

Name: _____ Date: _____

Super-Safe Science Scholars: 5th Grade Lab Leaders

Imagine being the safety lead during a volcano simulation; students will analyze complex hazard scenarios and justify emergency response decisions.

1. While observing a chemical change in a graduated cylinder, your partner notices a small crack in the base. What is the most analytical primary step to ensure safety?

- A. Apply waterproof tape to the crack and finish the measurement quickly.
- B. Carefully transfer the liquid to a secondary container and notify the teacher.
- C. Monitor the drip rate to see if the experiment remains valid.
- D. Place the cylinder in the sink and continue with a different beaker.

2. If a non-corrosive saline solution splashes into your eyes, you are required to use the eyewash station for a minimum of 20 minutes regardless of the substance's pH.

- A. True
- B. False

3. When heating a test tube over a Bunsen burner, you must always point the opening of the tube ____.

- A. toward your lab partner for observation
- B. straight up toward the ceiling
- C. away from yourself and all other people
- D. downward toward the lab bench

4. You realize you have taken 50ml of vinegar for a titration but only need 10ml. What is the most responsible way to handle the 40ml surplus?

- A. Pour the excess back into the original supply bottle to save resources.
- B. Offer it to another group to use in their experiment.
- C. Dispose of it according to your teacher's specific chemical waste instructions.
- D. Leave it in the beaker on the table for the next class period.

5. Biological specimens, such as owl pellets or plant matter, do not require the use of gloves because they are natural objects.

- A. True
- B. False

6. To safely investigate the odor of a volatile substance, a scientist should use a technique called ____.

- A. wafting
- B. sniffing
- C. inhaling
- D. venting

Name: _____ Date: _____

7. Which piece of safety equipment is most appropriate if a large beaker of ethanol tips over and ignites on the lab bench?

- A. The safety shower
- B. A fire blanket
- C. Working fire extinguisher
- D. The eyewash station

8. Long hair must be tied back and loose jewelry removed before beginning an experiment with mechanical pulleys or open flames.

- A. True
- B. False

9. If a heavy glass microscope slides off a table and shatters, you should immediately ____.

- A. pick up the large pieces with your hands
- B. kick the glass under the table out of the way
- C. notify the teacher and keep others away from the area
- D. use a damp paper towel to wipe up the shards

10. What is the most critical reason for wearing safety goggles even when you are just recording data while others at your table are still working?

- A. It is a classroom rule that helps the teacher maintain order.
- B. Goggles help you focus better on the data you are writing.
- C. Accidents from nearby experiments can still splash or throw debris into your eyes.
- D. Chemical vapors can only be blocked by the plastic seal of the goggles.