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Materials Around Us



Learning Objectives

- Know what materials are
- Know plant and animal materials
- Group natural and man-made materials
- Know materials from the Earth



Warm Up

EXPLORE AND ENGAGE

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Look at your desk. What is it made of?

Materials

Look at the windowpane.
Is it wood too?

Wood, ma'am!

No, it is glass!

Right! Wood and glass
are materials. Let us
learn about them.

Questions:

1. What is your tiffin box made of?
2. Can we make a boat out of paper?

Look at the things around you. Your book, your shoes, and your toys are all made of something. The matter from which a thing is made is called a **material**.

There are two main types of materials:

Natural and **Man-made**.



Natural Materials

Natural materials are given to us by nature. We get them from plants, animals, and the Earth.

Materials from Plants

Plants give us many useful things.

Wood: We get wood from the trunks of trees. Wood is used to make doors, tables, and pencils.



Wood

Table and Door



Rubber

Tyre

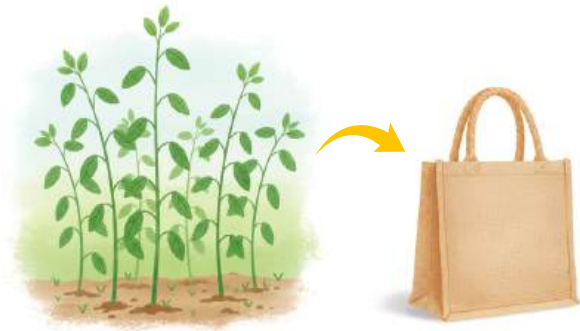
Rubber: We get rubber from the rubber plant. It is used to make tyres and erasers.

Fibres: Plants give us thin threads called **fibres**. We get cotton from the cotton plant. We get jute from the jute plant. We use them to make clothes and bags.



Cotton Plants

Cotton-Shirt



Jute Plants

Jute-Bag



Think and Answer

ANALYTICAL REASONING

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Why do we wear cotton clothes in summer?

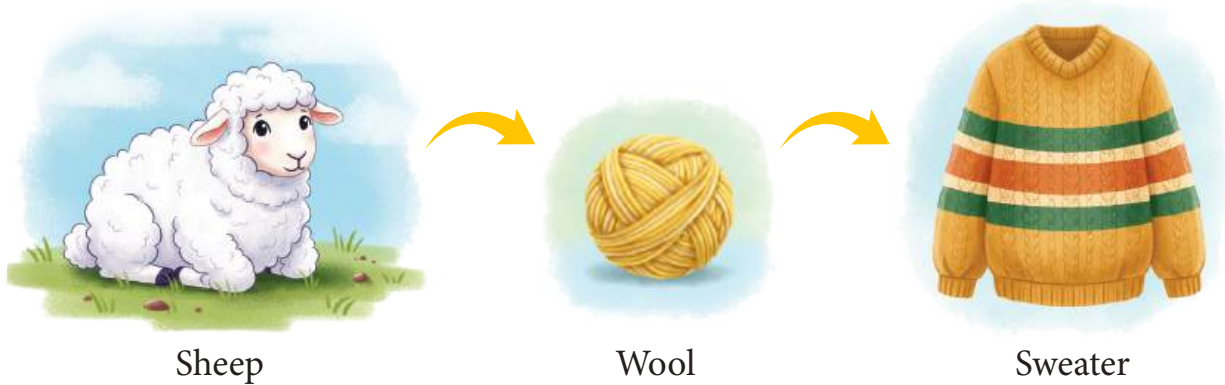
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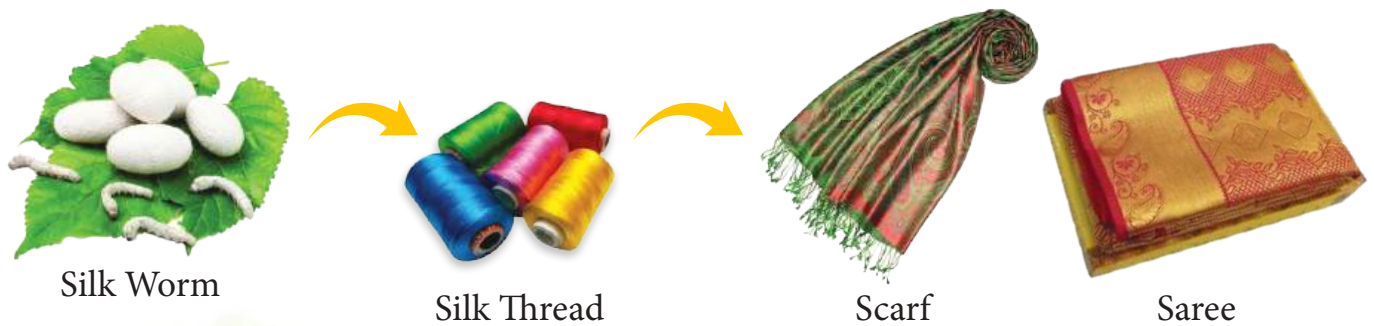
Materials from Animals

