

Chapter 13

Matter Everywhere

Lesson 1

Matter Everywhere

Pages 360 - 371



Visual Summary

Write about what you learned.



Matter

Matter is what all things are made of. There are 3 states of Matter – Solids, Liquids and Gases. All types of matter have different Properties. Properties are how something looks, feels,



Solid material

Different materials like wood, plastic, glass, metal, rubber make up solids. Some solids sink and some float. All solids are different, in size, color, shape, texture.

Think, Talk, and Write

1 **Vocabulary.** What is matter?

Matter is what all things are made of.

2 **Classify.** Sort different materials by their texture.

Hard	Soft
<p>This was done as a practical in class – Child's own work!</p> <p>Ask your child to find objects around the house and sort them into two groups – soft and hard</p>	

3 Describe how objects can be different.

Objects can have different properties, be made of different materials and have different parts

Essential Question What are some properties of materials?

Shape, size, color, texture, mass and state are some properties of materials

Please do this at home with your child.

Be a Scientist

How can you make an object float?

Test materials to find out which float. If they sink, find out if you can change their shapes to make them float.

What to Do

1 **Predict.** List the objects that you think will sink in the water. List the things that will float.

Things That Will Float	Things That Will Sink

2 **Investigate.** Test your predictions. Place each object in the tub of water.

Step 2

You need

- tub of water
- rubber eraser
- paper
- aluminum foil
- wooden block
- rock
- ball of clay
- plastic cup

3 **Compare.** Which materials float? Which sink? Were your predictions correct?

4 **Observe.** Can you change the shape of any of the materials? Which ones?

5 **Investigate.** Change the shape of the materials to see if you can make them float. Test three different shapes.

Step 5

6 **Communicate.** How can you make an object float? Can you make all materials float? Explain.

Investigate More

7 How can you make the best boat? Make a plan to test your ideas.

Lesson 1

Matter Everywhere

What are the properties of these objects?

What to Do

1 **Observe.** Look at and feel each spoon. Record what each one looks and feels like.

	Wood	Plastic	Metal
Looks	Brown	smooth	shiny
Feels	Light	hard	heavy

You need



spoons



tub of water

pencil

2 **Predict.** Which spoons will float in water? Which will sink? Try it out.

The Plastic and wood will float.

The metal will sink.



3 **Record Data.** Fill in the chart to describe what you observe.

Wood	Plastic	Metal
Float	Float	Sink

Explore More

4 **Compare.** Observe the properties of a wooden pencil. How is it like the wooden spoon? How is it different?

The wooden spoon and pencil feel the same. They look different. They have different shapes

Open Inquiry

Learn more about other properties of solids. My question is:

Are all solids made of hard materials?

Read and Respond

What is matter?

When you describe something, you talk about its properties.

Properties are how something looks, feels, smells, tastes, and sounds. Color, size, hardness, and shape are properties.

Color is one example of a property. Underline three more examples.



▲ Hard and shiny are two properties of these pots.

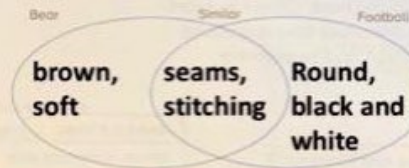
Every kind of matter has its own properties.

Matter is what all things are made of.

Solids, liquids, and gases are three forms of matter. All matter takes up space. Two objects cannot be in the same space at the same time.

Quick Check

1. Compare the properties of a teddy bear and a football.



▲ Brown and soft are two properties of this toy bear.



What are materials?

A **material** is the type of matter that makes up solids. Cotton, rubber, metal, and glass are different materials.

Objects that are made out of the same material can have the same properties. Some materials sink in water. Others float in water. Some materials are hard. Others are soft. Texture describes how a material feels. Rough and smooth are textures.

Quick Lab

Sort objects in your classroom by type of material. Describe their properties.

Sinking and Floating



Read a Photo

Which materials sink in water?

Glass, toy car

Some materials dissolve in water. When a material dissolves, it stays evenly mixed. Sugar dissolves in water. Sand does not dissolve. It sinks to the bottom. **Solubility** is the property that describes whether or not a material will dissolve. Sugar is soluble in water. Sand is not.

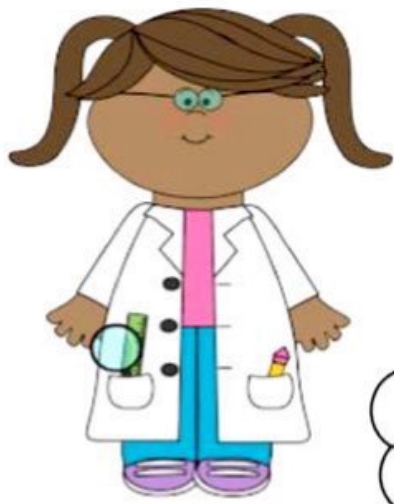


▲ This drink mix is soluble.

Quick Check

2. What is a material?

A material such as cotton, rubber, metal or glass, is the type of matter that makes up a solid



Properties of matter



Matter

Everything on Earth is made of matter.

Matter is anything that has weight and takes up space. Even air is matter! There are 3 states of matter
Solids, **Liquids** and **Gases**



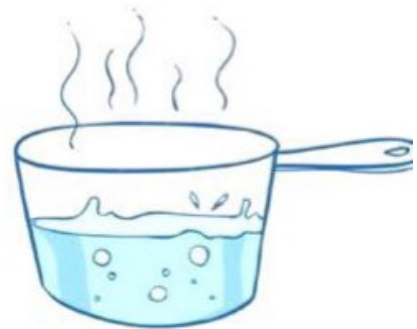
STATES OF MATTER



Solid



Liquid



Gas

What are materials?

A material is a type of matter that makes up **solids**.

Wood, plastic, glass, paper and metal are different materials. Some materials sink in water and others float. Materials have different **properties**



What are some **physical properties** used to describe matter?

Shape

round, square, flat, cube, triangular, sphere, cylinder shaped

Size

Big, small, long, short, tall, narrow, wide

Colour

Red, blue, pink, green, yellow

State

Solid, liquid, gas

Texture

Smooth, rough, sharp, soft, pointy, bumpy, slippery

Mass

How much mass heavy / light



Vocabulary

What is matter?

Matter is what all things are made of

matter

حالة المادة



What is properties?

Properties are how something looks, feels, smells, tastes and sounds.

Shape, size, color, texture, mass are properties

properties

خصائص

What is a material?

A Material is a type of matter that makes up solids

material

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What is solubility?

Solubility - if a material will or will not dissolve in a liquid.

solubility

الذوبان



What is dissolve?

Dissolve - when a material mixes in a liquid

dissolve

يذوب

