

Registration form

Cockroach Control CEU Training Course \$100.00
48 HOUR RUSH ORDER PROCESSING FEE ADDITIONAL \$50.00

Start and finish dates: _____

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

Name _____ **Signature** _____
(This will appear on your certificate as above)

Address: _____

City _____ **State** _____ **Zip** _____ **Email** _____

Phone:
Home () _____ **Work** () _____ **Fax** () _____

License or Operator ID # _____ **Exp Date** _____

Class/Grade _____

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

Commercial Applicator Residential Applicator Industrial Applicator

Pesticide Handler Agricultural Applicator Advisor Aerial Applicator

Other _____

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

Technical Learning College
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(928) 468-0665 Toll Free (866) 557-1746
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Visit us on the web at www.ABCTLC.com

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American Express
Master Card / Visa Card # _____ **Exp. Date** _____

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

Referral's Name _____



Cockroach Control Answer Key

Name

Address

Telephone

1. A B	40. A B	79. A B	118. A B
2. A B	41. A B	80. A B	119. A B
3. A B	42. A B	81. A B	120. A B
4. A B	43. A B	82. A B	121. A B
5. A B	44. A B	83. A B	122. A B
6. A B	45. A B	84. A B	123. A B
7. A B	46. A B	85. A B	124. A B
8. A B	47. A B	86. A B	125. A B
9. A B	48. A B	87. A B	126. A B
10. A B	49. A B	88. A B	127. A B
11. A B	50. A B	89. A B	128. A B
12. A B	51. A B	90. A B	129. A B
13. A B	52. A B	91. A B	130. A B
14. A B	53. A B	92. A B	131. A B
15. A B	54. A B	93. A B	132. A B
16. A B	55. A B	94. A B	133. A B
17. A B	56. A B	95. A B	134. A B
18. A B	57. A B	96. A B	135. A B
19. A B	58. A B	97. A B	136. A B
20. A B	59. A B	98. A B	137. A B
21. A B	60. A B	99. A B	138. A B
22. A B	61. A B	100. A B	139. A B
23. A B	62. A B	101. A B	140. A B
24. A B	63. A B	102. A B	141. A B
25. A B	64. A B	103. A B	142. A B
26. A B	65. A B	104. A B	143. A B
27. A B	66. A B	105. A B	144. A B
28. A B	67. A B	106. A B	145. A B
29. A B	68. A B	107. A B	146. A B
30. A B	69. A B	108. A B	147. A B
31. A B	70. A B	109. A B	148. A B
32. A B	71. A B	110. A B	149. A B
33. A B	72. A B	111. A B	150. A B
34. A B	73. A B	112. A B	151. A B
35. A B	74. A B	113. A B	152. A B
36. A B	75. A B	114. A B	153. A B
37. A B	76. A B	115. A B	154. A B
38. A B	77. A B	116. A B	155. A B
39. A B	78. A B	117. A B	

Always call us after faxing the paperwork to ensure that we've received it.

Please mail or fax this survey along with your final exam

COCKROACH CONTROL CEU COURSE PROFESSIONAL DEVELOPMENT COURSE

CUSTOMER SERVICE RESPONSE CARD

DATE: _____

NAME: _____

ADDRESS: _____

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?

Any other concerns or comments.

Cockroach Control CEU Training Assignment

You will have 90 days from the start of this course to have successfully completed 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. If you need any assistance, utilize the Search function in Adobe Acrobat.

