Animal Behavior Lab Instructions

1. Go to the SmartScienceLab Home Page for Students (http://www.smartsciencelab.com)
2. Select California State University from the drop-down menu
3. Select CSU Los Angeles from the drop-down menu
4. Enter your user ID (CIN)
5. Select Dwight Beltz – CSULA Biology for the course
6. Enter your password and click the Log In button
7. If the Click to Launch Smart Science® Explorations bar appears, you may have to click on it
8. (You might have to save a file to your computer depending on the browser; if you do, click the file to open it)
9. Select the Animal Behavior module then click the Choose button
10. Read through the material, answer the pre-lab questions, then submit your answers in the Think tab (the questions are not part of your graded exercise).
11. Click the Close button after reviewing your answers
12. Choose a hypothesis and click the Enter button
13. Make sure the Dry-Dry experiment is selected from the drop-down list
14. Press the green Play button and watch the video. Note how the bugs may or may not migrate to the right hand petri dish
15. Click the Start Getting Data button
16. Click once on each bug in the right hand petri dish
17. After all bugs in the right dish have been marked, click the Next button once, then click on each bug in the right hand petri dish
18. Repeat steps 16 and 17 until the Next button disappears OR you reach 800s (800 seconds).
20. Keep the Smart Science module open so you can review the results
21. Go to Moodle and answer the exercise questions
Animal Behavior Exercise Questions

1. Which of the following experiments showed a definite migration of bugs from the left dish to the right?
   a. Wet-Acid
   b. Wet-Basic
   c. Wet-Vinegar
   d. None of the above

2. Which of the following experiments showed a definite migration of bugs from the right dish to the left?
   a. Wet-Baking Soda
   b. Wet-Basic
   c. Wet-Vinegar
   d. None of the above

3. Was there any difference between the Dry-Dry and Wet-Dry experiments?
   a. No
   b. Yes, there was more movement from the wet to the dry
   c. Yes, there was more movement from the dry to the wet
   d. Can’t tell from the results

4. What can you conclude by comparing the results of the Dry-Dry and Wet-Dry experiments?
   a. Pill bugs prefer a drier environment
   b. Pill bugs prefer a wetter environment
   c. Pill bugs don’t seem to have a preference for either a wetter or drier environment
   d. Can’t tell from the results

5. Compare the results of the Wet-Baking Soda and Wet-Vinegar experiments. Which experiment showed more movement from the left to the right dish?
   a. Wet-Vinegar
   b. Wet-Baking Soda
   c. There was no difference between the two experiments
   d. There were trends in both experiments but nothing conclusive
6. What can you conclude by comparing the results of the Wet-Baking Soda and Wet-Vinegar experiments?

a. Pill bugs prefer a Vinegar environment
b. Pill bugs prefer a Baking Soda environment
c. Pill bugs don’t seem to have a preference for either a wetter or drier environment
d. Can’t tell from the results

7. Compare the results of the Wet-Baking Soda and Wet-Basic experiments. What can you conclude from the results?

a. Pill bugs prefer either a Baking Soda or Basic environment
b. Pill bugs do not prefer a Baking Soda or Basic environment
c. Baking Soda is probably a Basic compound
d. Both (a) and (c)
e. Both (b) and (c)

8. Compare the results of the Wet-Vinegar and Wet-Acid experiments. What can you conclude from the results?

a. Pill bugs prefer either a Vinegar or Acid environment
b. Pill bugs do not prefer either a Vinegar or Acid environment
c. Vinegar is probably an Acid compound
d. Both (a) and (c)
e. Both (b) and (c)

9. Examine the results of the Dark-Light experiment. What can you conclude from the result?

a. There is a preference for a light environment
b. There is a preference for a dark environment
c. There does not seem to be a preference for either light or dark environments
d. No conclusion can be reached from the results

10. Overall, which type of environment do pill bugs prefer?

a. Dark, acid, and dry
b. Dark, basic, and wet
c. Light, basic, and wet
d. No preference for light or dark, prefer basic and dry
e. No preference for light or dark, prefer acid and wet