

## Inquiry Question

Can something we make be both a solid and a liquid?

Name: \_\_\_\_\_ Date: \_\_\_\_\_



Oobleck is a non-Newtonian fluid; it has properties of both liquids and solids. You can slowly dip your hand into it like a liquid, but if you squeeze the oobleck or punch it, it will feel solid.

In the Dr. Seuss book “Bartholomew and the Oobleck,” the gooey green substance, fell from the sky and wreaked havoc in the kingdom.

Watch this video of people trying to walk and bike on this oobleck:

<https://www.youtube.com/watch?v=JJfppydyGHw>

## General Instructions

Read Dr. Seuss book: Bartholomew and the Oobleck. Then create your own and experience the liquid/solid.

### Materials you'll need:

- Cornstarch
- Water

### Hints and Ideas:

#### *Instructions:*

- Put 300 ml of cornstarch into a bowl
- Slowly add 200 ml of water into the cornstarch, stirring after each small addition until it is smooth and about as thick as mayo
- Scoop some of the mixture into your hand and try to make a ball with it
- Let the ball ooze into your hand, then slap the mixture Squeeze the mixture
- Follow the rest of the instructions on the attached worksheet.

### Project Submission

Use a poster, video, slideshow, or photos to show the oobleck. As well as fill out the attached worksheet and hand it in.

Can something we make be both a solid and a liquid?

Name: \_\_\_\_\_

<b>Investigation</b>	<b>Yes</b>	<b>No</b>	<b>Solid or Liquid?</b>
Can you pour it into a cup?			
Does it keep the same shape?			
Can you stretch it?			
Can you pick it up?			

What happens when:

1. You put a pencil on your oobleck:

2. You put a paperclip on your oobleck:

3. You put an eraser on your oobleck:

In your opinion is oobleck a solid or a liquid? Explain your answer.