

Name _____ Period _____ Date _____



LAB SAFETY



Why worry about lab safety?

Though most labs we do in science have no safety issues, some do require the use of chemicals and/or materials that could be dangerous. In order to truly understand science we must perform experiments in class.

PART 1. Use the words in the box to fill in the blanks below. Each word will only be used once.

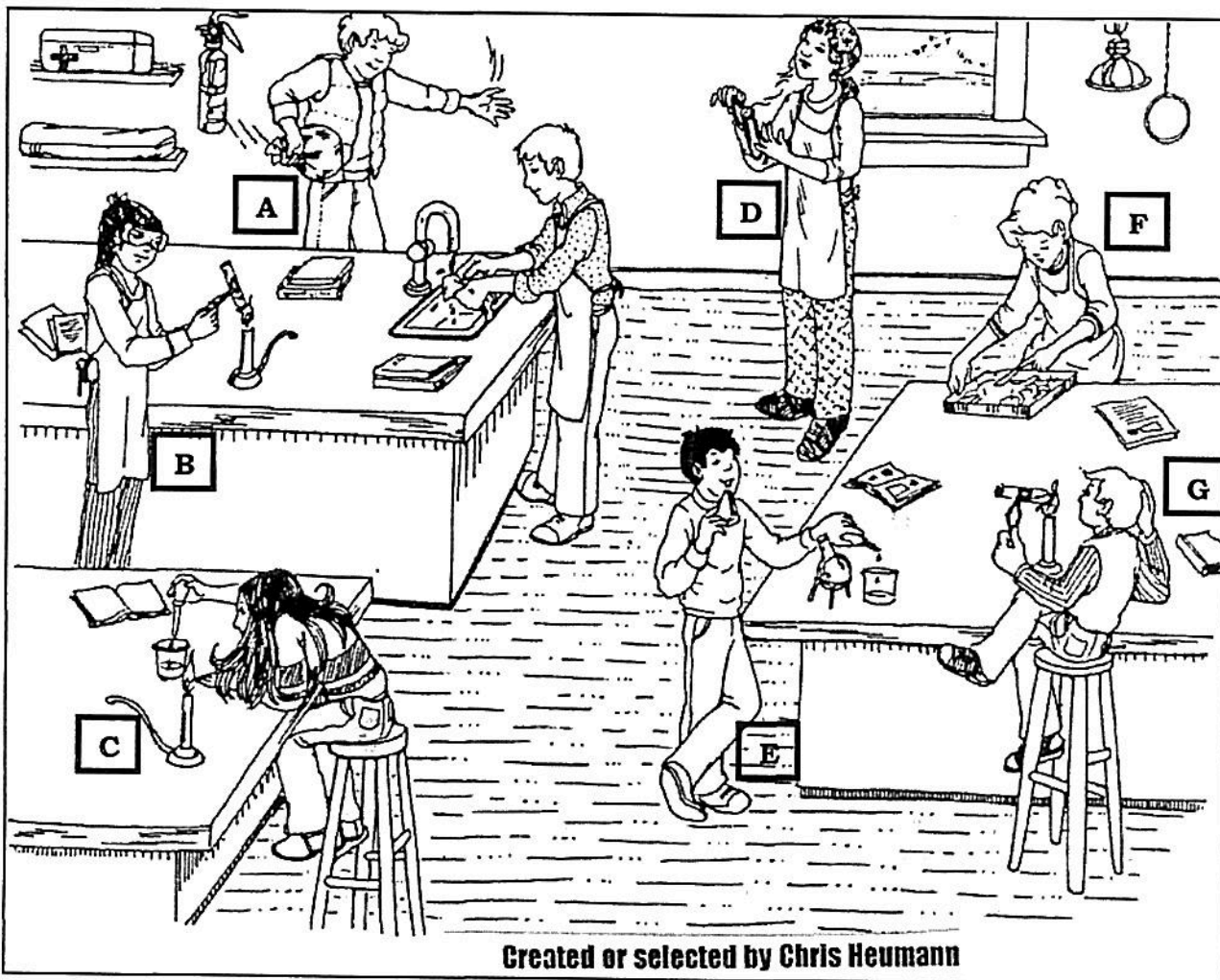
accident	alone	before	chemicals	chipped	Clean	glass
glassware	Goggles	gum	hands	heat	Horseplay	instructor
location	minor	safety	Shoes	taste	touch	

Report any (1.) _____ or injury to your instructor immediately, no matter how (2.) _____ it may appear. Never work (3.) _____. No student may work in the laboratory without an (4.) _____ present. Do not (5.) _____ any equipment, chemicals, or other materials in the laboratory are until you are instructed to do so.