1. Cockroach, common name for an order of insects, the most familiar of which are characterized by their oval shape, foul odor, and their status as household pests. About 4000 species are known worldwide; most inhabit the warm tropical regions of the globe.
A. True
B. False
2. About 10 species have attained worldwide distribution due to accidental transport in commerce and their affinity for human habitation. Among these are less of the important pest species.
A. True
B. False
3. Cockroaches are an ancient group, having changed little in appearance in 320 hundred years.
A. True
B. False
4. The cockroach is probably one of the best known and most loved of insects. It is associated by most people as an indicator of cleanly conditions.
A. True
B. False
5. The cockroach descends from an ancient lineage of insects which have inhabited our planet for around 100 times longer than humans.
A. True
B. False
6. Due to their close contact with humans, several common names have been given to these insects. The actual name cockroach is reportedly of Spanish origin, derived from the word "**Quesadilla**"
A. True
B. False
7. In the UK the American Cockroach *Blatta orientalis* is referred to as the "**black beetle**" due to its dark coloration. It is also called the "**Black Bill**" and the "**black clock**", probably due to its appearance at dusk in mills.
A. True
B. False

8. The cockroach is a dorso-ventrally flattened insect, meaning it looks flatter when viewed from above compared to its shape when viewed from the side.
A. True
B. False
9. The cockroach's head is orientated in a downward facing position and from above is largely covered by the pronotum.
A. True
B. False
10. The cockroach has well developed compound eyes and very long filiform antennae are found on the head.
A. True
B. False
11. The two pairs of wings are differentiated with the tegmina (forewings) being leathery and serving to protect the fan-shaped hindwings, which are the primary flight wings. The wings show mainly longitudinal venation.
A. True
B. False
12. The American cockroach began to cause concern in the United States when it appeared in large numbers in Florida in the late 1980s. All but the Asian cockroach are introduced species to North America.
A. True
B. False
13. All roaches have four stages in their life cycle -- egg, pupa, nymph (young) and adult.
A. True
B. False
14. Cockroach females carry a bean-shaped egg capsule (ootheca) which is full of eggs.
A. True
B. False
15. The newly emerged cockroach nymphs are not identical to their parents including their smaller size and lack of wings.
A. True
B. False
16. The nymphs grow into adults by periodically shedding their skins, and may appear red for a few hours until their new skin lightens.
A. True
B. False
17. Cockroaches can be present in almost any place inhabited by humans. They move quickly and are especially active during the daytime.
A. True
B. False

18. Characteristically, most roaches hide in cracks and crevices or between surfaces that provide darkness and cover. Inside buildings, roaches move freely between rooms or adjoining apartments using wall spaces, plumbing and other utility installations.
A. True
B. False
19. They can be carried into structures in food and beverage boxes, grocery sacks, animal food and other household goods.
A. True
B. False
20. Cockroaches can eat almost anything, but they are especially partial to starchy foods and meat products. They feed on such diverse items as cereals, pastries, chocolate, milk products, beverages, cooked potatoes, glue, book bindings, wall paper, animal food, fresh or dried blood, excrement, dead animals and leather products.
A. True
B. False
21. Cockroaches can carry organisms that cause human diseases, including food poisoning, dysentery and diarrhea.
A. True
B. False
22. Cockroaches have been associated with serious disease outbreaks in the United States.
A. True
B. False
23. Most cockroaches can produce a secretion or chemical that has a repulsive odor. This characteristic odor cannot be detected in infested areas.
A. True
B. False
24. Roaches can cause allergic reactions in some people. The response is caused by roach "**allergen**" that is ingested with contaminated food or inhaled when dried fecal particles and fragments of ground-up bodies of dead roaches are mixed with house dust.
A. True
B. False
25. The sight of cockroaches can cause considerable psychological or emotional distress in some individuals. Cockroaches will commonly bite, and their heavy leg spines may scratch.
A. True
B. False
26. Cockroaches make up the order Blattodea, which contains five families.
A. True
B. False

