



Lesson Question



Lesson Goals

Explore the of matter.

Recognize the physical properties of .

Describe what happens during a .

Explain how matter is during a physical change.



Words to Know

Fill in this table as you work through the lesson. You may also use the glossary to help you.

boiling point	the <input type="text"/> at which a liquid becomes a <input type="text"/>
buoyant force	the <input type="text"/> force on an object in a <input type="text"/>
conductivity	the ability of a substance to transfer <input type="text"/> or <input type="text"/>

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2K**Words to Know**

density	the amount of _____ in a given _____
melting point	the _____ and _____ at _____ which a solid becomes a liquid
solubility	the ability of one substance to _____ in _____ another _____

**Matter**

Matter:

- makes up all and .
- is made up of very small particles called .

Matter can be measured by its:

- , or the amount of matter in an object.
- , or the downward pull on an object due to gravity.
- , or the amount of space an object takes up.

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Properties of Matter

Matter can be classified by its properties.

A physical property is a characteristic of a substance that can be
and that does not change the of the substance.

Physical Properties of Matter

- Shape

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- Odor

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More Physical Properties of Matter

At the , a solid becomes a liquid.

At the , a liquid becomes a gas.

is the ability of a substance to dissolve.

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More Physical Properties of Matter**BUOYANT FORCE AND DENSITY**

is the upward force on an object in a fluid.

is the amount of mass in a given volume.

- An object will if it is less dense than the fluid.
- An object will if it is more dense than the fluid.

More Physical Properties of Matter**CONDUCTIVITY AND MAGNETISM**

Conductivity is the ability of a substance to heat or electricity.

Magnetism is the ability of a substance to certain

.

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Physical Changes

A is a change in some of the physical properties of matter, but not in its identity. Physical changes include:

- The arrangement of
- The of mass
- Changes in
- Reversibility

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The Arrangement of Particles

The arrangement of particles may .

- Example: As water boils, the water molecules as they turn into a .

Atoms remain to each other.

The Conservation of Mass

When a physical change occurs, the mass of the substance is conserved.

This means that the total of the substance remains the same from beginning to end.

Changes in Energy and Reversibility

changes may take place.

- Example: Energy in the form of heat may melt an ice cube.

Physical changes can usually be .

- Example: A melted ice cube can be refrozen to make ice.

Summary

Physical Properties

?

**Lesson
Question**

What happens during a physical change?

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Answer

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Review: Key Concepts

can be observed and change the identity of the substance.

A results in a change in of the physical properties of matter, but not in its .



Summary

Physical Properties

Use this space to write any questions or thoughts about this lesson.