

STUDY GUIDE

Chapter 1

Physical Science and You

Read each group of terms. Circle the two terms that are most related. In the spaces provided, explain how the terms are related. Write your answers in complete sentences.

1. matter, animals, energy

2. knowledge, pure science, technology

3. pure science, technology, applied science

4. sunlight, matter, energy

5. rocks, matter, energy

6. electricity, sunlight, matter

7. hardness, observing, questioning

For each term listed, write a definition using your own words.

8. technology: _____

9. physical science: _____

Answer the following question with complete sentences on the lines provided.

10. How does "pure" science differ from technology? _____

REINFORCEMENT**Chapter 1****Physical Science and You**

Use the definitions of pure science and technology listed below to decide whether the discovery described in each statement is an example of pure science or technology. Write a **P** for pure science or a **T** for technology in the space provided.

pure science: the study of a subject for the advancement of knowledge
technology: the application of scientific knowledge to improve the quality of life

- _____ 1. Sarah observed that the shape of the moon seems to change slightly each night.
- _____ 2. A scientist observed that coating glass with certain materials helped to prevent the glass from shattering.
- _____ 3. A meteorologist discovered that a radar system developed to track the paths of airplanes could also be used to track the paths of storms.
- _____ 4. While on a field trip, a geology student discovers a new kind of mineral.
- _____ 5. A biologist discovered that bacteria could not grow in an environment where a certain kind of mold was present. The mold was later used to make the drug penicillin.

Place a check mark beside each item that is likely to be studied by a physical scientist.

- _____ 6. the energy given off by the sun
- _____ 7. the bones that make up the human body
- _____ 8. the composition of the bones in the human body
- _____ 9. the temperature at which ice melts
- _____ 10. the substances that make up a drug
- _____ 11. the distance from the sun to Earth
- _____ 12. the fish population in a pond
- _____ 13. the speed at which electricity travels through a certain kind of wire
- _____ 14. how heat from the sun can be used to heat a home on Earth
- _____ 15. when the next bird migration occurs
- _____ 16. the amount of precipitation that falls in a desert
- _____ 17. the chemical makeup of a newly discovered mineral