Oobleck and Slime Experiments

Background: You already know that matter can exist in one of four states: solid, liquid, gas, and plasma. A fifth state has recently been introduced: the Bose-Einstein Condensate. At this point, it is not fully recognized as a true "fifth state of matter".

Procedure:
- Obtain an aluminum pie plate
- Put in \( \frac{1}{2} \) cup of corn starch
- Add \( \frac{1}{4} \) cup of water
- Mix well - Ask if your "Oobleck" is the proper consistency

Questions:
1. What state of matter was the corn starch?
2. What state of matter was the water?
3. What state of matter is the Oobleck? Justify your answer!

DO NOT THROW OUT YOUR OOBLECK YET! Set it aside for now until you decide which substance you will experiment with.

Procedure 2: You will need the following items per group:
- 1 dixie cup
- 1 tsp. Glue
- 1 tsp. Water from the tap
- 1 tsp laundry starch

Questions:
1. What state of matter were all three ingredients when they were separate?
2. What state of matter is the new substance? Justify your answer!
**Experiment**: Choose one of the substances and write an experiment. Your experiment must include all parts of a scientific method. *Some ideas might include:* how long can a strand of “slime” get before breaking, the effect of temperature on the substance, the effect of pressure, can oobleck say in the solid state for more than one minute, etc.

**Problem or question:**

**Hypothesis:**

**Set up the experiment:**

**Analyze the data:**

**List the result or conclusion:**