

**Discovery 2-1**  
**Classifying Matter**

Name \_\_\_\_\_  
Period \_\_\_\_\_

**Hypothesis: Is Oobleck (cornstarch and water) a solid or a liquid?**

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**Part A: How can substances be classified by states of matter?**

Mix  $\frac{1}{4}$  cup of corn starch with 3 tbs of water using a craft stick. **Do not use a stirring rod!** It will break. If the mixture is too runny, add a touch more cornstarch. If it's too thick, add a touch more water. Add food coloring if you choose. Perform the following tests. Record if the substance is a solid or liquid based on your tests.

Test	Solid or Liquid?
Hit the surface with your craft stick	
Set the end of the craft stick on the surface	
Scratch the surface	
Stir the substance	
Submerge a finger in the substance	
Try to yank your finger out while holding the beaker with your other hand	
Feel the substance in your palm	
Feel it between your finger and thumb	
Drop some into your hand	
Drop some onto the lab table	
Pick up the substance. Return to a Ziploc bag.	

· Would you classify the unknown substance as a solid or liquid? Justify your answer.

**Equipment:**

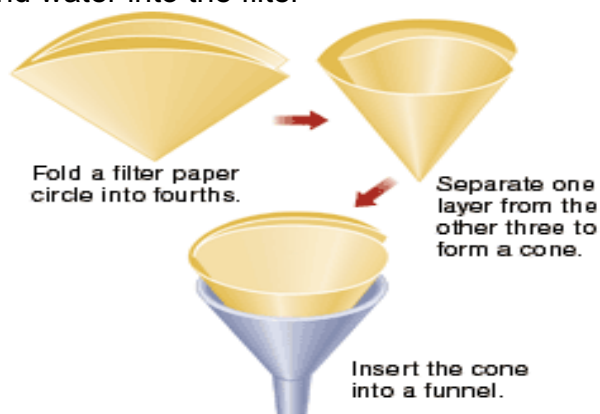
Sand and “Magic” Sand, 2 Beakers, Pipette and Water,  
Filter and Funnel, Stirring rod

**Procedure:**

1. Fill a beaker  $\frac{1}{4}$  with water.
2. Place a spoonful of regular sand in the beaker. Stir the sand and observe.

**Describe your observations.**

3. Place the filter paper in a funnel. Place the funnel on top of the empty beaker. Drain the sand and water into the filter



4. Touch the sand and see what you find.

**Write down your observations.**

5. Put the filtered sand back into its container.
6. Fill the beaker  $\frac{1}{4}$  with water again.
7. Place a spoonful of “magic” sand in the beaker. Stir and observe again.

**Describe your observations.**

8. Fold the filter paper into a funnel. Place the funnel on top of the empty beaker. Drain the sand and water into the filter.

9. Touch the sand and see what you find.

**Write down your observations.**

10. Put the filtered sand back into its container.

**Conclusion**

1. What do you think is special about the magic sand? Why does it act the way it does?