Animals also give us materials for everyday use.

Wool: We get wool from the soft hair (fur) of sheep. Wool keeps us warm. We make sweaters and caps from it.



Silk: We get silk from a tiny insect called a silkworm. Silk is shiny and used to make beautiful sarees and scarfs.



Leather Items

Leather: We get leather from the skin of dead animals like camels and buffaloes. It is used to make shoes, belts, and bags.

Materials from the Earth

We dig the Earth to find many useful materials.

Sand, Stones, and Clay: Sand and stones are used to build strong houses. Clay becomes soft when wet. Potters use clay to make pots, diyas, and bricks.



Metals: We get metals like iron, gold, and silver from rocks. Iron makes strong tools. Gold and silver make beautiful jewellery.

Fuels: Coal and petroleum are found deep inside the Earth. They give us energy to run cars and buses.



Gold Jewellery



Iron tools

Man-made Materials

Materials made by human beings in factories are called **man-made** or **synthetic** materials.

Plastics: Plastic is made from chemicals. It does not rust and is **waterproof**. It is used to make bottles, buckets, and toys.



Toys



Bottle



Bucket



Umbrella



Rope

Synthetic Fibres: Threads like nylon and polyester are made by humans. They are very strong and dry fast. We use them to make umbrellas and ropes.



Activity Time

EXPERIENTIAL LEARNING

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Aim: To see which material is waterproof.

Materials Required: A glass of water, a cotton cloth, and a plastic sheet.

Steps: Pour a little water on the cloth. Then, pour water on the plastic sheet.

Observation: The cloth drinks the water and gets wet. The water stays on top of the plastic sheet.

Conclusion: Plastic is waterproof. Cotton is not.





Fun Zone / Peer Learning

COLLABORATIVE LEARNING

Look inside your pencil box. Talk to your desk partner. Sort the things inside into "Natural Materials" and "Man-made Materials".



Chapter Recap

- Everything is made of materials.
- Materials can be Natural or Man-made.
- Plants give us wood, rubber, and fibres.
- Animals give us wool, silk, and leather.
- The Earth gives us sand, clay, metals, and fuels.
- Humans make plastics and synthetic fibres in factories.



Key Terms

SCIENTIFIC LITERACY

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Fibres: Thin, thread-like strands used to make cloth.

Synthetic: Things made by human beings.

Waterproof: Anything that prevents water from passing through.