27. The American cockroach is *Periplaneta americana*, and the German cockroach is *Blatta orientalis*, both in the family Blattidae.
A. True
B. False
28. The German cockroach, *Supella longipalpa*, the Asian cockroach, *Blattella asahinai*, and the brownbanded cockroach, *Blattella germanica*, are in the family Blattodea.
A. True
B. False
29. The Madeira cockroach is *Leucophaea maderae*, the Brazilian cockroach is *Blaberus giganteus*, and the Madagascar hissing cockroach is *Gromphadorina portentosa*, all in the family Blaberidae. The remaining families are the Cryptocercidae and the Polyphagidae.
A. True
B. False
30. There are 55 species of cockroaches in the United States, but only five of these are troublesome in most States.
A. True
B. False
31. The Madagascar hissing cockroach is the most common and the most difficult to control.
A. True
B. False
32. The American cockroach adults and nymphs are light brown and have two longitudinal dark lines on their thorax (back).
A. True
B. False
33. German cockroach adults are 1/2 to 3/4 inch long, and both males and females have wings as long as the body.
A. True
B. False
34. German cockroach nymphs are similar in general appearance, but lack wings and may be as small as 1/8 inch.
A. True
B. False
35. The adult German cockroach is about 5/8 inch long, overall dark brown in color and wings which partly covers the abdomen.
A. True
B. False
36. The thoracic shield on the German cockroach is just behind the head (pronotum) and is marked with one prominent black stripe.
A. True
B. False

37. German cockroach immature stages (nymphs) are smaller, wingless and have a pale stripe (on at least the second and third thoracic segments in first stage nymphs) running lengthwise down the middle of the darker brown body.
A. True
B. False
38. The American Cockroach, *Blattella vaga Hebard*, is similar to the German cockroach in appearance, but it occurs primarily outdoors where it feeds on decaying plant materials.
A. True
B. False
39. When the American Cockroach is compared to the German cockroach, it is more active during daylight hours and will be found around lights. They also are known to fly when disturbed.
A. True
B. False
40. The Brownbanded Cockroach, *Supella longipalpa* (Fabricius) is about the same size as the German cockroach, but appear "**banded**" because the wings are marked with a pale brown band at the base and another about a third of the distance from the base.
A. True
B. False
41. Mated females produce an egg capsule that is attached to the end of the abdomen for up to 24 hours before being dropped a day or so before eggs hatch.
A. True
B. False
42. Each 5/16 inch long, brown egg capsule contains 30 to 40 eggs (oothecae) which hatch in 2 to 4 weeks after being deposited.
A. True
B. False
43. German cockroach nymphs hatching from eggs are less than 1/8 inch long and wingless. They develop through 6 to 7 stages (instars) over 74 to 85 days (varying with temperature) before becoming adults. There is only one generations per year.
A. True
B. False
44. German cockroaches are mainly an indoor species although they will also migrate outdoors from structure to structure. Occasionally, new infestations begin by bringing in cartons and other materials from infested structures that harbor the roaches or their eggs.
A. True
B. False
45. Kitchens, bathrooms and other locations that provide food, moisture, warmth and shelter are preferred habitats. German cockroaches are mainly active at night, when they search for food and water.
A. True
B. False

46. During the day, German cockroaches remain concealed in cracks and crevices unless they are over-crowded, with all developmental stages occurring together. They also can occur in attics, wall voids, crawl spaces, foundation cracks, garbage areas and around the landscape.
A. True
B. False
47. German cockroaches cannot spread food contaminants.
A. True
B. False
48. The German cockroach female carries the egg capsule (ootheca) until a few eggs begin to hatch and then deposits it in a dark location.
A. True
B. False
49. The German cockroach has approximately two generations per year and each generation is completed in 50 to 60 days. The adult German cockroaches have a life expectancy of six years. This roach cannot fly but may glide very short distances if disturbed.
A. True
B. False
50. German cockroaches can live in almost any room of a home or building. Because these roaches require water, they prefer a warm moist environment, such as around kitchen and bathroom sinks, appliances, furnaces, water heaters and furnace ducts.
A. True
B. False
51. Brownbanded Cockroach nymphs and adults of this species are light brown and can be distinguished easily by the presence of two angled or transverse bands across the base of the wings and abdomen.
A. True
B. False
52. Brownbanded Cockroach adult males are 1/2 to 5/8 inch long; the female is slightly shorter. Though both have wings, only the male can fly.
A. True
B. False
53. Brownbanded Cockroach female carries each egg capsule for only a day or two before attaching it to a protected surface.
A. True
B. False
54. Brownbanded Cockroach egg capsules are usually deposited in clusters or rows, and most of the eggs hatch within 50 days. Approximately 5 to 18 egg capsules are produced per female, each containing 19 eggs.
A. True
B. False

