terrestrial systems. While many spiders build webs, others do not, but instead _____ as it passes by. This is also the tactic used by scorpions, another group of chelicerate predators.
- Control insect populations
 - Feed on detritus
 - Feed on the blood
 - Ambush prey
 - None of the Above

10. The predatory habits of these critters help to _____ in many parts of the world.
- Control insect populations
 - Feed on the blood
 - Ambush insects
 - Feed on detritus
 - None of the Above
11. Some arachnid chelicerates are _____, such as ticks and mites.
- Pest population controllers
 - Detritus feeders
 - Blood feeders
 - Parasites
 - None of the Above
12. Chelicerates live upon the bodies of other animals and _____, skin, or hair. Some of these carry diseases, which they pass on to the host when they feed.
- Control insect populations
 - Feed on the blood
 - Ambush insects
 - Feed on detritus
 - None of the Above
13. Other chelicerates are tiny organisms that _____, the bits of decaying matter that accumulate on and below the ground. The first terrestrial chelicerates are believed to have been detritus feeders.
- Control insect populations
 - Feed on the blood
 - Ambush prey
 - Feed on detritus
 - None of the Above
14. Parental care is not common among the chelicerates, but some scorpions will carry their young on their backs for a time. In most cases, however, no such care is provided, and the young must fend for themselves from the time they _____.
- Survive
 - Molt
 - Hatch
 - Mate
 - None of the Above
15. Survival is then dependant on the fact that large numbers of eggs are produced at a time, and it is likely that at least a few will _____.
- Survive
 - Molt
 - Hatch
 - Mate
 - None of the Above
16. Those ancient spiders were relatively large, and their bodies were segmented. In contrast, almost all spiders _____ have an unsegmented abdomen.
- Who survive
 - With 8 legs
 - Hatch
 - Living today
 - None of the Above

17. Only members of the suborder Mesothelae still exhibit a segmented abdomen, and these spiders are generally considered the most _____ types of spiders.

- A. Advanced
- B. Primitive
- C. Dangerous
- D. Violent
- E. None of the Above

18. Spiders are mostly terrestrial, of the class Arachnida, order Araneae, with four pairs of legs and a two-part body consisting of a(n) _____, or prosoma, and an unsegmented abdomen, or opisthosoma.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Set of Book lungs
- E. None of the Above

19. The _____ is covered by a shield, or carapace, and bears eight simple eyes.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Book lungs
- E. None of the Above

20. On the underside of the spider's head (the cephalic part of the cephalothorax) are two pairs of appendages, the anterior pair called chelicerae, and the second pair _____, with which the spider captures and paralyzes its prey, injecting into it venom produced in the poison glands.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Book lungs
- E. None of the Above

21. The spider then liquefies the tissues of the prey with a digestive fluid and sucks this broth into its stomach, where it may be stored in a(n) _____.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Book lungs
- E. None of the Above

22. Breathing is by means of tracheae (air tubes) or _____, or both.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Book lungs
- E. None of the Above

23. Arachnid _____ are similar to the gill books of horseshoe crabs, but are internal and adapted to a terrestrial habitat.

- A. Digestive gland
- B. Cephalothorax
- C. Pedipalps
- D. Book lungs
- E. None of the Above

24. Three pairs of _____ toward the tip of the abdomen produce protein-containing fluids that harden as they are drawn out to form silk threads.

- A. Digestive glands
- B. Legs
- C. Pedipalps
- D. Spinnerets
- E. None of the Above

25. Several kinds of silk glands and _____ produce different kinds of silk used variously for constructing cocoons or egg sacs, spinning webs, and binding prey; other light strands are spun out for ballooning, or floating, the spiders, especially young ones, long distances on air currents.

- A. Digestive glands
- B. Cephalothorax
- C. Pedipalps
- D. Spinnerets
- E. None of the Above

26. Cephalothorax Structures

The cephalothorax contains a number of structures and appendages: one pair of biting mouthparts known as chelicerae; a pair of _____; one pair of short, leglike appendages called pedipalps or palps; and four pairs of legs.

- A. Chelicerae
- B. Palps
- C. Fangs
- D. Poison glands
- E. None of the Above

27. The spider's eight eyes are also located on the _____.

- A. Chelicerae
- B. Cephalothorax
- C. Palps
- D. Top of the poison glands
- E. None of the Above

28. Mouthparts

When a spider catches prey, it uses a pair of jointed appendages known as the _____, located in front of the mouth opening. Chelicerae resemble tiny pocketknives.

- A. Chelicerae
- B. Cephalothorax
- C. Fangs
- D. Poison glands
- E. None of the Above

29. Each _____ has a sharp fang that swings out of its resting position to stab into the victim. Near the tip of the fang is a duct opening that comes from a poison gland.

- A. Chelicera
- B. Cephalothorax
- C. Palp
- D. Poison glands
- E. None of the Above

30. The _____ acts like a hypodermic needle—it ejects venom from the poison gland and delivers it into the prey.
- A. Chelicerae
 - B. Cephalothorax
 - C. Fang
 - D. Poison glands
 - E. None of the Above
31. Spiders also use _____ as multipurpose tools. They have been called the “hands” of the spider.
- A. Chelicerae
 - B. Cephalothorax
 - C. Palps
 - D. Poison glands
 - E. None of the Above
32. Spiders can use their _____ to perform tasks such as digging burrows in the soil and transporting small prey.
- A. Chelicerae
 - B. Cephalothorax
 - C. Fangs
 - D. Poison glands
 - E. None of the Above
33. Poison Glands
Most spiders have a pair of poison glands that lie within the _____.
- A. Chelicerae
 - B. Cephalothorax
 - C. Fang area
 - D. Palps
 - E. None of the Above
34. Each bulblike poison gland produces and stores toxin. A muscle spirals around the gland. When this muscle contracts, it squeezes poison from the gland through a duct into the _____ of the chelicerae, which then pass the poison into the prey.
- A. Chelicerae
 - B. Cephalothorax
 - C. Fangs
 - D. Poison glands
 - E. None of the Above
35. Palps and Legs
Behind the chelicerae is a pair of palps, _____ that are used in feeding and as feelers.
- A. That contain body fluids
 - B. That transfer sperm
 - C. Sensitive to touch
 - D. Segmented limbs
 - E. None of the Above
36. Male spiders also use palps to _____ to females during mating. Adjacent to the palps are four pairs of long, hairy legs.
- A. Transfer body fluid
 - B. Transfer sperm
 - C. Used to touch
 - D. Have seven jointed segments
 - E. None of the Above

37. Unlike human hair, each spider hair found on the legs acts as a sensory organ, _____ and vibration.
- Contains body fluid
 - Used to transfer sperm
 - Sensitive to touch
 - Has seven jointed segments
 - None of the Above
38. Each leg is made up of _____, called the coxa, trochanter, femur, patella, tibia, metatarsus, and tarsus.
- Tiny receptacles
 - Reproductive organs, heart and silk glands
 - Two sperm-producing testes
 - Seven jointed segments
 - None of the Above
39. More than 30 muscles control the movement of each leg. In addition, some joints of the leg move by the hydraulic action of _____.
- Body fluid
 - Hydraulic action
 - The palps
 - Seven jointed segments
 - None of the Above
40. The tips of the legs have two or three small claws that are used for _____ the spider's silk thread.
- Molting
 - Transferring sperm
 - Climbing or grasping
 - Moving the seven jointed segments
 - None of the Above
41. Many ground spiders have specialized adhesive hairs _____, known as claw tufts or scopulae.
- Used to attack prey
 - Beneath their claws
 - Used for climbing or grasping
 - Used to spin webs
 - None of the Above
42. These claw tufts enable the spiders to _____ on smooth, vertical surfaces—even upside down on glass.
- Climb upside down
 - Transfer sperm
 - Sensitivity touch
 - Walk sure-footedly
 - None of the Above

43. Sensory Organs

Most spiders are active at night, and as a result, they use their other senses more than they use their _____, which is not well developed. In addition to the thousands of hairs found on the palps and legs that are highly sensitive to touch and vibrations, spiders also have hairs on their feet that they use to taste things.

- A. Eyesight or Good vision
- B. Simple eyes or Eyes
- C. Spigots
- D. Silk glands
- E. None of the Above

44. Most spiders have four pairs of _____ (eyes with a single lens) that are located on the front of the cephalothorax.

- A. Compound palps
- B. Simple eyes or Eyes
- C. Spigots
- D. Palps
- E. None of the Above

45. The _____ are usually grouped into two or three rows that form specific patterns in different spider families. This eye arrangement is often used to identify and classify a spider.

- A. Eyesight or Good vision
- B. Simple eyes or Eyes
- C. Spigots
- D. Silk
- E. None of the Above

46. Unlike spiders that are active at night, spiders that are active during the day, such as jumping spiders and lynx spiders, typically have _____ at close range.

- A. Good vision
- B. Simple eyes or Eyes
- C. Poor vision
- D. Average vision
- E. None of the Above

47. Their vision easily rivals the _____ of many insects, which have compound eyes (eyes with multiple lenses).

- A. Eyesight or Good vision
- B. Simple eyes or Eyes
- C. Advance
- D. Best
- E. None of the Above

48. Spider's Abdomen

The spider's abdomen is soft and saclike. On the underside of the tip of the abdomen are three pairs of _____.

- A. Palps
- B. Shortened limbs
- C. Spigots
- D. Spinnerets
- E. None of the Above

49. Each spinneret is studded with many fine, hair-like tubes called spigots, which produce a variety of silk threads. The _____ lead to several large silk glands inside the abdomen.
- Palps
 - Shortened limbs
 - Spigot
 - Chelicerae
 - None of the Above
50. _____ is formed as a liquid inside these abdominal glands.
- Digestive system fluids
 - Sperm
 - Larva
 - Silk
 - None of the Above
51. As the silk is drawn out through the _____, protein molecules within the silk line up parallel to one another, causing the silk to harden and form strong, elastic filaments.
- Digestive system
 - Shortened limbs
 - Spigots
 - Silk
 - None of the Above
52. The hardening of silk results from the drawing-out process through the _____, not from exposure to air, as is commonly believed.
- Palps
 - Shortened limbs
 - Spigots
 - Chelicerae
 - None of the Above
53. Several silk threads produced by different _____ may fuse to form a stronger one.
- Palps
 - Shortened limbs
 - Spigots
 - Chelicerae
 - None of the Above
54. Spinnerets are actually _____. They can move to place silk strands in precise locations when the spider builds a web or wraps prey in silk.
- Digestive system glands
 - Shortened limbs
 - Spigots
 - Palps
 - None of the Above
55. Internal Anatomy and Function
The cephalothorax houses part of the _____ and the central nervous system.
- Digestive system
 - Shortened limbs
 - Spigots
 - Palps
 - None of the Above

56. The abdomen contains most of the spider's vital organs, including a long, tubular heart; respiratory organs; reproductive organs; and _____.

- A. Digestive system
- B. Book lungs
- C. Spigots
- D. Excretory organs
- E. None of the Above

57. Breathing Organs

Spiders use two types of breathing organs: _____ and tracheal tubes. Narrow slits on the underside of the abdomen lead to two or four respiratory organs called book lungs.

- A. Body tissues
- B. Book lung
- C. Pedicel
- D. Closed tubes
- E. None of the Above

58. The _____ organs are so named because they consist of alternating layers of air spaces and thin leaflets of cuticle filled with blood, making the structures resemble a slightly opened book.

- A. Body tissues
- B. Book lung
- C. Spider blood
- D. Pedicel
- E. None of the Above

59. Oxygen from the air passes through the extremely thin cuticle leaflets directly into the blood. A small opening in front of the spinnerets, known as a spiracle, leads to _____ made of cuticle. These tiny tubes branch and spread throughout the body.

- A. Body tissues
- B. Book lung
- C. Pedicel
- D. Tracheal tubes
- E. None of the Above

60. Air enters the spiracle and passes through the tracheal tubes so that oxygen can travel to all the spider's _____.

- A. Body tissues
- B. Book lung
- C. Spider blood
- D. Pedicel
- E. None of the Above

61. Spider's Blood

_____, also known as hemolymph, contains many blood cells with oxygen-carrying pigments called hemocyanin, which give the blood a light blue color.

- A. Body fluids
- B. Book lung juice
- C. Spider blood
- D. Pedicel fluid
- E. None of the Above

62. Spider blood also contains many other types of blood cells that play a role comparable to that of the _____ cells of humans. Among other functions, these cells play a role in blood clotting after an injury.

- A. anti-bodies
- B. Plasma
- C. White Blood
- D. Red blood
- E. None of the Above

63. The spider's long, _____ lies toward the back side of the abdomen. When the heart contracts, it pumps blood forward into the cephalothorax and backward into the abdomen.

- A. Tubular heart
- B. Book lung
- C. Chelicerae
- D. Closed tubes
- E. None of the Above

64. Blood travels through _____, or arteries, into spaces in the body cavity. From these spaces the blood travels to the book lungs, where it releases carbon dioxide and picks up a fresh supply of oxygen before returning to the heart.

- A. Body tissues
- B. Book lung
- C. Chelicerae
- D. Closed tubes
- E. None of the Above

65. Digestive System

The digestive system consists of a branched tube that extends from the mouth to the anus. In the cephalothorax, the tube enlarges to form a _____ with powerful muscles.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

66. When these muscles contract, they produce a powerful sucking action that pulls food into the _____.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

67. Spider digestion is unusual in that it begins outside of the spider's _____.

- A. Pedicel
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

68. When a spider captures an insect or other animal, it uses its _____ to pierce the prey and inject poison into the wound to paralyze or kill the animal.

- A. Pedicel
- B. Chelicerae
- C. Palps
- D. None of the Above

69. The spider then vomits juices containing digestive enzymes into the wound of the victim to break down and liquefy its _____ tissue.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

70. This liquefied tissue is then drawn through the spider's mouth and into its body by the sucking action of the _____.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

71. Two mechanical filters in the _____ prevent solid food particles from passing into the digestive system.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

72. From the stomach, food passes into the _____, which branches throughout the entire body.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

73. Enzymes secreted by the midgut further break down the liquefied food into nutrient molecules small enough to pass through the walls of the _____ into the blood.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

74. Nutrients can be stored for a long time in the spider's extensive _____, enabling many spiders to go for weeks or even months without the need to catch any prey.

- A. Stomach
- B. Digestive system
- C. Pedicel
- D. Midgut
- E. None of the Above

Nervous System

75. Most arthropods have a central nervous system made up of a long chain of nerve cell centers, called _____, that run throughout the body.

- A. Spider's brain
- B. Ganglia
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

76. In spiders, the ganglia are concentrated in the cephalothorax, where they condense into two compact masses: the _____, and the supra-esophageal ganglion.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

77. The _____, directs spider locomotion.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

78. The _____, is considered the brain of the spider.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

79. _____, throughout the body send information to this nerve center, where information processes and complex functions begin.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

80. Spider's Brain

A _____, is relatively highly developed, enabling spiders to easily adapt to changes in their environment.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

81. Some scientists believe spiders can learn, and some have observed that spiders can remember where in their web they have _____; if the prey is removed, the spiders will continue searching for it in the same place for hours.

- A. Stored captured prey
- B. Made a nest
- C. Made a trap
- D. A safe location
- E. None of the Above

82. Spider Reproduction

All species of spiders have two separate sexes, and the _____, are usually smaller than the females.

- A. Spiders
- B. Male spider or Males
- C. Female Spider or Female
- D. Tiny adults
- E. None of the Above

83. The _____, spider has two sperm-producing testes.
- A. Adult
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Larva
 - E. None of the Above
84. A sexually mature _____, spider uses its large palps to transfer sperm cells into the female during mating.
- A. The best and biggest
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. The nymph
 - E. None of the Above
85. In this process, the _____, builds a small, triangular sperm web, onto which he deposits a drop of sperm from his abdomen.
- A. The best and biggest
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. The nymph
 - E. None of the Above
86. The _____, dips both palps into this droplet, drawing sperm cells into the palps as if by a tiny pipette.
- A. The best and biggest
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. The nymph
 - E. None of the Above
87. The _____, reproductive system includes two egg-producing ovaries.
- A. Incredible
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Mature
 - E. None of the Above
88. After the male transfers sperm cells into the _____,'s genital opening, located on her abdomen, they are stored, sometimes for months, in tiny receptacles.
- A. Chelicerae
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Nymph
 - E. None of the Above
89. These sperm cells fertilize the _____, egg cells just before she deposits her eggs into a silky cocoon.
- A. Chelicerae
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Nymph
 - E. None of the Above

90. Life Cycle

The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a _____, or spiderling), and adult. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton.

