# SAFETY SYMBOLS

These symbols are used in activities and labs at points where extra caution is needed. Whenever you see one of these symbols, stop, read the material carefully, and proceed with extra care. If you have any questions, ask your teacher before going on.



# Safety Clothing

This symbol indicates that you should wear a lab apron or lab coat. For some activities, you also may need to wear protective gloves.



## Safety Goggles

This symbol indicates that you should wear safety goggles at all times during an activity.



### Fire Safety

This symbol indicates the presence of an open flame. Tie back hair and take off or secure loose clothing, such as ties or sleeves. Keep all flammable items away from the area of a flame or from an electrical source or appliance.



### Corrosive Substance

This symbol indicates a corrosive or caustic substance, such as a strong acid or a base. Avoid letting any corrosive substance touch your skin, eyes, or clothing. Wear protective clothing and goggles. Do not inhale vapors. Use a fume hood if vapors are dangerous.



### Breakage

This symbol indicates an activity in which the likelihood of breakage is greater than usual, such as working with glass tubing or funnels. Handle breakable equipment, such as glassware, carefully. Do not use cracked, chipped, scored, or badly scratched glassware.



### Hazardous Waste Disposal

This symbol indicates that a substance should be disposed of in a special way, as directed by your teacher. Do not place hazardous materials in a waste basket or wash them down the sink.



### **Hand Safety**

This symbol indicates that the potential for cuts or burns exists. Use scissors instead of a scalpel whenever possible. Do not use too much force when working with a sharp instrument, such as a scalpel. Do not use chipped or cracked glassware. Use protective gloves when working with hot materials or corrosive substances.



### **Dangerous Vapors**

This symbol indicates the presence or production of poisonous or noxious vapors. Use a fume hood when in the presence of dangerous vapors and avoid inhaling the vapors.



# **Explosion Danger**

This symbol indicates that the potential for an explosive situation is present. Avoid the danger of explosion by reading laboratory instructions carefully and following them exactly.



#### Poison

This symbol indicates the presence of a poisonous substance. Do not let a poisonous substance come into contact with your skin, do not swallow any of the substance, and do not breathe any of its vapors.



### **Electrical Shock**

This symbol indicates that the potential for an electric shock exists. Disconnect all electrical equipment when not in use. Do not use any electrical equipment when wet or around water.



# **Animal Safety**

This symbol indicates the need for caution in handling laboratory animals or when encountering animals in the field. If you are bitten or scratched, wash the area thoroughly with soap and water, control the bleeding, and place a sterile dressing on the wound.



### **Animal Welfare**

This symbol indicates that live animals are being used, and is a reminder that they must be treated humanely. Handle animals gently so as not to produce undue excitement or trauma in the animals.



# **Water Safety**

This symbol indicates the need for extra precautions when working near water.



# **Plant Safety**

This symbol indicates the need for caution in hand ling unknown or potentially poisonous plants. Neve eat any part of an unknown plant. Know how to recognize the poisonous plants in your area an avoid contact with them.



### Biohazard

This symbol indicates that the potential for dange involving microorganisms is present. Treat microorganisms as directed by your teacher. Avoid direct contact with a culture of microorganisms and was your hands thoroughly with soap and water after working with microorganisms.



#### Thermal Burn Hazard

Do not touch hot equipment.



#### Radioactivity or Other Dangerous Radiation

This symbol indicates the presence of dangerous radiation from a radioactive substance, or electromagnetic radiation that can harm the eyes, such as ultraviolet light or a laser beam. Follow your teacher's instructions as to the proper handling of radioactive substances and the protection of your eyes.

# **Emergency Procedures**

Report any injury, accident, or spill to your teacher immediately. Know the location of the closest evewash fountain, fire blanket, fire extinguisher, and shower.

| Situation      | Safe Response   |
|----------------|---|
| burns          | Immediately flush with cold water until the burning sensation subsides.   |
| fainting       | Provide fresh air (for instance, open a window). Move the person so that the head is lower than the rest of the body. If breathing stops, use artificial resuscitation. |
| fire           | Turn off all gas outlets. Unplug all appliances. Use a fire blanket or fire extinguisher to smother the fire. CAUTION: Do not cut off a person's air supply.            |
| eye injury     | Immediately flush the eye with running water. Remove contact lenses. Do not allow the eye to be rubbed if a foreign object is present in the eye.                       |
| minor cuts     | Allow to bleed briefly. Wash with soap and water.   |
| poisoning      | Note what substance was responsible. Alert teacher immediately.   |
| spills on skin | Flush with water.   |