Great Lesson 1 Sample Experiments

## Particles that attract each other and particles that do not attract each other

Materials: Some water in a little jug, sugar, some talcum powder, two glasses (beakers), two spoons

Command: Put some water in a glass, pour in some sugar, stir it with a teaspoon. Put some water in another glass, pour in some talcum powder, and stir it energetically with the teaspoon.

Observe: Record your observations.

# Solid, Liquid and Gas

Materials: A marble, some water in a small jug, three test tubes, a test tube holder, three slips of paper reading solid, liquid, and gas

Command: Put the three test tubes in the holder. Put the marble in one test tube, some water in the second test tube, and leave the third test tube as it is. Apply the names: solid, liquid, and gas.

Observe: Record your observations.

# Passing from Solid to Liquid to Gas

Material: A piece of wax (paraffin), a spoon, a candle, some matches

Command: Take the match and light the candle. Put the piece of wax on the spoon and hold it over the flame. Keep the spoon on the flame until the wax disappears.

Observe: Record your observations.

# Passing from Liquid to Gas, and then Solid

Materials: A piece of ice, a pan and a lid, a spoon, a hot plate

Command: Put the piece of ice in the pan and put it on the hot plate. As soon as the water boils, put the lid on it. Observe what happens on the lid. You can collect some drips on the lid and put them into the freezer.

Observe: Record your observations.

# Chemical Combination of Gas

Materials: Vinegar, baking soda, a spoon, a beaker

Command: Measure one teaspoon of baking soda into the beaker. Pour some vinegar into the beaker.

Observe: Record your observations.

The corresponding statements;

1. There are some particles that attract each other and they stay joined. There are others that do not attract each other very much and when joined may be separated.
2. Matter can assume three states: solid, liquid, gas.
3. When heated, matter passes from solid to liquid and then to gas or vapor.
4. Matter, when cooled, passes from the gaseous or vaporous state to the liquid state and from liquid to the solid state.

5. When vinegar and baking soda are combined, a gas is formed: carbon dioxide.