Nova's Material Science Flashcards

Learning objective: To identify and describe the properties of materials, including hardness, solubility, transparency, conductivity, and magnetism.

Use these flashcards to test your knowledge of how materials behave. Read the front of the card, think of the answer, and then check the back to see if you are correct!

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

It allows light to pass through so that objects behind it can be clearly seen.

Which property describes how easily a material can be scratched or dented?

Hardness.

If a substance dissolves in water, what do we call it?

Soluble.

What is the opposite of a thermal conductor?

A thermal insulator (a material that does not let heat pass through it easily).

Why would a scientist use a material that is a good electrical conductor?

To allow electricity to flow through it easily, such as in a copper wire.

What happens to a material if it is 'opaque'?

It does not let any light pass through it.

Give an example of a material property that is useful for making a winter coat.

Thermal insulation (it keeps body heat trapped inside).

If a material is attracted to a magnet, what property does it have?

It is magnetic.

Is dissolving sugar in water a reversible or irreversible change?

It is a reversible change, as the water can be evaporated to leave the sugar behind.

What word describes a material that can be bent easily without breaking?

Flexible.

Why are plastic coverings often put around metal electrical wires?

Because plastic is an electrical insulator and keeps the user safe from electric shocks.

If you mix sand and water, is the sand soluble?

No, sand is insoluble because it does not dissolve in water.