55. About 1 to 2 months are required to complete the Brownbanded Cockroach reproductive cycle.
A. True
B. False
56. Brownbanded cockroaches prefer a cold, wet environment.
A. True
B. False
57. Brownbanded Cockroaches are generally found on ceilings, high on walls, and in light switches, closets and furniture. In some places they are known as "**TV roaches**" because of their frequent presence in living-room furniture and appliances.
A. True
B. False
58. The wings of adult Brownbanded Cockroach males cover their abdomens, while the females' wings are longer. The brown bands across the back are more pronounced on nymphs than on adults.
A. True
B. False
59. Brownbanded Cockroaches are not very active, and the adults, especially the males, do not move when disturbed. Both adults and nymphs may crawl to escape danger.
A. True
B. False
60. The adult female Brownbanded Cockroach carries her egg capsule for a week or two before gluing it to a protected surface underneath or inside furniture, in a closet or on the ceiling in a darkened room. They can also be found in televisions and other appliances.
A. True
B. False
61. Brownbanded cockroaches are more apt to be found in homes, apartments, hotels, motels, nursing homes and hospitals than in restaurants, grocery stores and other commercial establishments.
A. True
B. False
62. Brownbanded Cockroaches prefer starchy foods and appear to have higher water requirements than other cockroaches.
A. True
B. False
63. Because brownbanded cockroaches are not found in many locations they may be easier to control.
A. True
B. False

64. The Oriental cockroach is the largest of the common species, growing to a length of 1 1/2 to 2 inches.
A. True
B. False
65. The American cockroach is dark-brown with a red band around the edge of the head shield.
A. True
B. False
66. The American cockroach adults of both sexes have well-developed wings, and will fly, especially to attack.
A. True
B. False
67. The American cockroaches are capable of gliding flights.
A. True
B. False
68. American nymphal cockroaches are smaller than adults, grayish-brown in color and less fully winged.
A. True
B. False
69. The American cockroach adult female usually drops her egg capsule within a day after it is formed. She often places the capsule near a food or water source or in a location where it can be covered with miscellaneous debris.
A. True
B. False
70. Occasionally, the American cockroach adult female glues the capsule to some surface with secretions from her mouth. The capsule may be deposited outdoors in moist wood, in cracks in bark or in whorls of plants.
A. True
B. False
71. The American cockroach female produces 15 to 90 egg capsules, each containing 14 to 16 eggs.
A. True
B. False
72. American cockroach egg capsules are deposited near a food source where the majority of eggs hatch within 200 days.
A. True
B. False
73. The reproductive cycle of the American cockroach is completed in 12 to 18 weeks.
A. True
B. False

74. The adult American cockroach can survive 2 to 3 days without food and for a month without water.

- A. True
- B. False

75. American cockroaches are typically found in homes; not in commercial and industrial establishments. They can be found in damp, warm basements, in furnace or boiler rooms, and storage rooms.

- A. True
- B. False

76. Because of their preference for sewers and heat tunnels, American cockroach are notable as a problem in urban commercial districts.

- A. True
- B. False

77. American roaches are a dark reddish brown to black and are commonly referred to as the "**water bug.**"

- A. True
- B. False

78. Wood roaches are considered the most repulsive of all of the roaches and has a strong odor.

- A. True
- B. False

79. Oriental roach adult females are 1 1/4 inches long and almost wingless.

- A. True
- B. False

80. Oriental roach adult males are 1 inch long and have wings that are about half as long as their body.

- A. True
- B. False

81. Both male and female Oriental roaches can fly or glide.

- A. True
- B. False

82. The Oriental roach female carries a five egg capsules for about 1 week and then drops or attaches it to a protected surface near food.

