



Properties of Materials

Week 2 — Monday | Material Investigation



Reading Time

Everything around us is made of **materials**. A material is the substance that something is made from. Your desk might be made of wood, your water bottle might be made of plastic, and your keys might be made of metal.

Each material has different **properties** — special qualities that make it good for certain jobs. For example, metal is strong and doesn't absorb water, which makes it good for tools. Cotton is soft and absorbent, which makes it good for clothes and towels.

Scientists study materials to figure out which ones work best for different purposes. This is called **materials science**. Engineers use materials science to design and build everything from bridges to toys to spaceships!

Some common material properties include: **hardness** (resists scratching), **flexibility** (bends easily), **absorbency** (soaks up liquid), **transparency** (you can see through it), and **density** (how heavy something is for its size).



Reading Questions

1. What is a material?

2. Why do different materials have different properties?

3. What is materials science?

4. Explain why choosing the right material is important when building something. Give an example.

Vocabulary Grid

Write a definition or draw a picture for each word.

Material	
Property	
Hardness	
Flexibility	
Absorbency	
Transparency	

Material Investigation Chart

Look around your home. Find one object made of each material and describe its properties.

Material	Object	Properties
Wood		
Metal		
Plastic		
Glass		
Fabric		

Around the House Hunt

Find 3 objects for each property and write them down.

Hard objects:

1. _____ 2. _____ 3. _____

Flexible objects:

1. _____ 2. _____ 3. _____

Transparent objects:

1. _____ 2. _____ 3. _____

Hard vs Soft Sort

Hard Objects	Soft Objects
1. _____ 2. _____ 3. _____	1. _____ 2. _____ 3. _____