

The following is a comprehensive, lesson-by-lesson list of the materials that you will need for demonstrations and other activities in the Chemistry lessons.

The materials in the following box are needed for many activities.

\*= optional material

## Frequently Used Materials

- safety goggles
- markers
- scissors
- paper
- colored pencils

## Module 7:

### 7.1.2 Types of Mixtures

- safety goggles
- dirt
- small and large rocks
- sieve or fine strainer
- milk
- clear glass cup
- white vinegar
- one pack of gelatin (flavored or unflavored)
- water
- small pot
- stove (Always have an adult present when using the stove.)
- sugar
- oil (any kind of cooking oil)
- lemonade
- shampoo

### 7.2.3 Modeling Osmosis

- safety goggles
- 3 gummy bears
- ½ c distilled water

- 1 c tap water

- ½ c salt
- 3 glass jars
- paper towels
- ruler

## Module 8:

### 8.1.4 Acid Rain

- safety goggles
- 3 of the same kind of small potted plants
- distilled water
- white vinegar
- 3 spray bottles
- permanent marker
- ruler
- digital or phone camera (pictures should be only of your experiment)

### 8.2.2 Red Cabbage pH Indicator

- 3 pre-cut red cabbage leaves
- tap water
- blender
- strainer

- one large container
- 14 clear plastic cups (7 oz or larger)
- permanent marker
- 4 oz lemon juice
- 3 Tbsp baking soda
- 3 Tbsp washing soda
- 4 oz white vinegar
- 4 oz apple juice
- 2 antacids tablets
- 4 oz seltzer water

### 8.2.3 L/U/T Acids and Bases in Careers: Project

- pencil and paper
- computer
- video camera
- tape or phone recorder\* (optional)

## Module 9:

### 9.1.1 Heat vs. Temperature

- 1 large mason jar
- 3 small mason jars
- room temperature water

- cold water
- microwave or stove
- pool thermometer

### 9.2.1 Modeling Reactions

- 2 different colors of play dough
- colored pencils
- 1 sheet of plain paper

## Module 10:

### 10.2.3 Predicting Redox Reactions

- gumdrops
- toothpicks

## Module 11:

### 11.1.4 Electroplating

- safety goggles
- 1 c vinegar
- 10 dirty pennies with dates before 1982 (They contain more copper than newer pennies.)
- 1 tsp salt
- plastic spoon
- glass jar 10 oz or larger
- 2 paper clips or clean iron nails
- sand paper

### 11.2.3 Nuclear Decay Simulation

- 40 Pennies
- plastic re-closable bag

## Module 12:

### 12.1.3 Modeling Organic Compounds

- toothpicks
- 4 red gumdrops
- 10 green gumdrops
- 2 yellow gumdrops

### 12.2.6 Strawberry DNA Extraction

- safety goggles
- 3 strawberries (tops removed)
- 1 small bottle of Isopropyl alcohol (70-95%)
- $\frac{1}{2}$  c water
- 1 tbsp dish soap
- $\frac{1}{2}$  tsp salt
- small bowl
- re-closable plastic sandwich bag
- cheesecloth or paper towel
- funnel
- glass cup
- tweezers