- A. Larvae
- B. Male spider or Male
- C. Female Spider or Female
- D. Nymph
- E. None of the Above

91. In each molting stage, young spiderlings resemble _____, a process known as incomplete metamorphosis.

- A. Larvae
- B. Male spider or Male
- C. Female Spider or Female
- D. Tiny adults
- E. None of the Above

92. Courting and Mating

Spiders become sexually mature after their last molt, at which time females have developed functional ovaries and males have mature testes. In most spider species, the _____ courts the female before mating occurs.

- A. Larvae
- B. Male spider or Male
- C. Female Spider or Female
- D. Spider drums or plucks and
- E. None of the Above

93. After a _____ has filled its palps with sperm cells, he begins searching for a female.

- A. Pheromone gland
- B. Male spider or Male
- C. Female Spider or Female
- D. Drumming or plucking
- E. None of the Above

94. A male begins by identifying himself to a female so that she does not mistake him for potential prey. In some spiders, such as American tarantulas, this identification process involves the _____ repeatedly touching the female.

- A. Pheromone
- B. Male spider or Male
- C. Palps
- D. Drums or plucks
- E. None of the Above

95. More often, a male courting a _____ communicates with her over larger distances using vibrations.

- A. Larva
- B. Male spider or Male
- C. Female Spider or Female
- D. Mate
- E. None of the Above

96. For instance, a male wolf spider uses its legs to _____ on the ground. In some web spiders, the male attaches a special signal thread to the female's web.
- A. Spread pheromones
 - B. Attack
 - C. Attach
 - D. Drum
 - E. None of the Above
97. The male then _____ the thread in a rhythm that indicates the vibration is caused by another spider of the same species and not by an ensnared insect.
- A. Grabs
 - B. Attaches
 - C. Attracts
 - D. Drums or plucks
 - E. None of the Above
98. If a female is ready to accept a courting _____, she may send signals back to him.
- A. Pheromone
 - B. Male spider or Male
 - C. Call
 - D. Drum or pluck
 - E. None of the Above
99. Locating the right _____ can be tricky for a male spider.
- A. Pheromone
 - B. Call
 - C. Female Spider or Female
 - D. Drum or pluck
 - E. None of the Above
100. Fortunately, female spiders produce certain chemical substances, known as _____, that aid spider courtship.
- A. Pheromones
 - B. Calls
 - C. Sperm
 - D. Vibrations
 - E. None of the Above
101. A female may release these _____ through the air (like a perfume) or she may deposit them on her silk threads.
- A. Pheromones
 - B. Vibrations
 - C. Scents
 - D. Drums or plucks
 - E. None of the Above
102. When a male spider encounters _____ from a female of the same species, he becomes excited, even if the female is not present.
- A. Pheromones
 - B. Vibrations
 - C. Scents
 - D. Drums or plucks
 - E. None of the Above

103. Spiders with better eyesight may rely mostly on _____ during courtship.
- Pheromones
 - Vibrations
 - Scents
 - Visual signals
 - None of the Above
104. When a male notices a female, he starts a _____ in front of her in which he raises his front legs, vibrates his palps, and twitches his abdomen.
- Zigzag dance
 - Sperm exchange
 - Movement specific to that species
 - Molt
 - None of the Above
105. Each species uses a different courtship dance with unique movements. A female will only accept a male who performs a dance with _____.
- Zigzag dance
 - His sperm-containing palp
 - Movements specific to that species
 - Kill her partner after mating
 - None of the Above
106. When a male finds an interested female, he inserts his _____ into the female's genital opening. The process of mating can be very brief (a matter of seconds), or it can last several hours, depending on the species. In most species, both sexes separate peacefully after mating.
- Cephalothorax
 - Sperm-containing palp
 - Reproductive system
 - Chelicerae
 - None of the Above
107. Contrary to popular belief, the female black widow spider does not necessarily _____. Depending on the species, a female may mate only once or she may mate with several males during her lifetime.
- Zigzag dance
 - Mate
 - Leave the web
 - Kill her partner after mating
 - None of the Above
108. Eggs and Brood Care
In most spider species, a female determines when _____ from the female's receptacles will fertilize her egg cells.
- Cocoons will be formed
 - Sperm cells
 - Fertilization
 - Newly hatched spiderlings
 - None of the Above
109. _____ may occur a few weeks after mating, a strategy that enables the female to lay her eggs when she deems external conditions are best. The female then lays her eggs.
- Cocoon making
 - Egg cells or Eggs
 - Fertilization
 - None of the Above

110. Most spider species lay several hundred _____; species of large spiders deposit several thousand within just a few minutes.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

111. Typically, the female spider lays her _____ in a silky case called a cocoon, which provides a protective and insulating environment for the developing spiders.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilized eggs
- D. Newly hatched spiderlings
- E. None of the Above

112. Many females abandon their _____ right after they deposit their eggs, although they may camouflage them or hang them in hidden locations. Other spiders guard and defend their cocoons until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

113. Some spiders exhibit special brood care. Female wolf spiders attach their _____ to their spinnerets and carry them around until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

114. The _____ then climb onto their mother's back, where they stay for about a week before they leave to survive on their own.

- A. Larvae
- B. Molts
- C. Females
- D. Newly hatched spiderlings
- E. None of the Above

115. Occasionally, young spiderlings stay in their mother's web for weeks. During this time, the mother feeds her _____, transferring regurgitated food from her mouth to their mouths.

- A. Self
- B. Children
- C. Brood
- D. Young spiderlings
- E. None of the Above

116. Development and Growth

Spider eggs hatch inside the _____. The first stage hatches from the egg as an immobile, milky white larva.

- A. Cocoon
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

117. _____ are covered by an embryonic membrane and receive nourishment from yolk material within their abdomen.

- A. Cocoon
- B. Pedicel
- C. Chelicerae
- D. Larvae
- E. None of the Above

118. After one to two molts over about a two-week period, the _____ changes into a mobile spiderling, also referred to as a nymph.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larva
- E. None of the Above

119. In order to grow to an adult size, spiderlings undergo a series of _____ that enables them to increase in size. During molting, the old cuticle slowly lifts off, while a thin new cuticle forms underneath.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

120. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body. It later hardens into a new rigid exoskeleton that encases the larger _____.

- A. Spiderling
- B. Molts
- C. Chelicerae
- D. Larvae stage
- E. None of the Above

121. The number of _____ between the spiderling and adult stage varies according to the size of the species. Small species may molt about five times, while some large tarantulas may molt as many as 40 times.

- A. Spiderlings
- B. Molts
- C. Mates
- D. Larvae stages
- E. None of the Above

122. For most spiders, a spiderling's last molt marks adulthood, when functional sexual organs have developed and growth halts. Some adult female spiders, such as American tarantulas, continue to _____ repeatedly.

- A. Attack
- B. Molt
- C. Mate
- D. Grow
- E. None of the Above

123. Most spiders live only 1 or 2 years. Notable exceptions are large female tarantulas, which can live up to 20 years. Male tarantulas live only 2 to 3 years. Many male spiders die soon after _____.

- A. Webbing
- B. Molting
- C. Mating
- D. Hunting
- E. None of the Above

124. Silks, Threads, and Webs

Nearly all spiders produce silk composed of the protein fibroin. This is the same protein produced by silkworms, the _____ of certain silk moths.

- A. Chelicerae
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

125. Each spider has four to eight different kinds of _____ in its abdomen, and each gland produces a different type of silk with different properties.

- A. Silk glands or glands
- B. Pedicel
- C. Reproductive system
- D. Chelicerae
- E. None of the Above

126. Other _____ produce cocoon threads that blanket and protect fertilized eggs. Still other glands produce sticky capture threads that ensnare prey.

- A. Glands
- B. Pedicel
- C. Reproductive system
- D. Chelicerae
- E. None of the Above

127. Types of Spider Webs

Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the almost circular orb web, in which an outer framework supports a continuous spiraling thread and a series of _____ from the center of the web.

- A. Threads spiraling
- B. Horizontal silk sheets with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

128. Other web types may have a more irregular shape. Some spiders build irregular, flimsy webs. Common house spiders construct funnel webs, flat silk sheets with a _____ that serves as a retreat for the spider.

- A. Nest
- B. Horizontal silk sheet with a dome
- C. Thread radiating
- D. Raised tube in the corner
- E. None of the Above

129. Cobweb spiders build an irregular _____ with sticky threads at the bottom that trap insects. Sheet web spiders construct a horizontal silk sheet with a dome, from which the small spider hangs upside down.

- A. Silk meshwork
- B. Horizontal silk sheet with a dome
- C. Threads radiating in to a tube
- D. Raised tube in the corner
- E. None of the Above

130. Many spider webs are found near the ground or in low vegetation, although orb webs often span the open spaces between bushes or trees _____.

- A. Making a trap
- B. Making a horizontal silk sheet with a dome
- C. In order to trap flying insects
- D. Making a trip wire
- E. None of the Above

131. The size of a web depends on the size of the spider. Whether the web has a _____ depends on the size of the prey the spider expects to capture.

- A. Horizontal silk sheet with a dome
- B. Tight or wide mesh
- C. Thread radiating in to a tube
- D. Raised tube in the corner
- E. None of the Above

132. Web Building

Web building is a _____, but some spiders can complete a web in less than 30 minutes.

- A. Completely relying on instinct
- B. Complex process
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

133. Spiders typically build their webs at night, _____ on their sense of touch, not eyesight, during construction.

- A. Completely relying
- B. A complex process
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

134. Each type of spider uses a different procedure when building a web. Spiders that weave orb webs generally begin by _____ that is carried by air currents until it catches on a tree limb or other firm support.

- A. Completely relying on the wind
- B. A complex process of throwing a web
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

135. From this thread, the spider lays down another thread to _____ that is the basic framework of the web.

- A. Start
- B. Make a trap
- C. Spin a thread
- D. Form a Y-shaped structure
- E. None of the Above

136. The spider then _____ of the Y-structure, known as the hub, and begins creating radius lines, or spokes, around the web.

- A. Hides
- B. Eats their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

137. As the spider builds _____, it connects these lines with a few narrow circles of thread in the center of the web that forms the auxiliary spiral.

- A. Trips wires
- B. A safety tube
- C. Radius lines
- D. A midpoint
- E. None of the Above

138. The _____ prevents radius lines from sagging when the spider walks on them. Using the auxiliary spiral as scaffolding, the spider begins the formation of the catching spiral, fastening sticky threads to each radius line. As the spider constructs the catching spiral, it dismantles the auxiliary spiral.

- A. Radius
- B. Web
- C. Tube
- D. Auxiliary spiral
- E. None of the Above

139. The catching spiral extends from the periphery of the web and stops short of the web's hub. In the finished web, only remnants of the _____ and there is an empty space in the web's center known as the free zone.

- A. Radius
- B. Tube
- C. Axis
- D. Auxiliary spiral remain
- E. None of the Above

140. The spider may _____ with its legs placed in the center of its web to detect vibrations in the web when prey gets caught in the sticky catching spiral.

- A. Spin a new web
- B. Eat their old web
- C. Sit upside down
- D. Remain still
- E. None of the Above

141. Others may hide nearby under a curled leaf and use the vibrations from a signal thread attached to the hub to stay informed when _____. The orb web is built anew every day.

- A. Prey has struck the web
- B. The trap alarm goes off
- C. Sit upside down
- D. The tube is harassed
- E. None of the Above

142. Some species _____ before starting a new web, while others roll up the web and discard it as a tiny silk ball.

- A. Discard it as a tiny silk ball
- B. Eat their old web
- C. Sit upside down and pounders
- D. Climbs to the midpoint and thinks
- E. None of the Above

143. Spider Identification Section: Ground Spiders

True tarantulas are a type of _____ that belongs to the family Lycosidae in the suborder Araneomorphae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

144. Sometimes known as American tarantulas, they are found in tropical regions throughout the world, with many species in the southwestern United States.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

145. As ground hunters, _____ are typical sit-and-wait predators—they wait for insects or small vertebrates to come near before they pounce and kill the prey with their strong chelicerae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

146. Many _____ brush off their abdominal hairs when they feel threatened. These barbed hairs fly through the air and can penetrate skin and the mucous membranes of the nose, causing a strong burning sensation.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. None of the Above

147. Wolf Spider

About 2,000 species of wolf spiders belong to the family Lycosidae in the suborder _____. Found throughout the world, these spiders have dull brown or black coloration, stout bodies, and long, thick legs. Some species have hairy bodies.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Araneomorphae
- E. None of the Above

148. _____ are ground hunters, but their name inaccurately suggests that they actively hunt their prey just like their wolf namesake. However, like tarantulas, most wolf spiders usually sit in a hidden spot. When prey happens by, they ambush the prey by jumping on it.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

149. _____ are sensitive to vibrations, such as the buzzing wings of insects, as well as to visual signals.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

150. For instance, during courtship males drum their legs on the ground or wave their _____ in a rhythmic dance in order to catch a female's attention.

- A. Fangs
- B. Hair
- C. Scent glands
- D. Legs and palps
- E. None of the Above

Pesticide Worker Protection Standard Review Section

151. All agricultural employers whose workers perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides, and handle pesticides in these locations are covered by the _____ worker protection standard revised 2005.

- A. EPA
- B. Federal Environmental Pesticide Control Act
- C. Federal Insecticide, Fungicide, and Rodenticide Act
- D. WPS
- E. None of the Above

152. Agricultural _____ must be in full compliance with this regulation before April 15, 1994. Additionally, owners, operators, and their immediate family members must comply with some of the provisions of this standard.

- A. Commercial workers
- B. Handlers
- C. Laborers
- D. Employers
- E. None of the Above

153. Agricultural employers must be in full compliance with the U.S. Environmental Protection Agency's (EPA) 2005 _____.

- A. Commercial agriculture pesticide standard
- B. FIFA
- C. Pesticide exposure law
- D. WPS
- E. None of the Above

154. The WPS covers every _____, including livestock producers, who have employees that perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides.

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

155. Unlike other laws and regulations affecting agricultural labor, the _____ does not exempt any employment in commercial agriculture involving hand labor in fields, but owners or operators and immediate family members are specifically exempt from some provisions.

- A. Commercial agriculture standard
- B. Employer
- C. Pesticide exposure law
- D. WPS
- E. None of the Above

156. The WPS expands coverage to include more employees and expands employers' requirements for training employees who handle pesticides, protecting employees from _____, and providing emergency assistance to exposed employees.

- A. Commercial agriculture labor
- B. Work
- C. Pesticide exposure
- D. WPS
- E. None of the Above

157. Although many laws affecting agricultural employment exempt farming enterprises that employ small numbers of _____, the new standard has no exemptions based on the number of employees.

- A. Commercial agriculture workers
- B. Employers
- C. Pesticide exposure handlers
- D. WPS
- E. None of the Above

158. _____ covered by the WPS must: Reduce overall exposure to pesticides by prohibiting handlers from exposing workers during pesticide application, excluding workers from areas being treated and areas under a restricted entry interval, and notifying workers about treated areas.

- A. Commercial agriculture laborers
- B. Employers
- C. Handlers
- D. WPS
- E. None of the Above

159. Some activities are allowed during _____ if workers are properly trained and protected.

- A. Commercial agriculture
- B. Employers
- C. Pesticide exposure
- D. WPS
- E. None of the Above

160. _____ by requiring decontamination supplies be present and emergency assistance be available.

- A. Agricultural work
- B. Pesticide hazards needs to be delimited
- C. Mitigate exposures
- D. Discourage unsafe work
- E. None of the Above

161. Inform workers about _____ by requiring safety training (workers and handlers), safety posters, access to labeling information, and access to specific information (listing of treated areas on the establishment).

- A. Agricultural hazards
- B. Pesticide hazards
- C. Mitigating exposures
- D. None of the Above

162. Therefore, employers should contact their State agency that regulates the _____ in cooperation with the EPA to determine whether they must comply with the WPS and local regulations. Nothing in this report replaces technical and professional legal advice.

