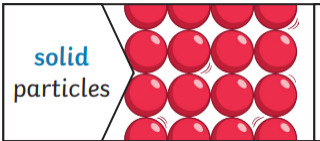
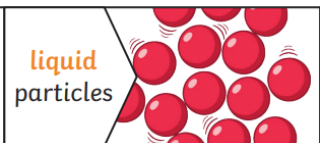
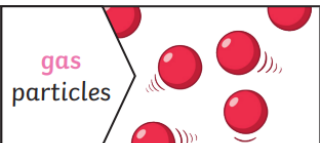
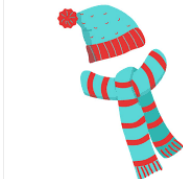




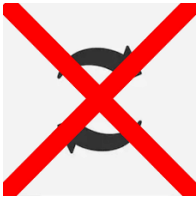
Properties and Changes of Materials 1

Vocabulary	Definition	Picture
material	The substance that something is made out of, e.g. wood, plastic, metal.	
solid	One of the three states of matter. The particles in solids are very close together, meaning solids, such as wood and glass, hold their shape.	
liquid	One of the three states of matter. A liquid can flow and take the shape of its container. Examples of liquids include water and milk.	
gas	One of the three states of matter. The particles in gases are free to move around. A gas fills its container. Examples are oxygen and helium.	

transparent	A transparent object lets light through so the object can be looked through.	
insulator	An insulator is a material that does not let heat or electricity travel through it	
conductor	A conductor is a material that heat or electricity can easily travel through.	
soluble	If a substance that can be dissolved in liquid. This means the particles are broken down to become so tiny we can no longer see them.	
reversible	Some changes can be undone. In those cases, the material that was changed returns to its original state.	



Properties and Changes of Materials 1

irreversible	It cannot be changed back again. In an irreversible change, new materials are always formed.	
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Sticky Knowledge:

I can describe, compare and group together everyday materials on the basis of their properties, including their hardness, solubility, transparency, conductivity (electrical and thermal), and response to magnets

I can tell the difference between a solid, liquid and gas and use this knowledge 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 particular uses of everyday materials, including metals, wood and plastic.

I know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution

- Dissolve = solid into a liquid making a solution.
- Recover a solid from a solution using evaporation.

I can demonstrate that dissolving, mixing and changes of state are reversible changes.

- Reversible change means it can go back to its original state.

I can explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

- Irreversible change means it can not go back to its original state and usually a new substance is formed.