

Chapter 1.3 Scavenger Hunt. (7th)

Date _____

Last Name _____, First _____ per _____

Pre- read chapter 1.3, starting on page 18 and find the answers to the scavenger hunt clues.

1. What is the **title** of chapter 1 section 3? _____
2. List the 10 **key terms** in section 1.2
 - a. _____
 - b. _____
 - c. _____
 - d. _____
 - e. _____
 - f. _____
 - g. _____
 - h. _____
 - i. _____
 - j. _____
3. **Standards warm up** on page 18
 - a. What kind of organism will you be studying? _____
 - b. What tool will you use to see them more clearly? _____
 - c. What will the questions you will be writing be about? _____
 - d. Write a question that you could investigate if you added a meter stick to your materials.

4. **A Green Key on page 18**
 - a. What does scientific inquiry refer to? _____

 - b. What kind of insect is shown sitting on a leaf on page 18? _____
5. **The Scientific Process**
 - a. Make a list of each of the blue headings in chapter 1.3
 - i. _____
 - ii. _____
 - iii. _____
 - iv. _____
 - v. _____
 - vi. _____
6. **A Green Key on page 19**
 - a. What makes a hypothesis “testable?” _____

7. **Figure 10 “Developing Hypotheses**
 - a. What is a hypothesis? _____
 - b. The boy’s hypothesis is that crickets chirp more when the temperature is higher. Propose another hypothesis that could explain the observation that crickets seem to be noisier on some nights than others. _____
 - c. Is your hypothesis testable? _____ Explain _____

8. Define the highlighted words on page 20 and 21.

- a. Variables _____
- b. Controlled experiment _____
- c. Manipulated variable _____
- d. Responding variable _____
- e. Control _____
- f. Operational Definition _____
- g. Data _____
- h. Communicating _____

9. Figure 11 “A Controlled Experiment”

- a. Which conditions are the students controlling in their cricket experiment?
- b. What is the manipulated variable in the experiment? _____
- c. What is the responding variable in the experiment? _____

10. Lab Zone Skills Activity

- a. What is the scientific question in this activity? _____
- b. What is the manipulated variable in the experiment? _____
- c. What is the responding variable in the experiment? _____
- d. What other conditions would you need to control? _____

11. Figure 12 “Collecting and Interpreting Data

- a. What organizational tool helps you organize the information you collect during an experiment? _____
- b. What data analysis tool may reveal patterns? _____
- c. Interpret the data shown. Did all the crickets chirp more at 25°C than at 20°C? ___
 - i. Did you use the data table or graph to answer the question? _____
- d. Does the data support the boy in figure 10’s hypothesis? _____
 - i. Write a conclusion concerning cricket chirping and temperature based on the evidence presented.

12. Figure 13 “Scientific Inquiry”

- a. True or false? The steps in scientific inquiry must be followed in the same order every time? _____
- b. What do the conclusions of one experiment often lead to? _____
- c. If you were to Go Online to PHschool.com to try the active art activity on the Nature of Inquiry, what web code would you use? _____