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

163. The _____ of 1947, as amended, sets an overall risk/benefit standard for pesticide registration, requiring that all pesticides perform their intended function, when used according to labeling directions, without imposing unreasonable risks of adverse effects on human health or the environment.

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

164. These WPS regulations contained four basic requirements, one is: _____ are not to be sprayed with pesticides.

- A. Laborers
- B. Workers
- C. Crops
- D. All of the above
- E. None of the Above

165. During the congressional discussion of _____ amendments in 1972, the Senate Committee on Agriculture and Forestry (Committee) "found protection of man and the environment to be a broad term encompassing farmers, farmworkers, and others who come into contact with pesticides..." (57 FR 38102).

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

166. The Committee further found "that the bill [_____] requires the Administrator to require that the labeling and classification of pesticides be such as to protect farmers, farmworkers, and others coming in contact with pesticides or pesticide residues" (57 FR 38102).

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

167. Given the above mandate, the _____ issued regulations in 1974 dealing with pesticide-related occupational safety and health of workers performing hand labor operations in fields during and after application of pesticides (40 CFR).

- A. Federal Environmental Pesticide Control Act
- B. Federal Insecticide, Fungicide, and Rodenticide Act
- C. WPS
- D. EPA
- E. None of the Above

168. These WPS regulations contained four basic requirements, one is: there are specific restricted entry intervals (REI) for 12 pesticides, interim restrictive entry levels for certain pesticides, and a _____ for all other agricultural pesticides prohibiting re-entry into treated areas until sprays have dried, dusts have settled, and vapors have dispersed.

- A. Agricultural pesticides
- B. Workers
- C. Protective clothing
- D. Appropriate and timely
- E. None of the Above

169. These WPS regulations contained four basic requirements, one is: _____ is required for any worker entering a treated area before the specific re-entry period has expired.

- A. Agricultural posters
- B. Information
- C. Protective clothing
- D. Appropriate and timely
- E. None of the Above

170. These WPS regulations contained four basic requirements, one is: " _____ " warnings are required for re-entry. These warnings may be given orally in appropriate language, placed on the pesticide notice board, or posted in the field.

- A. MSDS
- B. Labor
- C. Protective clothing
- D. Appropriate and timely
- E. None of the Above

171. The EPA determined that the 1974 regulations did not adequately protect agricultural workers and pesticide handlers who were occupationally exposed to pesticides. In order to correct these inadequacies, the EPA issued new regulations designed to reduce exposure to pesticides, _____, and inform workers about pesticides.

- A. Agricultural employer
- B. WPS
- C. Production
- D. MSDS
- E. None of the Above

172. Reducing overall exposure to pesticides will be accomplished by prohibiting handlers from exposing workers during application, excluding workers from areas being treated and areas under a REI (some activities are allowed during a REI if workers are properly trained and protected), and _____ about treated areas.

- A. Agricultural employer
- B. WPS
- C. Production
- D. Discourages
- E. None of the Above

173. Mitigating exposures will be accomplished by requiring _____ supplies and emergency assistance. Workers will be informed about pesticide hazards through required safety training (workers and handlers), safety posters, access to labeling information, and access to specific information (listing of treated areas on the establishment).

- A. Agricultural employer
- B. Decontamination
- C. Production
- D. Discourages
- E. None of the Above

174. Provisions of the _____ apply to: Owners or managers of farms, forests, nurseries, or greenhouses where pesticides are used in the production of agricultural plants.

- A. Agricultural employer
- B. WPS
- C. Production
- D. Discourages
- E. None of the Above

175. Provisions of the _____ apply to: Those who hire or contract for services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse.

- A. Agricultural employer
- B. WPS
- C. Production
- D. Discourages
- E. None of the Above

176. The general duties of the WPS require an _____ or a pesticide handler-employer to: Assure that each worker and handler subject to the standard receives the required protections.

- A. Agricultural employer
- B. WPS
- C. Production
- D. Discourages
- E. None of the Above

177. The general duties of the WPS require a(n) _____ or a pesticide handler-employer to: Assure that any pesticide subject to the standard is used in a manner consistent with the labeling of the pesticide, including the requirements in the standard.

- A. Agricultural employer
- B. WPS
- C. Label
- D. MSDS
- E. None of the Above

178. The general duties of the WPS require a(n) _____ or a pesticide handler-employer to: Requires everyone applying pesticides to obey instructions printed on the pesticide container's label.

- A. Agricultural employer
- B. Label
- C. Worker
- D. Handler
- E. None of the Above

179. _____ Applicators are prohibited from applying a pesticide in a way that will expose workers or other persons. Workers are excluded from areas while pesticides are being applied.

- A. Protection during applications
- B. Notification to workers
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

180. The general duties of the _____ require an agricultural employer or a pesticide handler-employer to: Provide sufficient information and directions to each person who supervises any worker or handler to assure that each worker or handler receives the required protection. The information and directions must specify which persons are responsible for actions required to comply with the standard.

- A. Agricultural employer
- B. WPS
- C. EPA
- D. MSDS
- E. None of the Above

181. The general duties of the _____ require an agricultural employer or a pesticide handler-employer to: Require each person who supervises any worker or handler to assure compliance by the worker or handler with the provisions of this standard and to assure that the worker or handler receives the required protection (40 CFR).

- A. Agricultural employer
- B. WPS
- C. MSDS
- D. Label
- E. None of the Above

182. The general duties of the _____ require an agricultural employer or a pesticide handler-employer to: The general duties also prohibit agricultural and handler employers from taking any retaliatory actions against workers attempting to comply with this standard, or from taking any action that prevents or discourages any worker or handler from complying or attempting to comply with the WPS.

- A. Agricultural employer
- B. WPS
- C. MSDS
- D. Label
- E. None of the Above

183. _____ must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide-treated area during the restricted-entry interval, with only narrow exceptions.

- A. Protection during applications
- B. Notification to workers
- C. Restricted-entry intervals
- D. Personal protective equipment
- E. None of the Above

184. _____ must be provided and maintained for handlers and early-entry workers.

- A. Protection during applications
- B. Notification to workers
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

185. _____ about treated areas so they may avoid inadvertent exposures.

- A. Protection during applications
- B. Workers must be notified
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

186. Handlers and workers must have an ample _____, soap, and towels for routine washing and emergency decontamination.

- A. Protection during applications
- B. Supply of water
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

187. Transportation must be made available to a medical care facility if a worker or handler may have been poisoned or injured. Information must be provided about the pesticide to which the person may have been exposed.

- A. Protection during applications
- B. Notification to workers
- C. Pesticide safety training and safety posters
- D. Transportation
- E. None of the Above

188. Training is required for all workers and handlers, and a _____ must be displayed.

- A. MSDS
- B. Notification to workers
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

189. Handlers and workers must be informed of _____. Central posting of recent pesticide applications is required.

- A. Protection during applications
- B. Pesticide label requirements
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

190. _____ is the time immediately after a pesticide application when entry into the treated area is prohibited or very limited.

- A. Drying time
- B. Restricted-entry interval
- C. Early entry
- D. Laboring
- E. None of the Above

191. _____ are established for all pesticides used in the production of agricultural plants depending on toxicity.

- A. Protection during applications
- B. Restricted-entry interval
- C. Pesticide safety training and safety posters
- D. Personal protective equipment
- E. None of the Above

192. The _____ is listed on the pesticide labeling under the heading "Agricultural Use Requirements" in the "Directions for Use" section of the pesticide labeling or next to the crop or application method to which it applies.

- A. Protection during applications information
- B. Restricted-entry interval
- C. MSDS
- D. Personal protective equipment section
- E. None of the Above

193. _____ must be specified on all agricultural plant pesticide product labels.

- A. Protection during applications
- B. Restricted-entry interval
- C. MSDS
- D. Personal protective equipment
- E. None of the Above

194. Workers are excluded from entering a pesticide treated area during the _____, with few narrow exceptions.

- A. Early entry
- B. Restricted-entry interval
- C. Drying or spraying time
- D. Personal protective equipment
- E. None of the Above

195. The duration of _____ ranges from 4 hours to several days. Some pesticides have one REI, such as 12 hours, for all crops and uses.

- A. Applications
- B. Restricted-entry interval
- C. Spraying
- D. Early entry
- E. None of the Above

196. Other products have different _____, depending on the crop or method of application. When two or more pesticides are applied at the same time and have different REIs, the longer interval must be followed.

- A. Applications
- B. Restricted-entry interval
- C. Early entry times
- D. Personal protective equipment
- E. None of the Above

197. There is a _____ period for 4 hours for all products with WPS labeling; this means no early entry.

- A. Early entry
- B. Restricted-entry interval
- C. Safe
- D. No entry
- E. None of the Above

198. Employers must notify workers about _____ on the agricultural establishment if they will be on or within a quarter (1/4) mile of the treated area.

- A. Protection during applications
- B. No entry
- C. Pesticide applications
- D. Early entry
- E. None of the Above

199. In most cases, employers may choose between oral warnings or posted warning signs, but they must tell workers which warning method is in effect. All applications must be additionally _____ at the central location.

- A. Recorded and displayed
- B. Posted Restricted-entry interval
- C. Posted pesticide applications
- D. Personal protective equipment
- E. None of the Above

200. Most products allow _____ either orally or by posting a field warning sign, one or the other is acceptable as long as workers are informed of which method is being used.

- A. Protection during applications information
- B. Restricted-entry interval information
- C. Pesticide applications
- D. Worker notification
- E. None of the Above

You are finished with your assignment. Please fax, mail or e-mail your assignment along with your registration form and survey sheet. Always call later to ensure we've received the assignment.

Fax (928) 272-0747 info@tlch2o.com

Fax a copy of your driver's license too.

Spider Control CEU Training Awareness Assignment #4 Q-R Last Names

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services, Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Assignment # 1 for whose last name begins with A-E

Assignment #2 for whose last name begins with F-K

Assignment #3 for the last name starting with the letter L-P

Assignment #4 for the last name starting with the letter Q-R

Assignment #5 for the last name starting with the letter S-Z

Multiple Choice Section, WPS and California Terms.

From the Text WPS, Agricultural Pesticide Section

Warning signs must be:

1. Posted 24 days or less before application.

- A. TRUE
- B. FALSE

2. Removed within three (3) days after the end of the harvest.

- A. TRUE
- B. FALSE

3. Posted so they can be seen at all normal entrances to treated areas, including borders adjacent to labor but not prison camps.

- A. TRUE
- B. FALSE

4. The WPS covers every _____, including livestock producers, who have employees that perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural type labor
- D. Pesticide applicator
- E. None of the Above

5. Unlike other laws and regulations affecting agricultural labor, the WPS does not exempt any employment in _____ involving hand labor in fields, but owners or operators and immediate family members are specifically exempt from some provisions.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

6. The WPS expands coverage to include more employees and expands employers' requirements for training employees who handle pesticides, protecting employees from _____, and providing emergency assistance to exposed employees.

- A. Agricultural pesticides
- B. Toxic environments
- C. Over spray
- D. Pesticide exposure
- E. None of the Above

7. Although many laws affecting _____ exempt farming enterprises that employ small numbers of hired farmworkers, the new standard has no exemptions based on the number of employees.

- A. Agricultural employer
- B. Agricultural employment
- C. Employees
- D. Workers
- E. None of the Above

Employers covered by the WPS must:

8. Reduce overall exposure to pesticides by prohibiting handlers from exposing workers during pesticide application, excluding workers from areas being treated and areas under a _____, and notifying workers about treated areas.

- A. Permit
- B. Restriction
- C. Special application
- D. Validation
- E. None of the Above

9. _____ by requiring decontamination supplies be present and emergency assistance be available.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Tell employees
- E. None of the Above

10. Inform workers about pesticide hazards by requiring safety training (workers and handlers), safety posters, access to labeling information, and access to _____ (listing of treated areas on the establishment).

- A. Labels
- B. Mitigating exposure instructions
- C. Requiring safety training
- D. MSDS
- E. None of the Above

11. WPS provisions are _____ and are likely to affect a large number of employers and their workers.
- A. Easy to understand
 - B. Distributed
 - C. Requiring safety training
 - D. Very complicated
 - E. None of the Above
12. States may also issue _____ standards that are stricter than the WPS.
- A. Additional
 - B. Worker protection
 - C. Less
 - D. Complicated
 - E. None of the Above
13. Therefore, employers should contact their State agency that regulates the Federal Insecticide, Fungicide, and Rodenticide Act _____ with the EPA to determine whether they must comply with the WPS and local regulations.
- A. Law
 - B. Agencies
 - C. In cooperation
 - D. Without
 - E. None of the Above

Four Basic Requirements

14. These regulations contained four basic requirements:
Workers are not to be sprayed with pesticides unless they are notified.
- A. TRUE
 - B. FALSE
15. There are specific allowable entry intervals (REI) for 12 pesticides, interim restrictive entry levels for certain pesticides, and a general re-entry interval for all other agricultural pesticides not prohibiting re-entry into treated areas until sprays have dried, dusts have settled, and vapors have dispersed.
- A. TRUE
 - B. FALSE
16. Protective clothing is no longer required for any worker entering a treated area before the specific re-entry period has expired.
- A. TRUE
 - B. FALSE
17. "Appropriate and timely" warnings are required for re-entry. These warnings may be given orally in appropriate language, placed on the pesticide notice board, or posted in the field.
- A. TRUE
 - B. FALSE

1974 Regulations

18. The EPA determined that the 1974 regulations did not adequately protect agricultural workers and pesticide handlers who were occupationally exposed to pesticides. In order to correct these inadequacies, the EPA issued new regulations designed to reduce exposure to _____, mitigate exposure, and inform workers about pesticides.
- A. Pesticides
 - B. Toxics
 - C. During application
 - D. Decontamination supplies
 - E. None of the Above

19. Reducing overall exposure to pesticides will be accomplished by _____ from exposing workers during application, excluding workers from areas being treated and areas under a REI (some activities are allowed during a REI if workers are properly trained and protected), and notifying workers about treated areas.

- A. Prohibiting handlers
- B. Mitigating exposures
- C. Requiring safety training
- D. Training
- E. None of the Above

20. _____ will be accomplished by requiring decontamination supplies and emergency assistance.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Notification
- E. None of the Above

21. Workers will be informed about _____ through required safety training (workers and handlers), safety posters, access to labeling information, and access to specific information (listing of treated areas on the establishment).

- A. Pesticide hazards
- B. Exposure
- C. Application
- D. Decontamination supplies
- E. None of the Above

Worker Protection Standard for Agricultural Pesticides

Provisions of the WPS apply to:

22. Owners or managers of farms, forests, nurseries, or greenhouses where pesticides are used in the production of agricultural plants.

- A. TRUE
- B. FALSE

23. Those who hire or contract for services of agricultural workers to do tasks related to the production of agricultural plants on a farm, forest, nursery, or greenhouse.

- A. TRUE
- B. FALSE

General Duties of WPS

The general duties of the WPS require an agricultural employer or a pesticide handler-employer to:

24. Assure that each worker and handler _____ receives the required protections.

- A. That complies with the standard
- B. Subject to the standard
- C. Understands the standard
- D. All of the Above
- E. None of the Above

25. Assure that any pesticide _____ is used in a manner consistent with the labeling of the pesticide, including the requirements in the standard.