No food, drink, or (6.) _____ are allowed in the laboratory. Keep (7.) _____ away from face. Do not touch, (8.) _____, or smell any chemicals unless specifically instructed to do so. Never fool around in the laboratory. (9.) _____, practical jokes, and pranks are dangerous and prohibited. Know the (10.) _____ and correct use of all (11.) _____ equipment. Work areas should be kept clean and tidy at all times. (12.) _____ all work surfaces and equipment (13.) _____ leaving the lab. Return all equipment clean and in working order to the proper storage area.

Dispose of (14.) _____ as instructed. Long hair must be tied back and dangling jewelry and loose or baggy clothing must be secured. (15.) _____ must completely cover the foot. Never handle broken (16.) _____ with your bare hands. Use a brush and dustpan to clean up broken glass. Place broken or waste glassware in the designated glass disposal container. Examine (17.) _____ before each use. Never use (18.) _____ or cracked glassware. Never use dirty glassware. (19.) _____ must be worn when working with chemicals, (20.) _____, or glassware.

PART 2. Study the diagram below which represents students performing various laboratory activities in science class and answer the questions that follow.



Describe 3 laboratory activities being done safely. Be sure to include the Station Letter.

1. _____
2. _____
3. _____

Describe 3 laboratory activities not being done safely. Be sure to include the Station Letter.

1. _____
2. _____
3. _____

3. Identify 2 safety devices (tools - not goggles or aprons) in the room and the station letter near where they are located.

1. _____
2. _____

PART 3. Use the letters under each symbol to identify the safety rule being described. Write the correct letter on the line.



A



B



C



D



E



F



G



H



I



J



K

- _____ 1. **Electrical Safety:** Care should be taken when using electrical equipment.
- _____ 2. **Clothing Protection Safety:** Substances could stain or burn clothing.
- _____ 3. **Fume Safety:** Chemicals or chemical reactions may cause dangerous fumes.
- _____ 4. **Poison Safety:** Poisonous substances are used.
- _____ 5. **Chemical Safety:** Chemicals used can cause burns or are poisonous if absorbed through the skin.
- _____ 6. **Plant Safety:** Poisonous plants or plants with thorns are handled.
- _____ 7. **Sharp Object Safety:** A danger or cuts or punctures caused by the use of sharp objects exist.
- _____ 8. **Eye Safety:** A danger to the eyes exists. Safety goggles must be worn.
- _____ 9. **Explosion Safety:** The misuse of chemicals may cause an explosion.
- _____ 10. **Thermal Safety:** Use caution when handling hot objects.
- _____ 11. **Fire Safety:** Care should be taken around open flames.

PART 4. Match the safety device to its function. Write the correct letter on the line.

- | | |
|----------------------------|---|
| _____ 1. Fire Extinguisher | a. Thrown over a fire to extinguish it. |
| _____ 2. Goggles | b. Worn to protect clothing from chemicals. |
| _____ 3. Gloves | c. Can help protect feet from dropped objects. |
| _____ 4. Eyewash | d. Puts out a fire. Works best if sprayed at the base of the fire. |
| _____ 5. Apron | e. Protects hands from chemicals. |
| _____ 6. Fire Blanket | f. Protect the eyes from splashing liquids or projectiles. |
| _____ 7. Closed-toed Shoes | g. Use this if a chemical gets in someone's eyes. Remember to flush the eyes continuously for 15 minutes! |

Conclusion

Why must we always follow these safety rules when performing laboratory activities? Answer in full sentences.
