

Year 5 Spring Term 2024

Properties of Materials

Which solids dissolve in water?

Soluble Materials

Some solids **dissolve** in water (**SOLUBLE**).

coffee



sugar



salt



jelly



Some solids do not **dissolve** in water (**INSOLUBLE**).

pepper



sand





wax



What should I already know?	What will I know at the end of the unit?
<ul style="list-style-type: none"> I can identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper, and cardboard for particular uses. I can compare and group materials together, according to whether they are solids, liquids, or gases. I can observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C) I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature. 	<ul style="list-style-type: none"> I can compare and group together everyday materials based on their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets. I know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution. I can use knowledge of solids, liquids, and gases to decide how mixtures might be separated, including through filtering, sieving, and evaporating. I can give reasons, based on evidence from comparative and fair tests, for the uses of everyday materials, including metals, wood, and plastic.

Vocabulary	
conductive magnetic thermal conduction hardness force	dissolve solute solvent substance filtering evaporation

Recommended Reads	Inventor/ Scientist
	Stephanie Louise Kwolek 

Suggested Investigations
Which materials are conductors? Can you place 5 materials in order of hardness? Which substances are soluble or insoluble? What is the best method for separating mixtures?