- A. MSDS
- B. Subject to the standard
- C. Label
- D. None of the Above

26. Provide sufficient information and directions to each person who supervises any worker or handler to assure that each worker or handler receives the _____.
- A. Comply with the standard
 - B. Subject to the standard
 - C. Provisions of this standard
 - D. All of the Above
 - E. None of the Above
27. The information and directions must specify which persons are responsible for actions required to _____.
- A. Comply with the standard
 - B. Distribute to the standard
 - C. Understand the provisions of this standard
 - D. All of the Above
 - E. None of the Above
28. Require each person who supervises any worker or handler to assure compliance by the worker or handler with the _____ and to assure that the worker or handler receives the required protection (40 CFR).
- A. WPS
 - B. Subjects to the standard
 - C. Provisions of this standard
 - D. All of the Above
 - E. None of the Above
29. The general duties also prohibit agricultural and handler employers from taking any retaliatory actions against workers attempting to _____, or from taking any action that prevents or discourages any worker or handler from complying or attempting to comply with the WPS.
- A. Comply with the standard
 - B. Be subject to the standard
 - C. Spray pesticides
 - D. All of the Above
 - E. None of the Above
30. Requires everyone applying pesticides to _____ printed on the pesticide container's label.
- A. Comply with the standard
 - B. Subject to the standard
 - C. Provisions of this standard
 - D. All of the Above
 - E. None of the Above

Summary of WPS Requirements

31. _____ Applicators are prohibited from applying a pesticide in a way that will expose workers or other persons. Workers are excluded from areas while pesticides are being applied.
- A. Restricted-entry intervals
 - B. Decontamination supplies
 - C. Emergency assistance
 - D. Protection during applications
 - E. None of the Above

32. _____ must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide-treated area during the restricted-entry interval, with only narrow exceptions.
- A. Restricted-entry intervals
 - B. Notification to workers
 - C. Protection during applications
 - D. Decontamination supplies
 - E. None of the Above
33. _____ must be provided and maintained for handlers and early-entry workers.
- A. Emergency assistance
 - B. Restricted-entry intervals
 - C. Personal protective equipment
 - D. Notification to workers
 - E. None of the Above
34. _____ Workers must be notified about treated areas so they may avoid inadvertent exposures.
- A. Emergency assistance
 - B. Restricted-entry intervals
 - C. Decontamination supplies
 - D. Notification to workers
 - E. None of the Above
35. _____ Handlers and workers must have an ample supply of water, soap, and towels for routine washing and emergency decontamination.
- A. Restricted-entry intervals
 - B. Decontamination supplies
 - C. Emergency assistance
 - D. Notification to workers
 - E. None of the Above
36. _____ Transportation must be made available to a medical care facility if a worker or handler may have been poisoned or injured. Information must be provided about the pesticide to which the person may have been exposed.
- A. Restricted-entry intervals
 - B. Decontamination supplies
 - C. Emergency assistance
 - D. Notification to workers
 - E. None of the Above
37. _____ Training is required for all workers and handlers, and a pesticide safety poster must be displayed.
- A. Notification to workers
 - B. Protection during applications
 - C. Pesticide safety training and safety posters
 - D. Emergency assistance
 - E. None of the Above

38. _____ Handlers and workers must be informed of pesticide label requirements. Central posting of recent pesticide applications is required.
- A. Access to labeling and site-specific information
 - B. Notification to workers
 - C. Protection during applications
 - D. Pesticide safety training and safety posters
 - E. None of the Above
39. _____ - Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides.
- A. Fungicides
 - B. Agricultural Use Requirements
 - C. Pesticides
 - D. Defoliant
 - E. None of the Above
40. 40 CFR Part 170 contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment, _____, and restricted entry intervals.”
- A. Restricted-entry interval
 - B. Notification of Workers
 - C. Agricultural Use Requirements
 - D. Worker Protection Standard
 - E. None of the Above
41. Some pesticide uses are not covered by WPS, even when the _____ section is on the labeling. For example, if the pesticide labeling bears an Agricultural Use Requirements section, but the product also can be applied to rights-of-way, the rights-of-way use is not covered by WPS.
- A. Restricted-entry interval
 - B. Worker Notification
 - C. Agricultural Use Requirements
 - D. Worker Protection Standard
 - E. None of the Above

WPS Requires Restricted Entry to Treated Areas

42. _____ is the time immediately after a pesticide application when entry into the treated area is prohibited or very limited.
- A. Restricted-entry interval
 - B. Worker Notification
 - C. Agricultural Use Requirements
 - D. Early Entry
 - E. None of the Above
43. _____ are established for all pesticides used in the production of agricultural plants depending on toxicity.
- A. Restricted-entry interval
 - B. Worker Notification
 - C. Agricultural Use Requirements
 - D. Rules
 - E. None of the Above

44. The REI is listed on the pesticide labeling under the heading “_____” in the “Directions for Use” section of the pesticide labeling or next to the crop or application method to which it applies.

- A. Restricted-entry interval
- B. Worker Notification
- C. Agricultural Use Requirements
- D. MSDS
- E. None of the Above

45. _____ must be specified on all agricultural plant pesticide product labels. Workers are excluded from entering a pesticide treated area during the REI, with few narrow exceptions.

- A. Restricted-entry interval
- B. Notify Workers Or Worker Notification
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

46. The duration of _____ ranges from 4 hours to several days.

- A. Restricted-entry interval
- B. Early entry
- C. Agricultural Use Requirements
- D. Worker Protection Standard
- E. None of the Above

47. Some pesticides have one REI, such as 12 hours, for all crops and uses. Other products have different REIs, depending on the crop or _____.

- A. Restricted-entry interval
- B. Cotton
- C. Method of application
- D. Plantings
- E. None of the Above

48. When two or more pesticides are applied at the same time and have different REIs, the longer interval must be followed. There is a no-entry period for 4 hours for all products with _____ labeling; this means no early entry.

- A. Restricted-entry interval
- B. Agricultural Use Requirements
- C. Worker Protection Standard
- D. Early Entry
- E. None of the Above

WPS Requires Notification of Applications

49. Employers must _____ about pesticide applications on the agricultural establishment if they will be on or within a quarter (1/4) mile of the treated area.

- A. Provide training on the Restricted-entry interval
- B. Provide Agricultural Use Requirements
- C. Provide a Worker Protection Standard
- D. Notify Workers
- E. None of the Above

50. In most cases, employers may choose between oral warnings or posted warning signs, but they must _____ which warning method is in effect. All applications must be additionally recorded and displayed at the central location.
- A. Post the Restricted-entry interval
 - B. Notify Workers Or Tell workers
 - C. Distribute the Agricultural Use Requirements
 - D. Carry the Worker Protection Standard
 - E. None of the Above

Spider Information from the text

51. As the silk is drawn out through the _____, protein molecules within the silk line up parallel to one another, causing the silk to harden and form strong, elastic filaments.

- A. Digestive system
- B. Shortened limbs
- C. Spigots
- D. Silk
- E. None of the Above

52. The hardening of silk results from the drawing-out process through the _____, not from exposure to air, as is commonly believed.

- A. Palps
- B. Shortened limbs
- C. Spigots
- D. Chelicerae
- E. None of the Above

53. Several silk threads produced by different _____ may fuse to form a stronger one.

- A. Palps
- B. Shortened limbs
- C. Spigots
- D. Chelicerae
- E. None of the Above

54. Spinnerets are actually _____. They can move to place silk strands in precise locations when the spider builds a web or wraps prey in silk.

- A. Digestive system glands
- B. Shortened limbs
- C. Spigots
- D. None of the Above

55. Internal Anatomy and Function

The cephalothorax houses part of the _____ and the central nervous system.

- A. Digestive system
- B. Shortened limbs
- C. Spigots
- D. Palps
- E. None of the Above

56. The abdomen contains most of the spider's vital organs, including a long, tubular heart; respiratory organs; reproductive organs; and _____.

- A. Digestive system
- B. Book lungs
- C. Spigots
- D. Excretory organs
- E. None of the Above

57. Breathing Organs

Spiders use two types of breathing organs: _____ and tracheal tubes. Narrow slits on the underside of the abdomen lead to two or four respiratory organs called book lungs.

- A. Body tissues
- B. Book lung
- C. Pedicel
- D. Closed tubes
- E. None of the Above

58. The _____ organs are so named because they consist of alternating layers of air spaces and thin leaflets of cuticle filled with blood, making the structures resemble a slightly opened book.

- A. Body tissues
- B. Book lung
- C. Spider blood
- D. Pedicel
- E. None of the Above

59. Oxygen from the air passes through the extremely thin cuticle leaflets directly into the blood. A small opening in front of the spinnerets, known as a spiracle, leads to _____ made of cuticle. These tiny tubes branch and spread throughout the body.

- A. Body tissues
- B. Book lung
- C. Pedicel
- D. Tracheal tubes
- E. None of the Above

60. Air enters the spiracle and passes through the tracheal tubes so that oxygen can travel to all the spider's _____.

- A. Body tissues
- B. Book lung
- C. Spider blood
- D. Pedicel
- E. None of the Above

61. Spider's Blood

_____, also known as hemolymph, contains many blood cells with oxygen-carrying pigments called hemocyanin, which give the blood a light blue color.

- A. Body fluids
- B. Book lung juice
- C. Spider blood
- D. Pedicel fluid
- E. None of the Above

62. Spider blood also contains many other types of blood cells that play a role comparable to that of the _____ cells of humans. Among other functions, these cells play a role in blood clotting after an injury.

- A. anti-bodies
- B. Plasma
- C. White Blood
- D. Red blood
- E. None of the Above

63. The spider's long, _____ lies toward the back side of the abdomen. When the heart contracts, it pumps blood forward into the cephalothorax and backward into the abdomen.

- A. Tubular heart
- B. Book lung
- C. Chelicerae
- D. Closed tubes
- E. None of the Above

64. Blood travels through _____, or arteries, into spaces in the body cavity. From these spaces the blood travels to the book lungs, where it releases carbon dioxide and picks up a fresh supply of oxygen before returning to the heart.

- A. Body tissues
- B. Book lung
- C. Chelicerae
- D. Closed tubes
- E. None of the Above

65. Digestive System

The digestive system consists of a branched tube that extends from the mouth to the anus. In the cephalothorax, the tube enlarges to form a _____ with powerful muscles.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

66. When these muscles contract, they produce a powerful sucking action that pulls food into the _____.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

67. Spider digestion is unusual in that it begins outside of the spider's _____.

- A. Pedicel
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

68. When a spider captures an insect or other animal, it uses its _____ to pierce the prey and inject poison into the wound to paralyze or kill the animal.

- A. Pedicel
- B. Chelicerae
- C. Palps
- D. None of the Above

69. The spider then vomits juices containing digestive enzymes into the wound of the victim to break down and liquefy its _____ tissue.

- A. Stomach
- B. Chelicerae
- C. Body
- D. Midgut
- E. None of the Above

70. This liquefied tissue is then drawn through the spider's mouth and into its body by the sucking action of the _____.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

71. Two mechanical filters in the _____ prevent solid food particles from passing into the digestive system.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

72. From the stomach, food passes into the _____, which branches throughout the entire body.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

73. Enzymes secreted by the midgut further break down the liquefied food into nutrient molecules small enough to pass through the walls of the _____ into the blood.

- A. Stomach
- B. Chelicerae
- C. Mouth
- D. Midgut
- E. None of the Above

74. Nutrients can be stored for a long time in the spider's extensive _____, enabling many spiders to go for weeks or even months without the need to catch any prey.

- A. Stomach
- B. Digestive system
- C. Pedicel
- D. Midgut
- E. None of the Above

Nervous System

75. Most arthropods have a central nervous system made up of a long chain of nerve cell centers, called _____, that run throughout the body.

- A. Spider's brain
- B. Ganglia
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

76. In spiders, the ganglia are concentrated in the cephalothorax, where they condense into two compact masses: the _____, and the supra-esophageal ganglion.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

77. The _____, directs spider locomotion.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
78. The _____, is considered the brain of the spider.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
79. _____, throughout the body send information to this nerve center, where information processes and complex functions begin.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
80. Spider's Brain
- A _____, is relatively highly developed, enabling spiders to easily adapt to changes in their environment.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
81. Some scientists believe spiders can learn, and some have observed that spiders can remember where in their web they have _____; if the prey is removed, the spiders will continue searching for it in the same place for hours.
- Stored captured prey
 - Made a nest
 - Made a trap
 - A safe location
 - None of the Above
82. Spider Reproduction
- All species of spiders have two separate sexes, and the _____, are usually smaller than the females.
- Spiders
 - Male spider or Males
 - Female Spider or Female
 - Tiny adults
 - None of the Above
83. The _____, spider has two sperm-producing testes.
- Adult
 - Male spider or Male
 - Female Spider or Female
 - Larva
 - None of the Above

84. A sexually mature _____, spider uses its large palps to transfer sperm cells into the female during mating.
- The best and biggest
 - Male spider or Male
 - Female Spider or Female
 - The nymph
 - None of the Above
85. In this process, the _____, builds a small, triangular sperm web, onto which he deposits a drop of sperm from his abdomen.
- The best and biggest
 - Male spider or Male
 - Female Spider or Female
 - The nymph
 - None of the Above
86. The _____, dips both palps into this droplet, drawing sperm cells into the palps as if by a tiny pipette.
- The best and biggest
 - Male spider or Male
 - Female Spider or Female
 - The nymph
 - None of the Above
87. The _____, reproductive system includes two egg-producing ovaries.
- Incredible
 - Male spider or Male
 - Female Spider or Female
 - Mature
 - None of the Above
88. After the male transfers sperm cells into the _____,'s genital opening, located on her abdomen, they are stored, sometimes for months, in tiny receptacles.
- Chelicerae
 - Male spider or Male
 - Female Spider or Female
 - Nymph
 - None of the Above
89. These sperm cells fertilize the _____, egg cells just before she deposits her eggs into a silky cocoon.
- Chelicerae
 - Male spider or Male
 - Female Spider or Female
 - Nymph
 - None of the Above
90. Life Cycle
The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a _____, or spiderling), and adult. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton.
- Larvae
 - Male spider or Male
 - Female Spider or Female
 - Nymph
 - None of the Above

91. In each molting stage, young spiderlings resemble _____, a process known as incomplete metamorphosis.

- A. Larvae
- B. Male spider or Male
- C. Female Spider or Female
- D. Tiny adults
- E. None of the Above

92. Courting and Mating

Spiders become sexually mature after their last molt, at which time females have developed functional ovaries and males have mature testes. In most spider species, the _____ courts the female before mating occurs.

- A. Larvae
- B. Male spider or Male
- C. Female Spider or Female
- D. Spider drums or plucks and
- E. None of the Above

93. After a _____ has filled its palps with sperm cells, he begins searching for a female.

- A. Pheromone gland
- B. Male spider or Male
- C. Female Spider or Female
- D. Drumming or plucking
- E. None of the Above

94. A male begins by identifying himself to a female so that she does not mistake him for potential prey. In some spiders, such as American tarantulas, this identification process involves the _____ repeatedly touching the female.

- A. Pheromone
- B. Male spider or Male
- C. Palps
- D. Drums or plucks
- E. None of the Above

95. More often, a male courting a _____ communicates with her over larger distances using vibrations.

- A. Larva
- B. Male spider or Male
- C. Female Spider or Female
- D. Mate
- E. None of the Above

96. For instance, a male wolf spider uses its legs to _____ on the ground. In some web spiders, the male attaches a special signal thread to the female's web.

- A. Spread pheromones
- B. Attack
- C. Attach
- D. Drum
- E. None of the Above

97. The male then _____ the thread in a rhythm that indicates the vibration is caused by another spider of the same species and not by an ensnared insect.
- A. Grabs
 - B. Attaches
 - C. Attracts
 - D. Drums or plucks
 - E. None of the Above
98. If a female is ready to accept a courting _____, she may send signals back to him.
- A. Pheromone
 - B. Male spider or Male
 - C. Call
 - D. Drum or pluck
 - E. None of the Above
99. Locating the right _____ can be tricky for a male spider.
- A. Pheromone
 - B. Call
 - C. Female Spider or Female
 - D. Drum or pluck
 - E. None of the Above
100. Fortunately, female spiders produce certain chemical substances, known as _____, that aid spider courtship.
- A. Pheromones
 - B. Calls
 - C. Sperm
 - D. Vibrations
 - E. None of the Above
101. A female may release these _____ through the air (like a perfume) or she may deposit them on her silk threads.
- A. Pheromones
 - B. Vibrations
 - C. Scents
 - D. Drums or plucks
 - E. None of the Above
102. When a male spider encounters _____ from a female of the same species, he becomes excited, even if the female is not present.
- A. Pheromones
 - B. Vibrations
 - C. Scents
 - D. Drums or plucks
 - E. None of the Above
103. Spiders with better eyesight may rely mostly on _____ during courtship.
- A. Pheromones
 - B. Vibrations
 - C. Scents
 - D. Visual signals
 - E. None of the Above

104. When a male notices a female, he starts a _____ in front of her in which he raises his front legs, vibrates his palps, and twitches his abdomen.