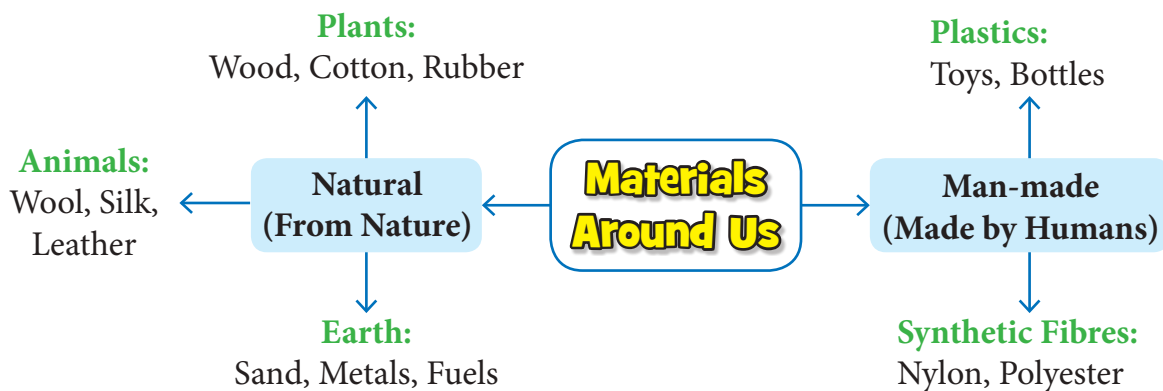
Fur: The soft hair covering some animals.



Mind Map

CONCEPTUAL MAPPING

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Chapter Drill

A. Tick (✓) the correct options.

- We get wood from:

a. Animals	<input type="checkbox"/>	b. Trees	<input type="checkbox"/>	c. Rocks	<input type="checkbox"/>	d. Insects	<input type="checkbox"/>
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- Which insect gives us a shiny fibre?

a. Spider	<input type="checkbox"/>	b. Ant	<input type="checkbox"/>	c. Silkworm	<input type="checkbox"/>	d. Butterfly	<input type="checkbox"/>
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- Which material is used to make a raincoat?

a. Paper	<input type="checkbox"/>	b. Plastic	<input type="checkbox"/>	c. Wood	<input type="checkbox"/>	d. Cotton	<input type="checkbox"/>
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- We get metals and stones from:

a. Plants	<input type="checkbox"/>	b. Animals	<input type="checkbox"/>	c. The Earth	<input type="checkbox"/>	d. Factories	<input type="checkbox"/>
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B. Match the following.

Column A

- Gold
- Jute
- Coal
- Leather

Column B

- Animal skin
- Fuel
- Plant fibre
- Metal

D. Give two examples each of:

- Things made of plastic.
- Materials we get from plants.
- Things made of clay.
- Materials we get from animals.

E. Look at the pictures. Name the three different materials you see. Tell whether each material comes from a plant, an animal, or the Earth.



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F. Very Short Answer Questions.

1. Name one thing made of glass.
2. Where do we get leather from?
3. Name two synthetic fibres.
4. What is the use of clay?

G. Short Answer Questions.

1. What are natural materials?
2. Write two uses of wood.
3. Why do we use plastic to make water bottles?
4. What are fuels used for?



Competency-based Questions

COMPETENCY APPLICATION

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A. Higher Order Thinking Skills (HOTS)

Ravi wants to make a strong bag to carry heavy books to school. Should he use a paper bag, a plastic bag, or a jute bag? Why?

B. Case-Study-Based Questions

Maya went to the market with her father. It suddenly started raining. Maya was wearing a cotton dress, and her father was wearing a plastic raincoat.

1. Who will get wet in the rain, Maya or her father?
2. Which word describes the material of the raincoat that stops the water?



Life Skills and Values

VALUE INCULCATION

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Plastic is very useful, but throwing plastic bags on the ground makes the Earth dirty and harms animals. Name two things you can use instead of plastic bags when you go shopping.



Subject Link

MULTIDISCIPLINARY LINK

Collect fallen leaves, a small piece of cotton cloth, a piece of wool, and a small pebble. Paste them on a chart paper and write down where each material comes from.

