

Name: _____ Date: _____

Answer Key: Which Way to the Lab? 3rd Grade Branches of Science Quiz

Correctly classify scientific investigations into life, earth, and physical categories to build a strong foundation for future inquiry-based projects.

1. A scientist is visiting a beach to study how the ocean waves change the shape of the sand dunes. Which branch of science is this?

Answer: C) Earth Science

Earth Science focuses on the natural processes of our planet, including how landforms like sand dunes are shaped by water and wind.

2. True or False: A scientist who studies how magnets pull on metal objects is working in the field of Physics.

Answer: A) True

Physics is the study of matter, energy, and forces, which includes how magnetic force interacts with different materials.

3. If you are observing a colony of ants to see how they work together to gather food, you are practicing _____.

Answer: A) Biology

Biology is the branch of science that focuses on living things and their behaviors.

4. Which scientist would be most interested in studying why a shiny new copper penny turns green over time?

Answer: B) A Chemist

Chemists study the composition of matter and how substances change when they react with things like air or water.

5. True or False: Astronomy is the branch of science that focuses on naming different types of rocks found in the backyard.

Answer: B) False

Astronomy is the study of stars, planets, and space; studying rocks on Earth falls under Earth Science or Geology.

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6. A scientist who spends their time tracking hurricanes to keep people safe is working in the field of _____.

Answer: C) Earth Science

Meteorology is a part of Earth Science that deals with the atmosphere and weather patterns like hurricanes.

7. If you wanted to design a faster bicycle by studying motion and friction, which branch of science would help you the most?

Answer: B) Physics

Physics helps us understand how things move and how forces like friction can slow them down or speed them up.

8. When you use a telescope to find the rings of Saturn, you are exploring the branch of _____.

Answer: B) Astronomy

Astronomy is the specific study of celestial objects and everything beyond Earth's atmosphere.

9. Which of these questions would a Biologist be most likely to investigate?

Answer: A) How long does it take for a sunflower to grow?

Biologists study all forms of life, and since a sunflower is a living plant, its growth is a biological topic.

10. True or False: Most scientists only use one branch of science and never need to learn about the others.

Answer: B) False

Science branches often overlap; for example, an Earth Scientist might use Chemistry to learn what a rock is made of.