

What is Oobleck?

CAN YOU USE THE SCIENTIFIC METHOD AND YOUR SENSES TO SOLVE THE MYSTERY OF OOBLECK?

Problem

Three liquids are mixed together in a plastic bag. Using your senses (except for taste) can you determine if the substance that is formed is a solid, liquid or gas?

Research

List three properties of solids, liquids and gases.

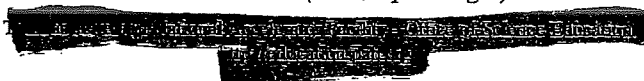
Solid

Liquid

Gas

Hypothesis

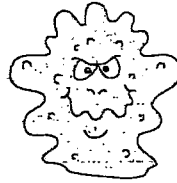
I think the substance will be a _____ .
(solid, liquid or gas)



Procedure

1. To do this experiment, your team will need:

- A plastic bag
- A clear liquid
- A green liquid
- A white liquid
- All of your senses, **except for taste**



2. Open the plastic bag.

3. Carefully measure two teaspoons of the clear liquid into the plastic bag.

4. Next, add two drops of the green liquid.

5. Carefully add two tablespoons of the white liquid.

6. Close the bag and knead the mixture well for 2 minutes.

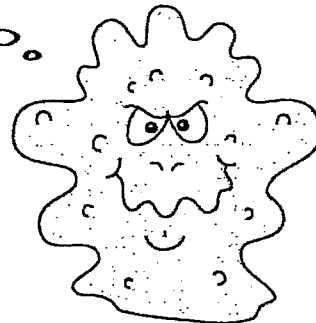
7. Once 2 minutes have passed, take the Oobleck out of the bag and experiment with it.

8. Record your observations about the properties of Oobleck on the **Oobleck Investigation Sheet**.

9. Decide if each observation is a property of a solid, liquid or gas. Circle one or more of the **State of Matter** letters on the right hand side of the **Oobleck Investigation Sheet** to show what you decided.

10. Answer the blob's question.

**What state of matter
is Oobleck???**



Data Collection and Analysis

Oobleck Investigation Sheet

PROPERTY

State of Matter

example: GREEN

Ⓢ Ⓛ G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

S L G

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S L G

S L G

Conclusion

OOBLECK APPEARS TO BE A _____



Reading About Properties and Changes

OOBLECK HAS SPECIFIC PROPERTIES.

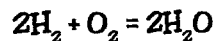
Directions: Read the following passage. Fill in the blanks with words that make sense. Remember to use context clues that come before and after the blanks.

Matter can be described and identified by physical and chemical properties. Physical 1 have to do with appearance. You can observe many physical properties with your senses and by measuring the length, 2, height, mass and density of a substance. 3 properties include color, shape, smell, texture, taste and size. The state of matter (whether its a solid, 4, or gas) and the 5 at which the substance boils, melts or freezes are also physical properties. Magnetic properties are physical properties as well.

6 properties, on the other hand, have more to do with the atomic or molecular composition of matter. Chemical properties deal with how substances react with other 7 such as water, air or fire.

A physical change has occurred when a substance changes color, size, shape, temperature or state. A 8 change has occurred when a substance has changed into something new or 9 so that the original substance is gone. Digestion, combustion and radioactive decay are examples of chemical changes. A chemical change takes place in a 10 to produce electricity when you turn on a flashlight.

Chemical changes are sometimes represented by a chemical formula:



This formula states that two hydrogen gas molecules react with one oxygen gas molecule to produce two molecules of water.

Directions: Choose the word that fits the context of the passage.

- | | | | | |
|-----|----------------|----------------|---------------|---------------|
| 1. | a. chemicals | b. properties | c. substances | d. textures |
| 2. | a. width | b. density | c. height | d. property |
| 3. | a. chemical | b. matter | c. described | d. physical |
| 4. | a. water | b. molecule | c. liquid | d. atom |
| 5. | a. time | b. temperature | c. design | d. cylinder |
| 6. | a. chemical | b. physical | c. substance | d. gaseous |
| 7. | a. properties | b. physicals | c. degrees | d. substances |
| 8. | a. temperature | b. physical | c. chemical | d. color |
| 9. | a. similar | b. different | c. familiar | d. original |
| 10. | a. battery | b. bulb | c. change | d. switch |

Writing About Physical Properties

REMEMBER WHEN YOU OBSERVED THE PROPERTIES OF OOBLECK.

Write about your favorite food. Try to describe your favorite food to someone, without telling them what it is! Be sure to use words that appeal to the senses (sight, touch, hearing, smell and taste) so that you will be describing the physical properties of your favorite food. Think about and be sure to explain why this is your favorite food.