- A. Zigzag dance
- B. Sperm exchange
- C. Movement specific to that species
- D. Molt
- E. None of the Above

105. Each species uses a different courtship dance with unique movements. A female will only accept a male who performs a dance with _____.

- A. Zigzag dance
- B. His sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

106. When a male finds an interested female, he inserts his _____ into the female's genital opening. The process of mating can be very brief (a matter of seconds), or it can last several hours, depending on the species. In most species, both sexes separate peacefully after mating.

- A. Cephalothorax
- B. Sperm-containing palp
- C. Reproductive system
- D. Chelicerae
- E. None of the Above

107. Contrary to popular belief, the female black widow spider does not necessarily _____. Depending on the species, a female may mate only once or she may mate with several males during her lifetime.

- A. Zigzag dance
- B. Mate
- C. Leave the web
- D. Kill her partner after mating
- E. None of the Above

108. Eggs and Brood Care

In most spider species, a female determines when _____ from the female's receptacles will fertilize her egg cells.

- A. Cocoons will be formed
- B. Sperm cells
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

109. _____ may occur a few weeks after mating, a strategy that enables the female to lay her eggs when she deems external conditions are best. The female then lays her eggs.

- A. Cocoon making
- B. Egg cells or Eggs
- C. Fertilization
- D. None of the Above

110. Most spider species lay several hundred _____; species of large spiders deposit several thousand within just a few minutes.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

111. Typically, the female spider lays her _____ in a silky case called a cocoon, which provides a protective and insulating environment for the developing spiders.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilized eggs
- D. Newly hatched spiderlings
- E. None of the Above

112. Many females abandon their _____ right after they deposit their eggs, although they may camouflage them or hang them in hidden locations. Other spiders guard and defend their cocoons until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

113. Some spiders exhibit special brood care. Female wolf spiders attach their _____ to their spinnerets and carry them around until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Nests
- D. Newly hatched spiderlings
- E. None of the Above

114. The _____ then climb onto their mother's back, where they stay for about a week before they leave to survive on their own.

- A. Larvae
- B. Molts
- C. Females
- D. Newly hatched spiderlings
- E. None of the Above

115. Occasionally, young spiderlings stay in their mother's web for weeks. During this time, the mother feeds her _____, transferring regurgitated food from her mouth to their mouths.

- A. Self
- B. Children
- C. Brood
- D. Young spiderlings
- E. None of the Above

116. Development and Growth

Spider eggs hatch inside the _____. The first stage hatches from the egg as an immobile, milky white larva.

- A. Cocoon
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

117. _____ are covered by an embryonic membrane and receive nourishment from yolk material within their abdomen.

- A. Cocoon
- B. Pedicel
- C. Chelicerae
- D. Larvae
- E. None of the Above

118. After one to two molts over about a two-week period, the _____ changes into a mobile spiderling, also referred to as a nymph.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larva
- E. None of the Above

119. In order to grow to an adult size, spiderlings undergo a series of _____ that enables them to increase in size. During molting, the old cuticle slowly lifts off, while a thin new cuticle forms underneath.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

120. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body. It later hardens into a new rigid exoskeleton that encases the larger _____.

- A. Spiderling
- B. Molts
- C. Chelicerae
- D. Larvae stage
- E. None of the Above

121. The number of _____ between the spiderling and adult stage varies according to the size of the species. Small species may molt about five times, while some large tarantulas may molt as many as 40 times.

- A. Spiderlings
- B. Molts
- C. Mates
- D. Larvae stages
- E. None of the Above

122. For most spiders, a spiderling's last molt marks adulthood, when functional sexual organs have developed and growth halts. Some adult female spiders, such as American tarantulas, continue to _____ repeatedly.

- A. Attack
- B. Molt
- C. Mate
- D. Grow
- E. None of the Above

123. Most spiders live only 1 or 2 years. Notable exceptions are large female tarantulas, which can live up to 20 years. Male tarantulas live only 2 to 3 years. Many male spiders die soon after _____.

- A. Webbing
- B. Molting
- C. Mating
- D. Hunting
- E. None of the Above

124. Silks, Threads, and Webs

Nearly all spiders produce silk composed of the protein fibroin. This is the same protein produced by silkworms, the _____ of certain silk moths.

- A. Chelicerae
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

125. Each spider has four to eight different kinds of _____ in its abdomen, and each gland produces a different type of silk with different properties.

- A. Silk glands or glands
- B. Pedicel
- C. Reproductive system
- D. Chelicerae
- E. None of the Above

126. Other _____ produce cocoon threads that blanket and protect fertilized eggs. Still other glands produce sticky capture threads that ensnare prey.

- A. Glands
- B. Pedicel
- C. Reproductive system
- D. Chelicerae
- E. None of the Above

127. Types of Spider Webs

Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the almost circular orb web, in which an outer framework supports a continuous spiraling thread and a series of _____ from the center of the web.

- A. Threads spiraling
- B. Horizontal silk sheets with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

128. Other web types may have a more irregular shape. Some spiders build irregular, flimsy webs. Common house spiders construct funnel webs, flat silk sheets with a _____ that serves as a retreat for the spider.

- A. Nest
- B. Horizontal silk sheet with a dome
- C. Thread radiating
- D. Raised tube in the corner
- E. None of the Above

129. Cobweb spiders build an irregular _____ with sticky threads at the bottom that trap insects. Sheet web spiders construct a horizontal silk sheet with a dome, from which the small spider hangs upside down.

- A. Silk meshwork
- B. Horizontal silk sheet with a dome
- C. Threads radiating in to a tube
- D. Raised tube in the corner
- E. None of the Above

130. Many spider webs are found near the ground or in low vegetation, although orb webs often span the open spaces between bushes or trees _____.

- A. Making a trap
- B. Making a horizontal silk sheet with a dome
- C. In order to trap flying insects
- D. Making a trip wire
- E. None of the Above

131. The size of a web depends on the size of the spider. Whether the web has a _____ depends on the size of the prey the spider expects to capture.

- A. Horizontal silk sheet with a dome
- B. Tight or wide mesh
- C. Thread radiating in to a tube
- D. Raised tube in the corner
- E. None of the Above

132. Web Building

Web building is a _____, but some spiders can complete a web in less than 30 minutes.

- A. Completely relying on instinct
- B. Complex process
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

133. Spiders typically build their webs at night, _____ on their sense of touch, not eyesight, during construction.

- A. Completely relying
- B. A complex process
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

134. Each type of spider uses a different procedure when building a web. Spiders that weave orb webs generally begin by _____ that is carried by air currents until it catches on a tree limb or other firm support.

- A. Completely relying on the wind
- B. A complex process of throwing a web
- C. Spinning a thread
- D. Forming a Y-shaped structure
- E. None of the Above

135. From this thread, the spider lays down another thread to _____ that is the basic framework of the web.

- A. Start
- B. Make a trap
- C. Spin a thread
- D. Form a Y-shaped structure
- E. None of the Above

136. The spider then _____ of the Y-structure, known as the hub, and begins creating radius lines, or spokes, around the web.

- A. Hides
- B. Eats their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

137. As the spider builds _____, it connects these lines with a few narrow circles of thread in the center of the web that forms the auxiliary spiral.

- A. Trips wires
- B. A safety tube
- C. Radius lines
- D. A midpoint
- E. None of the Above

138. The _____ prevents radius lines from sagging when the spider walks on them. Using the auxiliary spiral as scaffolding, the spider begins the formation of the catching spiral, fastening sticky threads to each radius line. As the spider constructs the catching spiral, it dismantles the auxiliary spiral.

- A. Radius
- B. Web
- C. Tube
- D. Auxiliary spiral
- E. None of the Above

139. The catching spiral extends from the periphery of the web and stops short of the web's hub. In the finished web, only remnants of the _____ and there is an empty space in the web's center known as the free zone.

- A. Radius
- B. Tube
- C. Axis
- D. Auxiliary spiral remain
- E. None of the Above

140. The spider may _____ with its legs placed in the center of its web to detect vibrations in the web when prey gets caught in the sticky catching spiral.

- A. Spin a new web
- B. Eat their old web
- C. Sit upside down
- D. Remain still
- E. None of the Above

141. Others may hide nearby under a curled leaf and use the vibrations from a signal thread attached to the hub to stay informed when _____. The orb web is built anew every day.

- A. Prey has struck the web
- B. The trap alarm goes off
- C. Sit upside down
- D. The tube is harassed
- E. None of the Above

142. Some species _____ before starting a new web, while others roll up the web and discard it as a tiny silk ball.

- A. Discard it as a tiny silk ball
- B. Eat their old web
- C. Sit upside down and pounders
- D. Climbs to the midpoint and thinks
- E. None of the Above

143. Spider Identification Section: Ground Spiders

True tarantulas are a type of _____ that belongs to the family Lycosidae in the suborder Araneomorphae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

144. Sometimes known as American tarantulas, they are found in tropical regions throughout the world, with many species in the southwestern United States.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

145. As ground hunters, _____ are typical sit-and-wait predators—they wait for insects or small vertebrates to come near before they pounce and kill the prey with their strong chelicerae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

146. Many _____ brush off their abdominal hairs when they feel threatened. These barbed hairs fly through the air and can penetrate skin and the mucous membranes of the nose, causing a strong burning sensation.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. None of the Above

147. Wolf Spider

About 2,000 species of wolf spiders belong to the family Lycosidae in the suborder _____. Found throughout the world, these spiders have dull brown or black coloration, stout bodies, and long, thick legs. Some species have hairy bodies.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Araneomorphae
- E. None of the Above

148. _____ are ground hunters, but their name inaccurately suggests that they actively hunt their prey just like their wolf namesake. However, like tarantulas, most wolf spiders usually sit in a hidden spot. When prey happens by, they ambush the prey by jumping on it.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

149. _____ are sensitive to vibrations, such as the buzzing wings of insects, as well as to visual signals.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

150. For instance, during courtship males drum their legs on the ground or wave their _____ in a rhythmic dance in order to catch a female's attention.

- A. Fangs
- B. Hair
- C. Scent glands
- D. Legs and palps
- E. None of the Above

151. Female _____ are renowned for their brood care.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. None of the Above

152. After laying eggs, a female spider carries the _____ attached to her spinnerets.

- A. Nest
- B. Eggs
- C. Spiderlings
- D. Cocoon
- E. None of the Above

153. When the spiderlings hatch, she allows them to ride on her back for about a week. Some larger _____ dig burrows in the soil, which they may line with silk and provide with a door. At night they leave their burrows to hunt for insects.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Sixed Eyed
- E. None of the Above

154. _____ occupy a variety of ecological niches, including most terrestrial habitats. Some species are amphibious, having the ability to skate on the surface of water. Other species are diggers that build burrows in sandy soil.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

155. Wolf spiders are most numerous in grasslands where crickets and grasshoppers abound. These spiders capture prey by pouncing on and holding it while several bites are delivered with the _____.

- A. Palps
- B. Web
- C. Fangs
- D. Chelicerae
- E. None of the Above

156. They have a _____ than most spiders and use vision to locate and track prey.

- A. Zigzag dance
- B. Vibration
- C. Visual signal
- D. Higher visual acuity
- E. None of the Above

157. _____ have reflective surfaces behind the retina that double the stimulation from a given unit of light and also cause the eyes to glow brightly in a flashlight beam.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. None of the Above

158. Although there are considerable variations in life histories, all female _____ have a common and fascinating set of maternal care behaviors.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Black widows
- E. None of the Above

159. After mating, a female produces a carefully constructed _____, into which she lays her eggs.

- A. Larva
- B. Egg cells or Eggs
- C. Silken sac
- D. Nymphs
- E. None of the Above

160. She then attaches the _____ to her posterior at her spinnerets and carries it with her wherever she goes, until the young spiderlings have hatched.

- A. Larva
- B. Egg sac
- C. Silken sac
- D. Nymphs
- E. None of the Above

161. After hatching, the mother opens the sac with her _____, and the young quickly escape and climb on their mother's back, where they remain until ready to molt and take up independent lives.

- A. Larva
- B. Egg cells or Eggs
- C. Silken sac
- D. Chelicerae
- E. None of the Above

162. Although some tropical wolf spider species are suspected of having _____ that produce serious pathology in humans, the bite of most species causes only very mild symptoms.

- A. Larva
- B. Egg cells or Eggs
- C. Toxins
- D. Venoms
- E. None of the Above

163. Treatment: Wash the bite site with soap and water, and then treat with a(n) _____. Consult a physician if any unusual symptoms or infection should occur.

- A. Antiseptic
- B. Antibody
- C. Tetanus shot
- D. Soap
- E. None of the Above

164. Jumping Spider

The jumping spiders are active hunters. Depending on the species, they can leap up to 25 times their body length when stalking prey. They belong to the family _____, the largest spider family, with more than 4,000 species, in the suborder Araneomorphae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Salticidae
- D. None of the Above

165. _____ are found mostly in tropical regions throughout the world, although some species live in high elevation regions in the Himalayas.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders
- D. Jumping spiders
- E. None of the Above

166. _____ are small spiders, seldom growing larger than 2 cm (0.8 in) in length.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders
- D. Jumping spiders
- E. None of the Above

167. Most _____ have somber brown or gray coloration, but a few male species are quite colorful, with iridescent scales and spines and tufts of bright hair.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders
- D. Jumping spiders
- E. None of the Above

168. The most striking feature of _____ is their eyes. They have two primary eyes on the front of their cephalothorax that provide exceptionally acute vision. For example, at 20 cm (8 in), they not only see sharp images, but also recognize members of their own species.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders
- D. Jumping spiders
- E. None of the Above

169. Their six _____ detect motion. Their excellent eyesight makes these spiders reliant on visual cues for courtship and hunting, and as a result, they are active mostly during the day. At night they hide in crevices or under bark, often in small silken cells that they weave for themselves.

- A. Secondary eyes
- B. Primary eyes
- C. Legs
- D. Third eyes
- E. None of the Above

170. During courtship, the male jumping spider identifies himself by dancing in front of a female, waving his legs in a pattern specific to that species. Hunting is also guided by _____.

- A. Secondary eyes
- B. Primary eyes
- C. Visual cues
- D. Third eyes
- E. None of the Above

171. The spider's _____ are able to detect a moving insect, which prompts the spider to turn toward the insect and scrutinize it with its primary eyes.

- A. Secondary eyes
- B. Primary eyes
- C. Palps
- D. Third eyes
- E. None of the Above

172. The overlapping visual field is produced by the _____ and secondary eyes enables the spider to accurately calculate the distance to the prey.

- A. Secondary eyes
- B. Primary
- C. Palps
- D. Third eyes
- E. None of the Above

173. Jumping spiders _____ their prey the way a cat stalks a mouse. When the spider comes within a few centimeters of its prey, it suddenly leaps by pushing off the ground with its hind legs and then grabs the prey with its front legs.

- A. Examine
- B. Trap
- C. Approach
- D. Call
- E. None of the Above

174. Muscle power and the _____ of body fluids fuel the explosive force of the jumping spider's legs.

- A. Secondary eyes
- B. Primary eyes
- C. Hydraulic action
- D. Third eyes
- E. None of the Above

175. Web Spiders: House Spider

The common _____ belongs to the funnelweb spiders in the family Agelenidae in the suborder Araneomorphae. House spiders are found throughout Europe and North America.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. House spider(s)
- E. None of the Above

176. This spider is so named because its _____ is often seen in wall corners of houses, but it can also be found in any cool, dark place, such as dense vegetation or crevices of logs or rocks. The spider's web forms a tube, and the narrowed end serves as a retreat where the spider can hide.

- A. Prey has struck the web
- B. Long web
- C. Horizontal sheet web
- D. Auxiliary spiral web
- E. None of the Above

177. When an insect walks _____, the spider immediately rushes out from the funnel, grabs its victim, and delivers a poisonous bite. The spider then carries its prey back to its retreat, where it begins to feed.

