Station 1

Materials

- Test tube
- Test tube rack
- Scoopula
- Calcium carbonate (solid)
- Hydrochloric acid

Procedure

1. Pour 1 cm of hydrochloric acid into the test tube.
2. Use the scoopula to add a small amount of calcium carbonate to the test tube.
3. Record observations, then rinse the contents of the test tube down the drain.

Station 2

Materials

- Test tube and stopper
- Test tube rack
- Scoopula
- Copper(II) sulfate (solid)
- Distilled water

Procedure

1. Use the scoopula to collect a few crystals of copper(II) sulfate and add to the test tube.
2. Add about 1 cm of distilled water to the test tube.
3. Put the stopper in the test tube and shake gently. Record your observations.
4. Put the test tube into the test tube rack at Station 3.

Station 3

Materials

- Test tube rack
- Eye dropper
- Evaporating dish
- Ring clamp
- Wire gauze
- Bunsen burner
- Copper(II) sulfate (solution)

Procedure

1. Use the eye dropper to place three drops of the copper(II) sulfate solution into the evaporating dish.
2. Place the evaporating dish on the ring clamp and wire gauze. (**Caution!** It may be hot!
3. Heat the evaporating dish gently over a low flame. When the liquid has evaporated, record observations.
4. Remove the evaporating dish from the wire gauze and clean in the sink when cool.
5. Place the test tube with the remaining solution in the test tube rack at Station 4.

Station 4

Materials

- Test tube rack
- 50-mL beaker
- Tweezers
- Steel wool

Procedure

1. Using the tweezers, add a small amount of steel wool to the beaker.
2. Pour the copper(II) sulfate solution from the test tube into the beaker.
3. Record your observations.
4. Empty the beaker into the waste bucket, then rinse out the beaker and test tube in the sink.
5. Place the test tube into the rack at Station 2.

Station 5

Materials

- Test tube
- Test tube rack
- Scoopula
- Hydrogen peroxide (3%)
- Potassium iodide (solid)

Procedure

1. Pour about 1 cm of hydrogen peroxide into the test tube.
2. Use the scoopula to add a small amount of potassium iodide to the test tube.
3. Record your observations, then rinse the contents of the test tube down the sink.

Station 6

Materials

- Test tube
- Test tube rack
- Silver nitrate (solution)
- Copper (solid)

Procedure

1. Add about 1 cm of silver nitrate solution to the test tube.
2. Place a small piece of copper into the test tube.
3. Shake gently for one minute, then record your observations.
4. Empty the test tube into the waste bucket, then clean the test tube in the sink.

Station 7

Materials

- Test tube
- Test tube rack
- Scoopula
- Thermometer
- Ammonium nitrate (solid)
- Distilled water

Procedure

1. Add about 2 cm of distilled water to the test tube and measure the temperature of the water.
2. Use the scoopula to add a small amount of ammonium nitrate to the water.
3. Use the thermometer to gently stir the water. Measure the temperature when it stops changing.
4. Record observations, then rinse the contents of the test tube down the drain.

Station 8

Materials

- Test tube
- Test tube rack
- Scoopula
- Thermometer
- Calcium chloride (solid)
- Distilled water

Procedure

1. Add about 2 cm of distilled water to the test tube and measure the temperature of the water.
2. Use the scoopula to add a small amount of calcium chloride to the water.
3. Use the thermometer to gently stir the water. Measure the temperature when it stops changing.
4. Record observations, then rinse the contents of the test tube down the drain.

Station 9

Materials

- 250-mL beaker
- Magic flower
- Tap water

Procedure

1. Add about 2 cm of water to the beaker.
2. Drop the magic flower petal-side up into the beaker.
3. Record observations, then empty the beaker and put the flower into the garbage.

Station 10

Materials

- None

Procedure

Rest station – use this time to start the questions on the back of the page and to make sure your observations are complete.