

Properties of Materials Flashcards with Nova the Owl

Learning objective: To identify and describe the physical properties of a variety of everyday materials and understand how these properties determine their use.

Use these flashcards to test your knowledge of materials. Look at the term on the front, try to define it, and then check the answer on the back!

What does it mean if a material is 'transparent'?

A transparent material allows light to pass through it so that objects behind it can be clearly seen.

How would you describe an 'opaque' material?

An opaque material does not let any light pass through it, meaning you cannot see through it at all.

If a material is 'flexible', what can it do?

A flexible material can be bent easily without breaking or snapping.

What is the property of being 'hard'?

A hard material is firm and solid; it is difficult to scratch, cut, or bend.

What happens if a material is 'magnetic'?

A magnetic material is attracted to a magnet.

What is a 'thermal conductor'?

A thermal conductor is a material that allows heat to pass through it easily, like metal.

How does a 'thermal insulator' behave?

A thermal insulator is a material that prevents heat from passing through it easily, helping to keep things warm or cool.

If a material is 'waterproof', what does it do?

A waterproof material prevents water from passing through it.

What does it mean if a material is 'permeable'?

A permeable material allows liquids or gases to pass through it, like a sponge or fabric.

Nova asks: Why is metal a good choice for a saucepan?

Metal is a good choice because it is a strong thermal conductor, which allows heat from the hob to pass through to the food efficiently.

Max asks: Why would you use a rubber band instead of a piece of string to hold items together?

You would use a rubber band because it is flexible and has elastic properties, allowing it to stretch and grip items securely.

Kit asks: If you wanted to build a garden fence that you couldn't see through, would you choose transparent or opaque material?

You would choose an opaque material, because it blocks light and prevents people from seeing through the fence.