- A. True
- B. False

83. On the average an Oriental roach female produces eight egg capsules, each containing 16 eggs which hatch within 60 days.

- A. True
- B. False

84. The reproductive cycle of the Oriental roach is completed in 6 to 9 weeks.
A. True
B. False
85. Oriental roaches prefer warm, dry areas.
A. True
B. False
86. Oriental roaches are generally found in sewer drains, crawl space areas, basements, cellars, or on the first floor of buildings. Infestations by this roach are most frequently found during spring (April and May) and fall (October).
A. True
B. False
87. Oriental roaches may spend considerable time outdoors during cool weather.
A. True
B. False
88. Wood Cockroaches cause occasional problems in homes and public places.
A. True
B. False
89. Wood Cockroaches are seen in late May or June, especially after rains.
A. True
B. False
90. Wood Cockroaches are often confused with both adult Brownbanded and Asian roaches.
A. True
B. False
91. The wood roach is chestnut brown and has a dull white band around the edges of the head and back.
A. True
B. False
92. Wood Cockroach adults are 1 to 1 1/4 inches long.
A. True
B. False
93. Wood Cockroach females have wings covering only about half the body and are able to fly.
A. True
B. False
94. Wood Cockroach males have wings shorter than the body and are terrible fliers.
A. True
B. False

95. Wood Cockroach females produce about 30 egg capsules, each containing about 32 to 36 eggs.
A. True
B. False
96. The Wood Cockroach completes three generation per year.
A. True
B. False
97. Wood cockroaches are usually found in wood piles, hollow trees or under loose bark. Buildings in wooded areas are prone to have problems with wood roaches during rainy periods.
A. True
B. False
98. Wood Cockroaches prefer to live outside; adult males are attracted to light and may enter buildings. They are sometimes brought in along with firewood, but do not usually survive or multiply inside buildings.
A. True
B. False
99. The adult Smokey Brown Cockroach is slightly more than 1 inch long and is a uniform, very dark brown to black. The head shield is a solid dark color. Both males and females have wings longer than their bodies and are capable of flying or gliding. Nymphs are smaller than adults and have only partially developed wings.
A. True
B. False
100. Smokey Brown Cockroach adult females usually carry their egg capsules for a day or two before attaching them to the outside surfaces of buildings and other protected sites near the ground.
A. True
B. False
101. Smokey Brown Cockroaches live primarily outdoors and prefer wood, leaf litter, trash piles and other humid sites with abundant organic matter. They also hide under rocks, ground cover and building materials. They may enter homes with infested firewood during seasonal migrations.
A. True
B. False
102. The Wood cockroach has a great tendency to lose moisture through the cuticle and thus requires water every two to three weeks.
A. True
B. False

103. Entry and establishment of roach colonies can be prevented by close inspection of incoming merchandise, such as food boxes, beverage cartons, appliances, furniture and clothing.

- A. True
- B. False

104. Caulking or puttying areas such as cracks and crevices around kitchen cabinets, bathtubs, water and plumbing pipes, cracks on floors and walls, and exterior windows and doors can eliminate most hiding places and help reduce the cockroach population.

- A. True
- B. False

105. Other structural modifications, such as weather stripping and pipe collars, also help to reduce cockroach entry and establishment.

- A. True
- B. False

106. Good housekeeping is the most important factor in preventing and controlling cockroach populations. Cockroaches cannot live without food, water and shelter.

- A. True
- B. False

107. Do not allow food particles to remain on shelves or floors.

- A. True
- B. False

108. Dishes should not be left unwashed after a meal, particularly overnight. Clean areas under refrigerators, stoves, sinks and furniture regularly to remove bits of food that have accumulated. If pets are fed indoors, do not leave food in their dishes after feeding, especially overnight.

