

STATES OF MATTER LAB

NAME: _____

GROUP MEMBER NAME: _____

PURPOSE:

How do you know if a substance is a solid, liquid, or gas? Is shaving cream a solid, liquid, or a gas? Is a mixture of cornstarch and water a solid, liquid, or a gas?

HYPOTHESIS:

MATERIALS:

- shaving cream
- 1 filter
- 1 penny
- Paper towels
- Magnifying glass
- Cup with cornstarch
- graduated cylinder
- 40 mL of water
- 1 plastic spoon

PROCEDURE 1:

1. Write your names on the filter.
2. Squirt a small amount of shaving cream onto the filter.
3. Use the magnifying glass to observe the shaving cream.

Describe the properties of the shaving cream. Is it a solid, liquid, or a gas? Why do you think so?

4. **Gently** place a penny **on top** of the shaving cream blob.
5. Using a magnifying glass, observe and record what happens.

What happens when you place the penny on top of the shaving cream?

6. Rub a little shaving cream between your finger and thumb.

How does it feel?

7. Place your filter where instructed.

8. Wait 24 hours.

9. Using a magnifying glass, observe the shaving cream.

Do you notice any change? What does the shaving cream look like?

Compare and contrast the shaving cream from day one to the shaving cream on day two.

10. Wash penny and throw filter away.

PROCEDURE 2:

1. Pour 40 mL of water into the container of cornstarch.
2. Stir the mixture.

Describe the properties of the cornstarch and water mixture.

3. Stir the mixture quickly with your plastic spoon.

4. Stir the mixture slowly with your plastic spoon.

Does the mixture have characteristics of a solid or a liquid? Why do you think so?

5. Pour a small amount of the mixture into your hand. (Make sure your hand is over a paper towel!)

How does it feel? What happens?

6. Place cup and mixture in garbage. Do not put mixture down the drain.
7. Use your writing prompt to write a conclusion on the following page.