

Name: \_\_\_\_\_

Period: \_\_\_\_\_

## **Chapter 1 – Study Guide**

### **Part 1 – Fill in the blank with the correct vocabulary word from the word bank below.**

1. A \_\_\_\_\_ Hypothesis \_\_\_\_\_ is an educated guess based on what you know and observe.
2. A collection of structures, cycles, or processes that interact with each other is called a \_\_\_\_\_ system \_\_\_\_\_.
3. A \_\_\_\_\_ Scientific Theory \_\_\_\_\_ is a possible explanation for a repeatedly observed pattern that is supported by observations and results from many investigations.
4. \_\_\_\_\_ Infer \_\_\_\_\_ means to draw a conclusion based on an observation.
5. A rule that describes a pattern in nature is called a \_\_\_\_\_ Scientific Law \_\_\_\_\_.

#### **Word Bank**

Infer              hypothesis              scientific law              system              scientific theory

### **Part 2 – Fill in the blank with the correct vocabulary word from the word bank below.**

6. \_\_\_\_\_ Life Science \_\_\_\_\_ is the study of living things and how they interact.
7. A factor that can be changed during an experiment is called a \_\_\_\_\_ Variable \_\_\_\_\_.
8. \_\_\_\_\_ Science \_\_\_\_\_ is a way of learning more about our natural world.
9. The study of matter and energy is called \_\_\_\_\_ Physical Science \_\_\_\_\_.
10. \_\_\_\_\_ Earth Science \_\_\_\_\_ is the study of Earth systems and systems in space. It is also the study of nonliving things.

#### **Word Bank**

Life Science              science              Earth Science              variable              Physical Science

### Part 3 – Match the word with the correct definition.

11. \_\_\_ C \_\_\_ Constant                      A. a variable that is changed during an experiment.
12. \_\_\_ E \_\_\_ Dependent Variable        B. the use of science to help people in some way.
13. \_\_\_ D \_\_\_ Controlled Experiment    C. a variable that is not changed in an experiment.
14. \_\_\_ A \_\_\_ Independent Variable    D. involves changing one factor and observing its effect on one thing while everything else remains constant.
15. \_\_\_ B \_\_\_ Technology                  E. the variable that changes as a result of a change in the independent variable.
16. \_\_\_ F \_\_\_ matter                        F. anything that has mass and takes up space

### Part 4 – Put the steps of the Scientific Method in order.

- 17) Step 1 - \_\_\_\_\_ Ask a Question \_\_\_\_\_
- 18) Step 2 - \_\_\_\_\_ Collect Information \_\_\_\_\_
- 19) Step 3 - \_\_\_\_\_ Form a Hypothesis \_\_\_\_\_
- 20) Step 4 - \_\_\_\_\_ Test Hypothesis – Do an Experiment \_\_\_\_\_
- 21) Step 5 - \_\_\_\_\_ Record and Study Data \_\_\_\_\_
- 22) Step 6 - \_\_\_\_\_ Draw a Conclusion \_\_\_\_\_

#### Word Bank

Form a Hypothesis

Test Hypothesis – Do an experiment

Collect Information

Draw a Conclusion

Record and Study Data

Ask a Question