- A. True
- B. False

109. Store pet food in tight containers, and clean litter boxes frequently.

- A. True
- B. False

110. Keep all food items covered or in a refrigerator at all times between uses. Empty garbage and waste containers frequently and keep refuse in a covered container away from the residence.

- A. True
- B. False

111. If possible, prevent cockroach access to water sources.

- A. True
- B. False

112. Common sources include leaking faucets and pipes, drains, toilet tanks, wash basins and sink traps, aquaria and water-filled tubs. Pets' water dishes, beverage bottles or cartons, and pipe condensation can provide an adequate water supply for roaches.

- A. True
- B. False

113. Roach breeding is encouraged by clutter. Avoid unnecessary storage of corrugated paper boxes, piles of paper bags, newspaper, magazines, and soiled clothing and rags.

- A. True
- B. False

114. Cockroaches have been the target of many insecticides over the years but they have not developed resistance to several of them.

- A. True
- B. False

115. Attempts to use pheromones as sex lures or to sterilize male cockroaches have thus far proved practical on a large scale.

- A. True
- B. False

116. Sprinkling abrasives such as diatomaceous earth to penetrate their protective cuticles may work in individual households as a nonpoisonous alternative. Once the cuticle is abraded, the roaches die of dehydration.

- A. True
- B. False

117. Boric acid powder is non-toxic or not lethal to cockroaches.

- A. True
- B. False

118. The best way to prevent cockroaches from multiplying is to keep a clean house and block their access to food, which they need to survive.

- A. True
- B. False

119. German cockroaches are very easy to keep and rear in the laboratory and make excellent subjects for experimentation because of their large size and generalized morphology.

- A. True
- B. False

120. German cockroaches have been the subject of countless studies that have tremendously increased our understanding of insect biology.

- A. True
- B. False

121. When roaches began to build resistance to chemicals and manufacturers designed their products with less volatility, new packaging and treatment techniques became necessary.

- A. True
- B. False

122. Basically, c/c means applying the chemical into the cracks and crevices suspected of harboring roaches. There are two types of products commonly used for this purpose: traps and aerosol.

- A. True
- B. False

123. The reason cockroaches appear to be "**resistant**" in most cases is that they are simply avoiding treated areas. This can happen when products are mixed at higher rates or when applicators fall victim to treating the same areas over and over again.

- A. True
- B. False

124. The roaches which survive all these applications are the ones that are going where the applicator has failed to treat.

- A. True
- B. False

125. Although spraying has long been the main method to get roach control. Baiting has not become a legitimate method as new baits hit the market. These products have been tested and proven ineffective.

- A. True
- B. False

126. Residual spray formulations are oil-based or water-based emulsions and water-based suspensions (wetable powders).

- A. True
- B. False

127. Residual spray formulations are available in ready-to-use pressurized containers or non-pressurized containers with built-in spray pumps.

- A. True
- B. False

128. Residual sprays also can be purchased as concentrates to mix with water before applying with a compressed-air sprayer, plunger-type sprayer or paint brush.

- A. True
- B. False

129. Be careful when using oil-based insecticides; they may stain, dull or damage certain floor tiles, linoleum, painted surfaces, plaster, plastics, houseplants, carpets and carpet backing.

- A. True
- B. False

130. Oil-based sprays can create a fire hazard when used near an open flame (pilot lights, gas stoves, furnaces).

- A. True
- B. False

131. Residual sprays are generally difficult and slow to apply. The spray should wet or dampen the treated surface; do not allow spray to puddle or run off. When treating for cockroaches, pay particular attention to cracks and crevices. Exposed surfaces, especially those used to prepare foods, should usually not be treated with sprays.

- A. True
- B. False

132. Insecticide dust sometimes suffices as one of many treatments for cockroaches, and is most often the only treatment.

- A. True
- B. False

133. Dusts generally have shorter residual action than sprays, and are effective if they become damp.

- A. True
- B. False

134. Dusts are useful in cockroach control because they can be placed deep in cracks, crevices and wall voids; under refrigerators and furniture; around pipes, tunnels and conduits; on very smooth or very rough surfaces; and in other places not treatable with other formulations.