- A. Under the spider
- B. In to the trap
- C. Over the sheet web
- D. On the top
- E. None of the Above

178. Sometimes _____ leave their webs and can be seen wandering around or trapped in a bathtub. These are usually males who have given up building webs, but are always in search of a female.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. House spider(s)
- E. None of the Above

179. Male _____ lack adhesive hairs on their feet, and therefore, cannot climb on smooth vertical surfaces, such as those found in sinks and bathtubs.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. House spider(s)
- E. None of the Above

180. Most _____ are harmless and may actually prove beneficial to humans since they feed on insects that stray indoors.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. House spider(s)
- E. None of the Above

181. Garden spiders belong to the family Araneidae, a group of 2,500 different species of spiders that weave orb, or circular, webs. Marked with varying shades of brown, garden spiders have a distinctive white cross on their abdomens, and some people refer to them as _____.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. House spider(s)
- E. None of the Above

182. Like most orb weavers, a garden spider typically sits _____, placing its eight feet on the threads radiating out from the center of the web. The feet act as sensors, picking up vibrations when prey enters the web.

- A. In the tube
- B. In the nest
- C. Upside down in the middle of the orb web
- D. Hidden
- E. None of the Above

183. When an insect becomes stuck in the web's sticky spiral threads, the spider rushes out to wrap the victim with silk and give it a paralyzing bite. The spider then _____ to the hub of the web to feed on it.

- A. Attacks
- B. Eats their old web
- C. Carries the prey back
- D. Auxiliary spiral remain
- E. None of the Above

184. Black Widow Spider

The male black widow's abdomen is more elongated than that of the female, with white and red markings on its sides. The female's abdomen is almost spherical, usually with a red hourglass mark below or with 2 _____ separated by black.

- A. Transverse red marks
- B. Palps
- C. Legs
- D. Eyes
- E. None of the Above

185. The _____ of the black widow male are much longer in proportion to his body than those of the female.

- A. In tiny receptacles
- B. Reproductive organs, heart and silk glands
- C. Legs
- D. Cephalothorax
- E. None of the Above

186. The black widow female is more easily recognized, her shiny black body giving great contrast to the red hourglass marking on her _____.
- A. Transverse red marks
 - B. Round abdomen
 - C. Two sperm-producing testes
 - D. Egg sacs
 - E. None of the Above
187. Black widow spiders are common around wood piles, and are _____ when homeowners carry firewood into the house.
- A. Sly
 - B. Hostile
 - C. Angry
 - D. Frequently encountered
 - E. None of the Above
188. The female black widow spider _____.
- A. Completely relies on prey
 - B. Complex process
 - C. Spins a thread to hold here
 - D. Rarely leaves her web
 - E. None of the Above
189. The _____ is an irregular, tangled, crisscross web of rather coarse silk.
- A. Funnel shaped web
 - B. Nest
 - C. Web she constructs
 - D. Tube she builds
 - E. None of the Above
190. The core of the web is almost funnel shaped, woven into a silken tunnel in which the female spider _____ of her daylight hours.
- A. Hides
 - B. Spends the majority
 - C. Captures prey with her silk
 - D. Defensively hides
 - E. None of the Above
191. This web is altered and rebuilt on a regular basis and is capable of capturing rather large insects. The female wraps any _____, repeatedly turning her victim with her legs as she applies more silk.
- A. Cocoons
 - B. Spiderlings
 - C. Captured prey with her silk
 - D. Mate
 - E. None of the Above
192. After her victim is covered in silk, the spider kills her prey by _____. The prey might be eaten immediately or reserved for a later feeding.
- A. Talking to them
 - B. Injecting her venom
 - C. Feeding the prey
 - D. Defensively biting it
 - E. None of the Above

193. After the prey is fed upon and the body fluids are sucked from the victim, the carcass is cut loose and allowed to _____.

- A. Molt
- B. Drop to the ground
- C. Dry
- D. Bait other pests
- E. None of the Above

194. The female black widow is most often found hanging upside down in her web, where she spends most of her daytime hours. She stays close to her egg mass, _____ her or her egg sac.

- A. Homemaking
- B. Hiding
- C. Capturing prey with her silk
- D. Defensively biting anything that disturbs
- E. None of the Above

195. After laying her eggs, the female black widow is _____. The female black widow stores sperm, producing more egg sacs without mating.

- A. Hostile
- B. Hungry and more likely to bite a human
- C. Ready to hunt
- D. Defensively biting anything that disturbs
- E. None of the Above

196. Some females live more than three years, with older females dying in autumn after _____.

- A. Winter
- B. Injecting her venom
- C. Egg laying
- D. Molting
- E. None of the Above

197. Egg Sacs

Black widow _____ are pear shaped (or oval); brown, papery, and about ½ inch long.

- A. Instar
- B. Egg sacs
- C. Abdomen
- D. Pedicel
- E. None of the Above

198. Black widow _____ hold from 25 to 900 or more eggs, which have an incubation period of 20 days.

- A. Instar
- B. Egg sacs
- C. Abdomen
- D. Pedicel
- E. None of the Above

199. The spiderlings disperse shortly after emerging, tearing an opening in the _____ but staying near the sac.

- A. Instar
- B. Egg sacs
- C. Nest
- D. Tearing an opening
- E. None of the Above

200. After several hours, these second _____ spiderlings balloon to the ground and scatter. Growth requires two to three months. Of all spiders, the Black Widow is the most feared.

- A. Instar
- B. Egg sacs
- C. Moltings
- D. Hatchings
- E. None of the Above

You are finished with your assignment. Please fax, mail or e-mail your assignment along with your registration form and survey sheet. Always call later to ensure we've received the assignment.

Fax (928) 272-0747 info@tlch2o.com

Fax a copy of your driver's license too.

Spider Control CEU Training Awareness Assignment #5 Last Names S-Z

You will have 90 days from the start of this course to have successfully passed this assignment with a score of 70 %. You may e mail the answers to TLC, info@tlch2o.com or fax the answers to TLC, (928) 272-0747. This assignment is available to you in a Word Format on TLC's Website. You can find online assistance for this course on the in the Search function on Adobe Acrobat PDF to help find the answers. Once you have paid the course fee, you will be provided complete course support from Student Services, Dr. Rusty Randall or Dr. Bubba Jenkins (928) 468-0665.

Assignment # 1 for whose last name begins with A-E

Assignment #2 for whose last name begins with F-K

Assignment #3 for the last name starting with the letter L-P

Assignment #4 for the last name starting with the letter Q-R

Assignment #5 for the last name starting with the letter S-Z

Multiple Choice Section, Spider Terms.

1. Despite its reputation, this spider often attempts to escape rather than bite, unless it is guarding an _____ or if it is cornered and pressed.

- A. Instar
- B. Egg Mass
- C. Escape rather than bite
- D. Tearing an opening
- E. None of the Above

American Recluse Spiders

2. Eleven species of _____ are native to the United States, and a few non-natives have become established in circumscribed areas of the country.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. Recluse Spiders
- E. None of the Above

3. The _____ is the proper common name for only one species, *Loxosceles reclusa*.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Web Spiders(s)
- D. Brown Recluse Spider
- E. None of the Above

4. Although the _____ does not live in California, they do have four species of native recluse spiders.
- Tarantula(s)
 - Wolf Spider(s)
 - Web Spiders(s)
 - Brown Recluse
 - None of the Above
5. The most common Californian recluse spider is the _____. It is found mostly in the Sonoran and Mojave deserts, in the foothills of the lower San Joaquin Valley, and in adjacent areas of Mexico, all of which are sparsely populated by humans.
- Tarantula(s)
 - Wolf Spider(s)
 - Desert recluse, *L. deserta*
 - Brown Recluse Spiders
 - None of the Above
6. There are additional species (_____), but they are so uncommon that they are of scientific interest only.
- Tarantula(s)
 - Wolf Spider(s)
 - L. russelli*, *L. palma*, *L. martha*
 - Brown Recluse Spiders
 - None of the Above
7. Distribution of populations of the brown recluse, _____, in the United States. Areas around the borders of the shaded area may also have brown recluses, but they will be less common.
- Tarantula(s)
 - Loxosceles reclusa*
 - Web Spiders(s)
 - Brown Recluse Spiders
 - None of the Above
8. In addition to these native species, a South American recluse spider, _____ (pronounced "LEE-ta"), has become established in portions of Los Angeles (Alhambra, Sierra Madre, Monterey Park). This spider, however, seems to be confined to a very limited area in Los Angeles County, even though it has lived there for over 30 years.
- Mediterranean recluse
 - Loxosceles reclusa*
 - Loxosceles laeta*
 - Violin spiders
 - None of the Above
9. Occasional interceptions of the _____, *L. rufescens*, are found in commercial goods shipped from out-of-state, but no populations of this spider have been found in California.
- Mediterranean recluse
 - Loxosceles reclusa*
 - Loxosceles laeta*
 - Violin spiders
 - None of the Above

10. Over the years, the group of spiders to which the brown recluse belongs has been known by various colloquial names: " _____ " spiders, "fiddleback" spiders, "recluse" spiders, and "brown" spiders.

- A. Mediterranean recluse
- B. *Loxosceles reclusa*
- C. *Loxosceles laeta*
- D. Violin
- E. None of the Above

11. The scientific name for the recluse spider group is *Loxosceles* (lox-SOS-a-leez). All known members of the group have a scientific name, and the more familiar members of this group also have a common name (e.g., brown recluse, desert recluse, _____).

- A. Mediterranean recluse
- B. *Loxosceles reclusa*
- C. Arizona recluse
- D. Violin spiders
- E. None of the Above

12. The spider is golden brown, with the _____ being dark brown or black. This spider is not hairy and the fiddle pattern is often shiny. They are about 1/4 to 3/4 inch long. Members of this small family are known for their poisonous venom. They have six eyes in three pairs.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

13. The most definitive physical feature of recluse spiders is their eyes: most spiders have eight eyes that typically are arranged in two rows of four, but recluse spiders have six equal-sized eyes arranged in three pairs, called _____.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

14. There is a dyad at the front of the cephalothorax (the first main body part to which the legs attach) and another _____ on each side, further back.

- A. Dyad
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

15. Many publications refer to the _____ on the dorsal surface of the cephalothorax as the most important diagnostic feature.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin
- E. None of the Above

16. Although this marking is fairly consistent in mature brown recluses and Texan recluses (*L. devia*), it can vary in intensity and sometimes fades in preservative, and it is _____ in several recluse species found in the southwestern United States (e.g., the desert recluse).

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

17. Therefore, checking the eye pattern will eliminate almost all suspect recluse spiders from consideration, whereas the presence or absence of the _____ may lead to misidentifications.

- A. Dyads
- B. Very faint to nonexistent
- C. Fiddle
- D. Violin marking
- E. None of the Above

18. The abdomens of all recluses are covered with fine hairs and are uniformly colored, although the coloration can vary from _____, depending on what they have eaten.

- A. Dyads
- B. Very faint to nonexistent
- C. Light tan to dark brown
- D. Violin marking
- E. None of the Above

19. There is never a _____ on the abdomen.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

20. Finally, the legs are similarly covered with _____, whereas many nonrecluse spiders have stout spines on their legs.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

21. Some spiders share each of these physical characteristics (six eyes in dyads, dark pattern near the eyes, uniformly colored abdomen with fine hairs, _____).

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

22. No nonrecluse spider has all _____.

- A. Coloration pattern
- B. Fine hairs
- C. Four characteristics
- D. No spines on the legs
- E. None of the Above

23. On this basis, more than 99% of the spiders found by Californians can be identified as something other than a _____.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
24. If you do find a recluse spider in California, it will most likely be the native desert recluse, _____.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
25. To further identify _____ to species requires a high-power microscope and the skills of a spider expert (arachnologist).
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
26. The _____ is rather flat above and has a conspicuous, lengthwise furrow in the midline at the rear third. Each foot has two claws.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Cephalothorax
 - D. Wolf spiders
 - E. None of the Above
27. Many of the _____ are similar in appearance and have similar markings as the brown recluse. They are large, robust, hairy, and therefore, they can be distinguished from the brown recluse.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Recluse spider
 - D. Wolf spiders
 - E. None of the Above
28. _____ spin small, irregular webs under bark, stones, or other secluded areas. Their venom is especially poisonous to people; those bitten often become ill and find that the wound does not heal quickly.
- A. *L. deserta*
 - B. *Loxosceles* spiders
 - C. Brown Recluse spiders
 - D. Wolf spiders
 - E. None of the Above
29. Both male and female brown recluse spiders, as well as their spiderlings, are capable of injecting venom that may result in serious lesion formation or _____.
- A. Systemic reactions
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above

30. The _____ may vary. The symptoms may vary from no harm at all to a reaction that is quite severe.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
31. Usually, the brown recluse spider bite is not felt and the pain sets in from six to eight hours later. A typical bite area may resemble a pimple, pustule, or blister formation within six to 12 hours later. _____, accompanied by swelling, may occur during this interval.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
32. The surrounding tissue begins to darken, _____, and has sharply raised edges, resulting in a sunken area which may be several centimeters in diameter.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Is irregular in shape
 - D. Mild to severe pain
 - E. None of the Above
33. Often there is _____ within 24-36 hours, characterized by restlessness, fever, chills, nausea, weakness, and joint pain.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Severity of the bite
 - D. Mild to severe pain
 - E. None of the Above
34. Where the bite occurs, there is often tissue death, and _____. In some severe cases, a wound may develop that lasts several months. In all cases, a physician should be notified. If at all possible, kill and take the spider to the physician for positive identification.
- A. A systemic reaction
 - B. Serious lesion formation
 - C. Skin is sloughed off
 - D. Mild to severe pain
 - E. None of the Above
35. The Brown Recluse has _____. They are commonly found in the storage areas of residences, including areas such as attics, closets, bedrooms and other dark recesses.
- A. Adapted quite well to indoor habitats
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. None of the Above
36. This spider _____ clothing, toys, books, boxes, and furniture, as well as transport trucks, tool sheds, tree houses, and little-used or abandoned dog houses.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above

37. Bites often occur when the spiders _____ hide in towels or old clothes left in those areas.
- A. Hide in towels
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
38. The brown recluse spider is _____ food such as firebrats, crickets, Arachnides, and other soft-bodied creatures.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
39. Earning their name well, the brown recluse spider _____ ceases its wanderings at first light.
- A. Ceases its wanderings
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
40. People are most _____, while changing clothes, or cleaning storage areas. Not only will this spider hide in cracks and crevices of the home, they will often climb into clothing or shoes that someone has laid out to wear the following day.
- A. Nocturnal and prefers
 - B. Often occur when
 - C. Commonly bitten in bed
 - D. Frequently inhabits
 - E. None of the Above
41. A female deposits eggs in off-white silken cases about 1/3 inch in diameter _____, dark areas.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
42. Spiderlings _____ 24-36 days and abandon the egg case.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
43. _____, influenced by weather conditions and food availability.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above

44. They reach maturity in 10 to 12 months and _____ can survive long periods of time without food or water. Immature spiderlings resemble adult brown recluse spiders but have lighter coloration.
- A. Development is slow
 - B. Can survive long periods
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
45. Adult males and females _____ from light tan to dark brown.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Will vary
 - E. None of the Above
46. There are two types of spiders _____: ground dwellers and web makers.
- A. Development is slow
 - B. Emerge in
 - C. Found around the home
 - D. Will vary
 - E. None of the Above
47. Spiders which thrive on the ground are _____ than their web building cousins.
- A. Development is slow
 - B. Emerge in
 - C. In sheltered
 - D. Usually much stronger
 - E. None of the Above
48. _____, usually nocturnal, great hunters and rely on their strong grip and bite.
- A. Web builders
 - B. Some species
 - C. They stalk food
 - D. These brutes are aggressive
 - E. None of the Above
49. _____ at night and will feed on just about anything which moves.
- A. Web builders
 - B. Some species
 - C. They stalk food
 - D. These brutes are aggressive
 - E. None of the Above
50. _____ may have toxins to assist in their hunting. When prey is identified, they will usually stalk within pouncing distance, crouch, leap, rip, shred, bite, grab and kill – all within a few moments.
- A. Web builders
 - B. Some species
 - C. They stalk food
 - D. These brutes are aggressive
 - E. None of the Above

