

# Safety and Scientific Method Practice Quiz

Name: *Key*  
Date:  
Block:

1. List two safety rules regarding protective clothing in the lab  
 - Wear close toed shoes  
 - Wear safety goggles in the lab  
 - Tie back long hair & loose clothing  
*(other answers possible)*







2. If you notice that a beaker you are about to use has a crack in it, what should you do?  
*Tell the teacher and dispose into the broken glass container*

3. List two safety rules regarding working with chemicals  
 - Waft to smell  
 - If chemicals get into your eye, use the eye wash station  
*(other answers possible)*

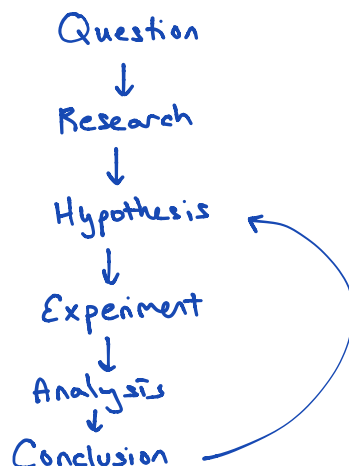
4. What does W.H.M.I.S. stand for?

*Workplace Hazardous Materials Information System*

5. Name the following W.H.M.I.S. symbols

|   |                             |   |  |
|---|-----------------------------|---|--|
|  | <i>Oxidizing hazard</i>     |  | <i>Health hazard</i>                     |
|  | <i>Poisonous</i>            |  | <i>Biohazardous Infectious Materials</i> |
|  | <i>Environmental hazard</i> |  | <i>Exclamation Mark</i>                  |

6. What are the steps of the scientific method?



7. Lucas wants to know if phone usage right before bed is affecting the quality of his sleep. He will conduct the experiment throughout five school nights, increasing his phone usage from 0.5 hours to 2.5 hours of continuous usage right before he sleeps, and counts how many times he wakes up during the night.

a. What is the independent variable?

Phone usage before sleep

b. What is the dependent variable?

Number of wake-ups per night

c. What are two controls in this experiment?

- Bed (other answers possible)
- School nights

d. Write a hypothesis for this experiment

If... Lucas uses his phone more before bed

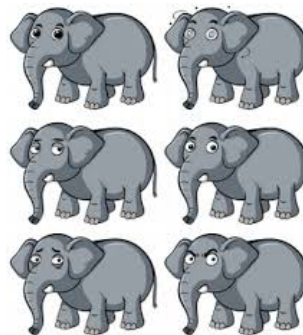
Then .... he will wake up more times during the night

8. Make a quantitative and qualitative observation about this picture.

(other answers possible)

Quantitative: 6 elephants

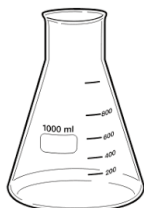
Qualitative: They are grey



9. Identify the following equipment by using the word bank.

|             |                       |                     |                   |
|-------------|-----------------------|---------------------|-------------------|
| A. Scoopula | D. Graduated cylinder | G. Erlenmeyer flask | J. Digital scale  |
| B. Funnel   | E. Bunsen burner      | H. Eyedropper       | K. Safety glasses |
| C. Beaker   | F. Test tube          | I. Test tube brush  | L. Hot plate      |

G i.



H ii.



D iii.



A iv. Used for scooping dry chemicals

J v. Used for measuring mass

F vi. Used for holding small amounts of liquids