Scientific Method Review

Fill in the Blank:

1. The _______________________ is the answer to the problem that tells what you learned from the experiment.

2. The _______________________ is the question you are trying to answer by doing the experiment.

3. The _______________________ are the tools and equipment that you need for the experiment.

4. Your _______________________ are the things you notice while doing the experiment.

5. A description of the steps that you will follow to complete the experiment is called the _______________________.

6. The _______________________ is your prediction or guess about what will happen in the experiment.

7. The _______________________ are the observations and measurements from the experiment. They can be in a table, chart, graph or diagram.
Can you make a substance that is both a liquid and a solid?

I think you can make a substance that is both a liquid and a solid.

Corn Starch
Water
Measuring Spoons
Bowl

1. Measure $\frac{1}{2}$ cup of corn starch
2. Mix the corn starch into $\frac{1}{4}$ cup of water
3. Stir the corn starch and water until it the corn starch is dissolved
4. Keep adding corn starch or water until the mixture is hard when you touch it, but liquid when you pick it up.

The mixture was white and glossy. It did not smell. When I put the spoon in the mixture to stir it, it was hard. It softened up when I mixed it a lot. When I picked up the mixture with my hand, it turned into a liquid and dripped off of my hands. When it landed back in the bowl, it became hard again.

You can make a substance that is both a liquid and a solid with corn starch and water. It is called Oobleck.
Scientists need to complete more than one trial when they do an experiment. This is important because many things can happen during an experiment. For example, if a scientist is trying to find out how many pennies a cup of water can hold before it overflows, he should try it at least three times. If the water spills or the pennies were dropped in differently each time, this could affect the results. If the first two trials had 8 and 9 pennies each, and the third trial had 25 pennies, the scientist could see that maybe something was wrong with the third trial. It is important for a scientist to complete more than one trial when they do an experiment.