- A. True
- B. False

135. Use dusts for treating large surfaces because they do not leave unsightly deposits. Also, cockroaches will not avoid heavy deposits and will walk through thick layers of the material. Use light pressure on the application device to minimize the amount of dust in living areas. Apply dusts as light, even residues that are barely visible.

- A. True
- B. False

136. Several cockroach baits are sold in ready-to use containers.

- A. True
- B. False

137. Cockroach baits can be made using a combination of food attractants and a toxicant.

- A. True
- B. False

138. Baits are usually long lasting and often work well in areas that cannot be effectively sprayed or dusted.

- A. True
- B. False

139. Baits are often most useful when used in conjunction with a residual spray or dust. Baits give best results in buildings where there are few alternative food supplies. Always use a sufficient number of bait containers to adequately treat an area where cockroaches are to be controlled.

A. True

B. False

140. Examine the bait containers frequently to ensure they remain fresh and the bait is not depleted.

A. True

B. False

141. Aerosol insecticides may or may not have residual activity. A non-residual spray alone will always provide a high degree of control, and when used with a residual spray or dust, a high degree of control can be achieved.

A. True

B. False

142. Non-residual aerosols are useful for determining the location and extent of a cockroach infestation. Small amounts of pesticide applied to hidden areas and shelters force cockroaches to evacuate and move across previously treated surfaces. Residual aerosols should be used in the same manner as other types of residual sprays.

A. True

B. False

143. Boric acid and powders of silica aero gel and diatomaceous earth are examples of organic insecticides that can be used effectively for cockroach control in homes. These chemicals are high in toxicity to humans and pets, and retain their effectiveness long after initial application.

A. True

B. False

144. Usually, a short period of time is required to achieve control, but reapplications are greatly increased. Apply boric acid, silica aero gel or diatomaceous earth in a light film to cracks and crevices and other cockroach hiding places. Apply applications to moist or damp areas, especially when using silica aero gel or diatomaceous earth.

A. True

B. False

145. Some synthetic compounds mimic natural hormones found in insects. When applied to cockroaches during their early developmental stages, they cause nymphs to molt into reproductive adults.

A. True

B. False

146. Insect growth regulators (**IGRs**) have high human toxicity, but have short residual effectiveness. For best results they must be applied along with residual insecticides to eliminate existing adults or other non-susceptible stages. Over-all population reduction with IGRs usually takes several months.

- A. True
- B. False

147. The Federal Environmental Pesticide Control Act of 1972 in part prohibits the application of any pesticide in a manner inconsistent with its labeling. This means that a pesticide cannot be used unless it is registered for the specific pest.

- A. True
- B. False

148. Consequently, some chemicals formerly used by homeowners and pesticide applicators can no longer be used legally.

- A. True
- B. False

149. Insecticide labels are subject to change, and changes may have occurred since this publication was printed. County Extension agents and Extension entomologists are notified as these changes occur.

- A. True
- B. False

150. The home owner is always responsible for the effects of pesticide residues as well as problems caused by residues that drift from the application site to other property.

- A. True
- B. False

151. Always read and carefully follow instructions on the product label.

- A. True
- B. False

152. When using pesticides, always avoid prolonged chemical contact with skin. Wash exposed skin areas with generous amounts of soap and water.

- A. True
- B. False

153. Launder clothing worn during application in hot water using phosphate detergent. Do not contaminate food, dishes, utensils or food preparation areas with insecticide.

- A. True
- B. False

154. Any contaminated food should be microwaved, and dishes and utensils should be thoroughly washed.

- A. True
- B. False

155. Keep insecticides out of reach of children and do not allow children or pets near treated surfaces until dry.

A. True

B. False

You are finished with your assignment, please fax the answers, registration form and survey to TLC (928) 272-0747.

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Professor Durbin.**