51. _____ are spiders which are not built to be on the ground. They are usually fragile, weak, slow, lacking grip and not able to defend themselves when out of their webs.
- A. Web builders
 - B. Some species
 - C. They stalk food
 - D. These brutes are aggressive
 - E. None of the Above
52. What they lack in physical body they more than make up for with bite. In most cases, they are equipped with toxins that can kill insects quickly and in some cases _____ they can be fatal to humans!
- A. These toxins are so strong
 - B. Some species
 - C. They stalk food
 - D. These brutes are aggressive
 - E. None of the Above
53. The _____ is one of the most dangerously venomous spiders in the United States.
- A. Spitting spider(s)
 - B. Hobo Spider(s)
 - C. Necrotic arachnidism
 - D. Recluse spider(s)
 - E. None of the Above
54. The _____ "stronghold territory" ranges from extreme southern Alaska through southern B.C. and Alberta, Canada, to central and southern California, and east into central Colorado.
- A. Spitting spider(s)
 - B. Hobo Spider(s)
 - C. Necrotic arachnidism
 - D. Recluse spider(s)
 - E. None of the Above
55. The _____, originating from Europe, began its infestation of the continental USA in the Port of Seattle some time before the 1930's.
- A. Spitting spider(s)
 - B. Hobo Spider(s)
 - C. Necrotic arachnidism
 - D. Recluse spider(s)
 - E. None of the Above
56. Most poisonous spider bites in the western half of the USA are due to the Hobo spider. A venomous bite from a Hobo or Brown _____ can be severe.
- A. Spitting spider(s)
 - B. Hobo Spider(s)
 - C. Necrotic arachnidism
 - D. Recluse spider(s)
 - E. None of the Above
57. _____ results from envenomation (venom poisoning) from the bite of Hobo, or Recluse. It occurs due to the venom's ability to clot blood which results in an area of tissue receiving inadequate blood flow and thus dying secondary to oxygen starvation.
- A. Spitting spider(s)
 - B. Hobo Spider(s)
 - C. Necrotic arachnidism
 - D. Recluse spider(s)
 - E. None of the Above

58. Up to 50% of bites by dangerously venomous spiders are "dry," with _____ and no signs of poisoning developing.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. No venom injected
- D. Recluse spider(s)
- E. None of the Above

59. Most people bitten and envenomated by _____ or Recluse spiders do not feel the initial bite and do not see the biting spider.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

60. Bites that are more serious occur when the _____ gets between clothes or bedding and skin and is trying to get away.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

61. Keeping clothes, bedding, and storage boxes off the floor is a wise precaution, since they are preferred hiding places for the _____.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

62. People often _____, sleeping on couches or floors, when putting on clothes, coats, gloves or shoes that have been on the floor, and when picking up piles of laundry.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Get bitten in bed
- D. None of the Above

63. Seek medical attention if you think you have a Hobo or Brown _____ bite. If possible, collect up the spider or what remains of it and take with you to your doctor or emergency clinic.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

Six-Eyed Spiders

64. The _____ (Scytodes spp.) are closely related to recluse spiders and have six eyes arranged in a similar pattern. However, they also have many black spots or lines on their bodies that would exclude them as recluses.

- A. Spitting spider(s)
- B. Hobo Spider(s)
- C. Necrotic arachnidism
- D. Recluse spider(s)
- E. None of the Above

65. _____ lacks any markings on its body.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

66. The woodlouse spider, *Dysdera crocata*, has six eyes arranged in two groups of three (triads) and no bodily markings; nonetheless, it is commonly mistaken for a _____ in the United States.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

Spiders with Violin-Shaped or Other Dark Markings

67. Many common tan or gray spiders have dark markings on the head region, which convinces people that they have caught a bona fide recluse spider. These spiders include cellar spiders (*Psilochorus* spp., *Physocyclus* spp.), _____ (*Mimetus* spp.), and sheet web spiders (*Linyphiidae*).

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Pirate spider(s)
- D. Recluse spider(s)
- E. None of the Above

68. The _____ *Holocnemus pluchei*, also confuses people even though the dark marks are on the ventral (underside) not the dorsal (top) surface of the body.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

69. _____ have a darkened area on their cephalothorax (head region) but have 8 eyes.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Recluse spider(s)
- E. None of the Above

Ubiquitous Brown Spiders

70. Virtually every spider that is tan or brown has been turned in as a potential _____. There are hundreds of species of these spiders. They include ground spiders (*Gnaphosidae*), sac spiders (*Cheiracanthium* spp., *Trachelas* spp., and many of the *liocranoid* spiders), wolf spiders (*Lycosidae*), grass spiders (*Agelenidae*), orb weavers (*Araneidae*), and male crevice spiders (*Filistatidae*).

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. Brown Recluse spider(s)
- E. None of the Above

71. More specifically, males of both the western black widow (*Latrodectus hesperus*) and the _____ are frequently brought in for recluse verification. All of these brown spiders have eight eyes and can quickly be eliminated from consideration.

- A. Spitting spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. False black widow (*Steatoda grossa*)
- D. Brown spider(s)
- E. None of the Above

72. Seek medical attention if you think you have a _____. If possible, collect up the spider or what remains of it and take with you to your doctor or emergency clinic.

- A. Spider bite
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

Orb weavers (Araneidae)

73. Individual spiders' coloring can range from extremely light yellow to very dark grey, but all European _____ have mottled markings across the back with five or more large white dots forming a cross.

- A. Garden spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

74. The white dots result from cells that are filled with guanine, which is a byproduct of protein metabolism. The third pair of legs of _____ are specialized for assisting in the spinning of orb webs. These spiders also use them to move around on their web without getting stuck.

- A. Garden spider(s)
- B. Marbled cellar spider(s) or Cellar spider
- C. Woodlouse spider(s)
- D. *Metellina* (or *Meta*) *segmentata*
- E. None of the Above

Nervous System

75. Most arthropods have a central nervous system made up of a long chain of nerve cell centers, called _____, that run throughout the body.

- A. Spider's brain
- B. Ganglia
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

76. In spiders, the ganglia are concentrated in the cephalothorax, where they condense into two compact masses: the _____, and the supra-esophageal ganglion.

- A. Spider's brain
- B. Sub-esophageal ganglion
- C. Supra-esophageal ganglion
- D. Sense organs
- E. None of the Above

77. The _____, directs spider locomotion.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
78. The _____, is considered the brain of the spider.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
79. _____, throughout the body send information to this nerve center, where information processes and complex functions begin.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
80. Spider's Brain
- A _____, is relatively highly developed, enabling spiders to easily adapt to changes in their environment.
- Spider's brain
 - Sub-esophageal ganglion
 - Supra-esophageal ganglion
 - Sense organs
 - None of the Above
81. Some scientists believe spiders can learn, and some have observed that spiders can remember where in their web they have _____; if the prey is removed, the spiders will continue searching for it in the same place for hours.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
82. Spider Reproduction
- All species of spiders have two separate sexes, and the _____, are usually smaller than the females.
- Stored captured prey
 - Male spider or Males
 - Female Spider or Female
 - Tiny adults
 - None of the Above
83. The _____, spider has two sperm-producing testes.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above

84. A sexually mature _____, spider uses its large palps to transfer sperm cells into the female during mating.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
85. In this process, the _____, builds a small, triangular sperm web, onto which he deposits a drop of sperm from his abdomen.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
86. The _____, dips both palps into this droplet, drawing sperm cells into the palps as if by a tiny pipette.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
87. The _____, reproductive system includes two egg-producing ovaries.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
88. After the male transfers sperm cells into the _____,'s genital opening, located on her abdomen, they are stored, sometimes for months, in tiny receptacles.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
89. These sperm cells fertilize the _____, egg cells just before she deposits her eggs into a silky cocoon.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Tiny adults
 - None of the Above
90. Life Cycle
The life cycle of the spider consists of four stages: egg, larva, young spider, (known as a _____, or spiderling), and adult. Like insects, spiders grow only by molting, a process that involves periodically shedding their exoskeleton.
- Stored captured prey
 - Male spider or Male
 - Female Spider or Female
 - Nymph
 - None of the Above

91. In each molting stage, young spiderlings resemble _____, a process known as incomplete metamorphosis.

- A. Stored captured prey
- B. Male spider or Male
- C. Female Spider or Female
- D. Tiny adults
- E. None of the Above

92. Courting and Mating

Spiders become sexually mature after their last molt, at which time females have developed functional ovaries and males have mature testes. In most spider species, the _____ courts the female before mating occurs.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

93. After a _____ has filled its palps with sperm cells, he begins searching for a female.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

94. A male begins by identifying himself to a female so that she does not mistake him for potential prey. In some spiders, such as American tarantulas, this identification process involves the _____ repeatedly touching the female.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

95. More often, a male courting a _____ communicates with her over larger distances using vibrations.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. None of the Above

96. For instance, a male wolf spider uses its legs to _____ on the ground. In some web spiders, the male attaches a special signal thread to the female's web.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drum
- E. None of the Above

97. The male then _____ the thread in a rhythm that indicates the vibration is caused by another spider of the same species and not by an ensnared insect.

- A. Pheromones
- B. Male spider or Male
- C. Female Spider or Female
- D. Drums or plucks
- E. None of the Above

98. If a female is ready to accept a courting _____, she may send signals back to him.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
99. Locating the right _____ can be tricky for a male spider.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
100. Fortunately, female spiders produce certain chemical substances, known as _____, that aid spider courtship.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
101. A female may release these _____ through the air (like a perfume) or she may deposit them on her silk threads.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
102. When a male spider encounters _____ from a female of the same species, he becomes excited, even if the female is not present.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Drums or plucks
 - E. None of the Above
103. Spiders with better eyesight may rely mostly on _____ during courtship.
- A. Pheromones
 - B. Male spider or Male
 - C. Female Spider or Female
 - D. Visual signals
 - E. None of the Above
104. When a male notices a female, he starts a _____ in front of her in which he raises his front legs, vibrates his palps, and twitches his abdomen.
- A. Zigzag dance
 - B. Sperm-containing palp
 - C. Movements specific to that species
 - D. Kill her partner after mating
 - E. None of the Above

105. Each species uses a different courtship dance with unique movements. A female will only accept a male who performs a dance with _____.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

106. When a male finds an interested female, he inserts his _____ into the female's genital opening. The process of mating can be very brief (a matter of seconds), or it can last several hours, depending on the species. In most species, both sexes separate peacefully after mating.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

107. Contrary to popular belief, the female black widow spider does not necessarily _____. Depending on the species, a female may mate only once or she may mate with several males during her lifetime.

- A. Zigzag dance
- B. Sperm-containing palp
- C. Movements specific to that species
- D. Kill her partner after mating
- E. None of the Above

108. Eggs and Brood Care

In most spider species, a female determines when _____ from the female's receptacles will fertilize her egg cells.

- A. Cocoons
- B. Sperm cells
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

109. _____ may occur a few weeks after mating, a strategy that enables the female to lay her eggs when she deems external conditions are best. The female then lays her eggs.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

110. Most spider species lay several hundred _____; species of large spiders deposit several thousand within just a few minutes.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

111. Typically, the female spider lays her _____ in a silky case called a cocoon, which provides a protective and insulating environment for the developing spiders.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilized eggs
- D. Newly hatched spiderlings
- E. None of the Above

112. Many females abandon their _____ right after they deposit their eggs, although they may camouflage them or hang them in hidden locations. Other spiders guard and defend their cocoons until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

113. Some spiders exhibit special brood care. Female wolf spiders attach their _____ to their spinnerets and carry them around until the eggs hatch.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

114. The _____ then climb onto their mother's back, where they stay for about a week before they leave to survive on their own.

- A. Cocoons
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

115. Occasionally, young spiderlings stay in their mother's web for weeks. During this time, the mother feeds her _____, transferring regurgitated food from her mouth to their mouths.

- A. Cocoons
- B. Egg cells or Eggs
- C. Brood
- D. Young spiderlings
- E. None of the Above

116. Development and Growth

Spider eggs hatch inside the _____. The first stage hatches from the egg as an immobile, milky white larva.

- A. Cocoon
- B. Egg cells or Eggs
- C. Fertilization
- D. Newly hatched spiderlings
- E. None of the Above

117. _____ are covered by an embryonic membrane and receive nourishment from yolk material within their abdomen.
- A. Cocoon
 - B. Egg cells or Eggs
 - C. Fertilization
 - D. Larvae
 - E. None of the Above
118. After one to two molts over about a two-week period, the _____ changes into a mobile spiderling, also referred to as a nymph.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larva
 - E. None of the Above
119. In order to grow to an adult size, spiderlings undergo a series of _____ that enables them to increase in size. During molting, the old cuticle slowly lifts off, while a thin new cuticle forms underneath.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
120. The new cuticle is wrinkled and pliable at first, but as molting progresses and the spiderling grows, the new cuticle stretches to accommodate the larger spiderling body. It later hardens into a new rigid exoskeleton that encases the larger _____.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
121. The number of _____ between the spiderling and adult stage varies according to the size of the species. Small species may molt about five times, while some large tarantulas may molt as many as 40 times.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above
122. For most spiders, a spiderling's last molt marks adulthood, when functional sexual organs have developed and growth halts. Some adult female spiders, such as American tarantulas, continue to _____ repeatedly.
- A. Spiderling
 - B. Molt
 - C. Mating
 - D. Larvae stage
 - E. None of the Above

123. Most spiders live only 1 or 2 years. Notable exceptions are large female tarantulas, which can live up to 20 years. Male tarantulas live only 2 to 3 years. Many male spiders die soon after

- _____.
- A. Spiderling
 - B. Molts
 - C. Mating
 - D. Larvae stage
 - E. None of the Above

124. Silks, Threads, and Webs

Nearly all spiders produce silk composed of the protein fibroin. This is the same protein produced by silkworms, the _____ of certain silk moths.

- A. Spiderling
- B. Molts
- C. Mating
- D. Larvae stage
- E. None of the Above

125. Each spider has four to eight different kinds of _____ in its abdomen, and each gland produces a different type of silk with different properties.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

126. Other _____ produce cocoon threads that blanket and protect fertilized eggs. Still other glands produce sticky capture threads that ensnare prey.

- A. Glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

127. Types of Spider Webs

Web patterns vary considerably, depending on the species of spider. Perhaps the most recognizable web is the almost circular orb web, in which an outer framework supports a continuous spiraling thread and a series of _____ from the center of the web.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

128. Other web types may have a more irregular shape. Some spiders build irregular, flimsy webs. Common house spiders construct funnel webs, flat silk sheets with a _____ that serves as a retreat for the spider.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

129. Cobweb spiders build an irregular _____ with sticky threads at the bottom that trap insects. Sheet web spiders construct a horizontal silk sheet with a dome, from which the small spider hangs upside down.

- A. Silk meshwork
- B. Horizontal silk sheet with a dome
- C. Threads radiating
- D. Raised tube in the corner
- E. None of the Above

130. Many spider webs are found near the ground or in low vegetation, although orb webs often span the open spaces between bushes or trees _____.

- A. Silk glands or glands
- B. Horizontal silk sheet with a dome
- C. In order to trap flying insects
- D. Raised tube in the corner
- E. None of the Above

131. The size of a web depends on the size of the spider. Whether the web has a _____ depends on the size of the prey the spider expects to capture.

- A. Silk glands or glands
- B. Tight or wide mesh
- C. In order to trap flying insects
- D. Raised tube in the corner
- E. None of the Above

132. Web Building

Web building is a _____, but some spiders can complete a web in less than 30 minutes.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

133. Spiders typically build their webs at night, _____ on their sense of touch, not eyesight, during construction.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

134. Each type of spider uses a different procedure when building a web. Spiders that weave orb webs generally begin by _____ that is carried by air currents until it catches on a tree limb or other firm support.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

135. From this thread, the spider lays down another thread to _____ that is the basic framework of the web.

- A. Completely relying
- B. Complex process
- C. Spinning a thread
- D. Form a Y-shaped structure
- E. None of the Above

136. The spider then _____ of the Y-structure, known as the hub, and begins creating radius lines, or spokes, around the web.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

137. As the spider builds _____, it connects these lines with a few narrow circles of thread in the center of the web that forms the auxiliary spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Radius lines
- D. Climbs to the midpoint
- E. None of the Above

138. The _____ prevents radius lines from sagging when the spider walks on them. Using the auxiliary spiral as scaffolding, the spider begins the formation of the catching spiral, fastening sticky threads to each radius line. As the spider constructs the catching spiral, it dismantles the auxiliary spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral
- E. None of the Above

139. The catching spiral extends from the periphery of the web and stops short of the web's hub. In the finished web, only remnants of the _____ and there is an empty space in the web's center known as the free zone.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

140. The spider may _____ with its legs placed in the center of its web to detect vibrations in the web when prey gets caught in the sticky catching spiral.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

141. Others may hide nearby under a curled leaf and use the vibrations from a signal thread attached to the hub to stay informed when _____. The orb web is built anew every day.

