

Name _____

Date _____

Handling Chemicals Safely

Questions

1. When you read the label on a chemical container, what are the three most important pieces of information?
2. How many times should you read this information before you open the container?
3. Is it important to be exact when preparing a chemical reaction? Explain.
4. What should you do with leftover chemicals after an experiment? What should you do with the products of an experiment?
5. How can you draw small volumes of liquids into a pipette safely?
6. Why is it important to read instructions all the way through before beginning an experiment?
7. When you need to carry chemicals from one place to another in the lab, what size container is the safest to use?
8. If you spill a liquid chemical, what should you do?
9. Should you add acid to water, or water to acid?

Bunsen Burner and Glassware Safety

Questions

1. Before hooking a Bunsen burner to the gas line, what should you look for?
2. How quickly should you turn on the gas?
3. When you use a striker, where should you stand?
4. If your flame sputters or goes out, what should you do?
5. If you smell gas in the room, what should you do?
6. Is it safe to heat a sealed container? Explain.

7. Is it safe to work near heated objects?
8. Is it safe to use glassware that has cracks or stars? Explain.
9. How can you safely carry a heated object?
10. Is it safe to heat flammable chemicals (e.g., gasoline) with a Bunsen burner?

Thermometer Safety *Questions*

1. Thermometers contain either alcohol or mercury to indicate temperature. Which substance (mercury or alcohol) creates toxic vapors when exposed to air?
2. If you break a mercury thermometer, what is the safe way to clean it up?
3. Before choosing a thermometer for a specific job, what should you know?

Glass Tubing Safety *Questions*

1. What is one of the most common causes of injury in the laboratory?

Dressing for Safety *Questions*

1. What type of shoes are appropriate for the lab?
2. Describe the type of clothing you should wear on days when you will be working in the lab.
3. How should you protect your eyes from chemicals and glass shards?
4. Why is it important to remove rings, watches, and contact lenses before working in the lab?
5. How can you protect your hands when working with corrosive chemicals?

Behavior in the Laboratory

Questions

1. Is the laboratory a safe place to eat, drink, or put on makeup? Why or why not?
2. What is a safe way to read a burette that is above your eye level?
3. Where should you keep personal belongings that you bring to the lab?

Emergency Equipment

Questions

1. Name the pieces of safety equipment in your laboratory. Do you know where they are and how to use them?
2. How do you extinguish a small fire in a container? What should you do if you have a larger fire?
3. How do you put out a clothing fire?