- A. Prey has struck the web
- B. Eat their old web
- C. Sit upside down
- D. Auxiliary spiral remain
- E. None of the Above

142. Some species _____ before starting a new web, while others roll up the web and discard it as a tiny silk ball.

- A. Discard it as a tiny silk ball
- B. Eat their old web
- C. Sit upside down
- D. Climbs to the midpoint
- E. None of the Above

143. Spider Identification Section: Ground Spiders

True tarantulas are a type of _____ that belongs to the family Lycosidae in the suborder Araneomorphae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

144. Sometimes known as American tarantulas, they are found in tropical regions throughout the world, with many species in the southwestern United States.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

145. As ground hunters, _____ are typical sit-and-wait predators—they wait for insects or small vertebrates to come near before they pounce and kill the prey with their strong chelicerae.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

146. Many _____ brush off their abdominal hairs when they feel threatened. These barbed hairs fly through the air and can penetrate skin and the mucous membranes of the nose, causing a strong burning sensation.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Nocturnal species
- D. Jumping spiders
- E. None of the Above

147. Wolf Spider

About 2,000 species of wolf spiders belong to the family Lycosidae in the suborder _____. Found throughout the world, these spiders have dull brown or black coloration, stout bodies, and long, thick legs. Some species have hairy bodies.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Araneomorphae
- E. None of the Above

148. _____ are ground hunters, but their name inaccurately suggests that they actively hunt their prey just like their wolf namesake. However, like tarantulas, most wolf spiders usually sit in a hidden spot. When prey happens by, they ambush the prey by jumping on it.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

149. _____ are sensitive to vibrations, such as the buzzing wings of insects, as well as to visual signals.

- A. Tarantula(s)
- B. Wolf Spider(s)
- C. Jumping spiders
- D. Chelicerae
- E. None of the Above

150. For instance, during courtship males drum their legs on the ground or wave their _____ in a rhythmic dance in order to catch a female's attention.

- A. Pedicel
- B. Chelicerae
- C. Palps
- D. Legs and palps
- E. None of the Above

DPR Supplement

The following questions are from California DPR rules and regulations to ensure that you have downloaded and read your rules, these rules are also found in the back of the text. California Code of Regulations (Title 3. Food and Agriculture) Division 6. Pesticides and Pest Control Operations

151. _____ means an objective committee whose purpose is to review protocols of human pesticide exposure studies to ensure the safety and general welfare of the human participants, and to guarantee that their human rights are not violated.

- A. Fieldworker Review Board
- B. Qualified applicator Review Board
- C. Industrial use Review Board
- D. Institutional Review Board
- E. None of the Above

152. _____ means use within the confines of, or on property necessary for the operation of, buildings such as hospitals, schools, libraries, auditoriums and office complexes.

- A. Net irrigation requirement
- B. Leaching ground water protection areas
- C. Institutional use
- D. Nursery
- E. None of the Above

153. _____ are sections of land designated as "leaching" in the Department of Pesticide Regulation document EH03-05 (Est.08/03), hereby incorporated by reference, entitled "Ground Water Protection Areas," where pesticide residues move from the soil surface downward through the soil matrix with percolating water to ground water.
- A. Net irrigation requirements
 - B. Leaching ground water protection areas
 - C. Institutional uses
 - D. None of the Above
154. _____ means a person who owns the property and/or is legally entitled to possess or use the property through terms of a lease, rental contract, trust, or other management arrangement.
- A. Pest management applicator
 - B. Employer
 - C. Person
 - D. Operator of the property
 - E. None of the Above
155. _____ means organophosphorus esters which inhibit cholinesterase.
- A. Pest management spraying
 - B. Crop dusting
 - C. Pesticide
 - D. Insecticide
 - E. None of the Above
156. _____ means any operation engaged in the outdoor commercial or research production of cut flowers or ornamental cut greens or any plants that will be used in their entirety in another location.
- A. Net growing
 - B. Crops
 - C. Greenhouse
 - D. Nursery
 - E. None of the Above
157. _____ is the amount of water needed to bring the soil in the crop root zone to field capacity at the time of irrigation. It can be determined by direct measurements of soil moisture, such as by using tensiometers, or indirect measurements of soil moisture, such as by estimating evapo-transpiration that has accumulated since the last irrigation.
- A. Net irrigation requirement
 - B. Leaching ground water protection areas
 - C. Institutional use water
 - D. Field irrigation
 - E. None of the Above
158. _____ means oral or written notification to the commissioner, as specified by the commissioner, prior to the use of a pesticide pursuant to a permit.
- A. Permit requirement
 - B. Permission
 - C. Institutional use permit
 - D. NOV
 - E. None of the Above

159. _____ means a structure or space, of sufficient size to permit entry, that is enclosed with a nonporous covering and used in the commercial or research production of an agricultural plant commodity. The term includes polyhouses, mushroom houses, rhubarb houses and similar structures.

- A. Greenhouse
- B. Nursery
- C. Enclosed cab
- D. Early entry
- E. None of the Above

160. _____ means an area of land that has been determined by the Director to be vulnerable to the movement of pesticides to ground water, as identified in the Department of Pesticide Regulation document EH03-05.

- A. Greenhouse
- B. Ground water protection area
- C. Restricted land
- D. REI
- E. None of the Above

161. _____ means to take all reasonable measures so that the behavior, activity, or event in question occurs.

- A. Permit
- B. Assure" or "Ensure
- C. Allow
- D. Buffer zone
- E. None of the Above

162. _____ means a chemical resistant barrier that completely surrounds the occupant(s) of the cab and meets those portions of the requirements in American Society of Agricultural Engineers Standard S-525 (Rev. 5/98) that pertain to dermal protection.

- A. Greenhouse
- B. PPE
- C. Enclosed cab
- D. Protection
- E. None of the Above

163. Enclosed cab acceptable for respiratory protection means an enclosed cab that incorporates a dust/mist filtering and /or a vapor or gas removing air purification system, as appropriate for the _____.

- A. Greenhouse
- B. Farm
- C. Enclosed cab
- D. Exposure situation
- E. None of the Above

164. _____ is the combination of water transpired from vegetation and evaporated from the soil and plant surfaces.

- A. Dew
- B. Application
- C. Mist
- D. Spray
- E. None of the Above

165. _____ data can be obtained from the California Irrigation Management Information System (CIMIS) or other local sources.

- A. Crop data
- B. Ground water protection areas
- C. Cotton pests
- D. Respiratory protection
- E. None of the Above

166. _____ This term means the behavior, activity, or event in question involves or concerns an employee, reasonable measures by an employer include determining that the employee has the knowledge to comply; providing the means to comply; supervising the work activity; and having and enforcing a written workplace disciplinary action policy covering the employer's requirements, as well as other measures required by pesticide law or this division.

- A. Permission
- B. Assure" or "Ensure
- C. Acceptance
- D. Buffer zone
- E. None of the Above

167. _____ means a procedure for removing a pesticide from its original container, rinsing the emptied container and transferring the pesticide product, mixtures and dilutions and rinse solution through connecting hoses, pipes and couplings that are sufficiently tight to prevent exposure of any person to the pesticide or rinse solution. Rinsing is not required when the pesticide is used without dilution.

- A. Chemigation
- B. Allowance
- C. Closed system
- D. Continuous monitoring
- E. None of the Above

168. _____ means the measurement of the air concentration of a specific pesticide on an uninterrupted, real-time basis by instrumental methods.

- A. Measuring
- B. Monitoring
- C. Closed system
- D. Continuous monitoring
- E. None of the Above

169. _____ means entry into a treated field or other area after the pesticide application is complete, but before the restricted entry interval or other restrictions on entry for that pesticide have expired.

- A. Chemigation
- B. Early entry
- C. Early work
- D. Continuous monitoring
- E. None of the Above

170. _____ means any location, other than the principal place of business, operated by a pesticide dealer or agricultural pest control operator to carry out licensed activities in California.

- A. Work zone
- B. Employment
- C. Branch location
- D. Buffer zone
- E. None of the Above

171. _____ means a surface facility, such as an infiltration pond or basin, or spreading ground specifically designed and managed to increase the infiltration of introduced surface water supplies into a ground water basin.

- A. Artificial recharge basin
- B. Pond
- C. Lake
- D. Buffer zone
- E. None of the Above

172. _____ does not include ditches, canals, or reservoirs designed primarily to transport and store water, or stream channels, lakes, and other naturally occurring water bodies that are not principally managed to recharge ground water.

- A. Artificial recharge basin
- B. Pond
- C. Groundwater collection zone
- D. Buffer zone
- E. None of the Above

173. _____ means an area that surrounds a pesticide application block in which certain activities are restricted for a specified period of time to protect human health and safety from existing or potential adverse effects associated with a pesticide application.

- A. Early entry zone
- B. Handler zone
- C. Safety zone
- D. Buffer zone
- E. None of the Above

174. _____ means esters on N-methyl carbamic acid which inhibit cholinesterase.

- A. Chemigation
- B. Carbamates
- C. Pesticide
- D. Poison
- E. None of the Above

175. _____ means the application of pesticides through irrigation systems.

- A. Chemigation
- B. Nozzles
- C. Closed system
- D. Booms
- E. None of the Above

176. _____ means a person who has qualified by examination in one or more pest control categories to supervise the pesticide applications made by a pest control business licensed pursuant to sections 11701 to 11709, inclusive, of the Food and Agricultural Code, and who is responsible for safe and legal operations under such license.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

177. _____ means any person who, for any kind of compensation, performs work, services, or activities covered by this division.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

178. _____ means any person who exercises primary direction and control over the work, services, or activities of an employee. A foreman, crew leader, supervisor, or similarly situated person represents the employer when hiring an employee or when exercising, or having responsibility for exercising, the primary direction and control, but is not considered the employer himself or herself.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

179. _____ means a person who uses or supervises the use of a pesticide for any purpose or on any property other than as provided by the definition of private applicator.

- A. Qualified applicator licensee
- B. Employee
- C. Employer
- D. Commercial applicator
- E. None of the Above

180. _____ means other chemical or non-chemical procedures which can reasonably accomplish the same pest control function with comparable effectiveness and reliability, taking into account economic, environmental, social, and technological factors and timeliness of control.

- A. Feasible mitigation measures
- B. Field spraying
- C. Feasible alternatives
- D. IPM
- E. None of the Above

181. _____ means a condition attached to the approval of an activity which, if implemented, would substantially reduce any adverse impact, taking into account economic, environmental, social, and technological factors and timeliness of control.

- A. Feasible mitigation measure
- B. Field capacity
- C. Feasible alternatives
- D. Permissions
- E. None of the Above

182. _____ is the amount of water remaining in soil when the downward water flow due to gravity becomes negligible.

- A. Feasible mitigation measure
- B. Field capacity
- C. Dew
- D. Moisture
- E. None of the Above

183. _____ is a monitoring instrument that measures the concentration of methyl bromide inside a structure in ounces per 1,000 cubic feet. (The analytical detection limit of a Fumiscope® is 250 parts per million [ppm]).

- A. Feasible mitigation measurement
- B. Field capacity
- C. Feasible alternatives
- D. Fumiscope
- E. None of the Above

184. _____ means any cultural activity, performed by hand or with hand tools, that causes substantial contact with surfaces (such as plants or soil) that may have pesticide residues. These activities include hand harvesting, detasseling, thinning, hand weeding, topping, planting, sucker removal, pruning, disbudding, roguing, and packing produce into containers in the field. Hand labor does not include operating, moving, or repairing irrigation equipment or performing the duties of a crop advisor, field checker, or scout, making observations of the well being of the plants, or taking samples.

- A. Picking
- B. Hand labor
- C. Weeding
- D. Hoeing
- E. None of the Above

185. _____ means mixing, loading, transferring, applying (including chemigation), or assisting with the application (including flagging) of pesticides, maintaining, servicing, repairing, cleaning, or handling equipment used in these activities that may contain residues, working with opened (including emptied but not rinsed) containers of pesticides, adjusting, repairing, or removing treatment site coverings, incorporating (mechanical or watered-in) pesticides into the soil.

- A. Handling
- B. Hand labor
- C. Ranching
- D. Working
- E. None of the Above

Agricultural Pesticide Section from TLC Text

186. The WPS covers every _____, including livestock producers, who have employees that perform hand labor operations in fields, forests, nurseries, and greenhouses treated with pesticides.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural type of labor
- D. Pesticide exposure event
- E. None of the Above

187. Unlike other laws and regulations affecting agricultural labor, the WPS does not exempt any employment in _____ involving hand labor in fields, but owners or operators and immediate family members are specifically exempt from some provisions.

- A. Agricultural employer
- B. Agricultural employment
- C. Agricultural labor
- D. Pesticide exposure
- E. None of the Above

188. The WPS expands coverage to include more employees and expands employers' requirements for training employees who handle pesticides, protecting employees from _____, and providing emergency assistance to exposed employees.

- A. Agricultural employers
- B. Agricultural employment dismissal
- C. Agricultural labor disputes
- D. Pesticide exposure
- E. None of the Above

189. Although many laws affecting _____ exempt farming enterprises that employ small numbers of hired farmworkers, the new standard has no exemptions based on the number of employees.

- A. Agricultural employers
- B. Agricultural employment
- C. Agricultural labor standards
- D. Pesticide exposure
- E. None of the Above

Employers covered by the WPS must:

190. Reduce overall exposure to pesticides by prohibiting handlers from exposing workers during pesticide application, excluding workers from areas being treated and areas under a(n) _____, and notifying workers about treated areas.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Very complicated
- E. None of the Above

191. _____ by requiring decontamination supplies be present and emergency assistance be available.

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. Assist
- E. None of the Above

192. Inform workers about pesticide hazards by requiring safety training (workers and handlers), safety posters, access to labeling information, and access to _____ (listing of treated areas on the establishment).

- A. Notifying workers
- B. Mitigate exposures
- C. Requiring safety training
- D. MSDSs
- E. None of the Above

193. WPS provisions are _____ and are likely to affect a large number of employers and their workers.

- A. Notifying workers
- B. Mitigating exposures
- C. Requiring more safety training
- D. Very complicated
- E. None of the Above

194. States may also issue _____ standards that are stricter than the WPS.

- A. Permission
- B. Worker protection
- C. Various
- D. Permits
- E. None of the Above

195. Therefore, employers should contact their State agency that regulates the Federal Insecticide, Fungicide, and Rodenticide Act _____ with the EPA to determine whether they must comply with the WPS and local regulations.

- A. To notifying workers
- B. Instead
- C. In cooperation
- D. In hopes that OSHA
- E. None of the Above

Four Basic Requirements

196. These regulations contained four basic requirements:

Workers are not to be sprayed with pesticides unless they are notified.

- A. TRUE
- B. FALSE

197. There are specific allowable entry intervals (REI) for 12 pesticides, interim restrictive entry levels for certain pesticides, and a general re-entry interval for all other agricultural pesticides not prohibiting re-entry into treated areas until sprays have dried, dusts have settled, and vapors have dispersed.

- A. TRUE
- B. FALSE

198. Protective clothing is no longer required for any worker entering a treated area before the specific re-entry period has expired.

- A. TRUE
- B. FALSE

199. "Appropriate and timely" warnings are required for re-entry. These warnings may be given orally in appropriate language, placed on the pesticide notice board, or posted in the field.

- A. TRUE
- B. FALSE

1974 Regulations

200. The EPA determined that the 1974 regulations did not adequately protect agricultural workers and pesticide handlers who were occupationally exposed to pesticides. In order to correct these inadequacies, the EPA issued new regulations designed to reduce exposure to _____, mitigate exposure, and inform workers about pesticides.

- A. Pesticides
- B. Limit
- C. Toxins
- D. Decontamination supplies
- E. None of the Above

You are finished with your assignment. Please fax, mail or e-mail your assignment along with your registration form and survey sheet. Always call later to ensure we've received the assignment.

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