Hyde Park Junior School - Science

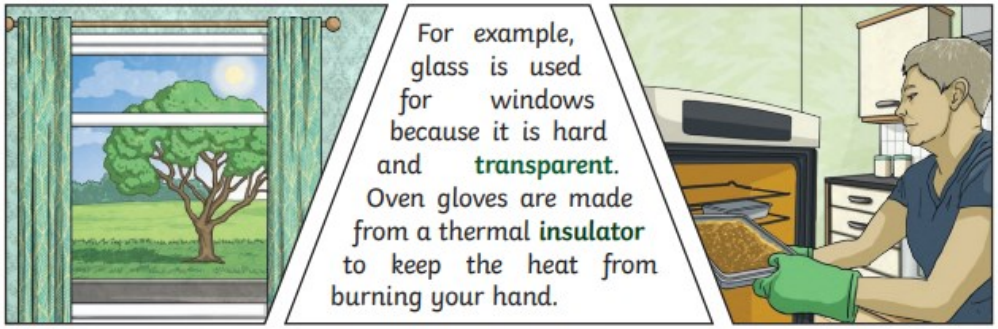
Topic: Properties and Changes to Materials	Year: 5	Strand: Chemistry

Enquiry Question: How to chemical changes impact on our lives?

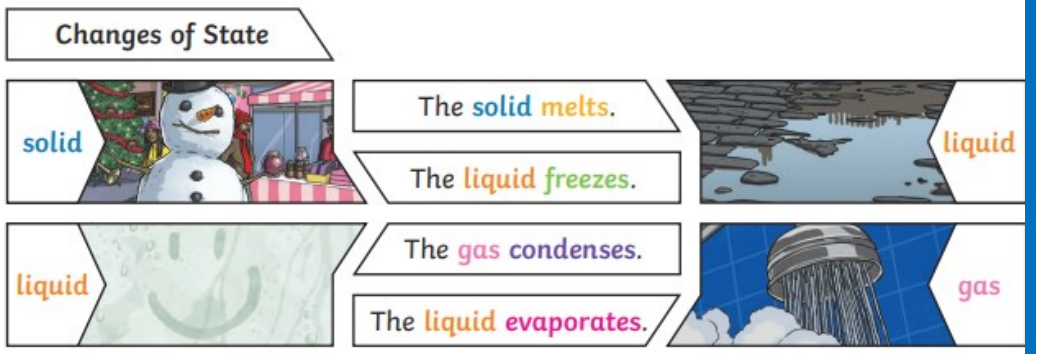
Key Information

Materials can be grouped according to their properties and the uses of materials are related to their properties. The properties of materials is not only useful in helping us select the right material in order to make things, but it also provides us with a means of separating materials.

Examples of Uses of Materials



Changes of State



Key Vocabulary

soluble/solubility	able to be dissolved, especially in wate.
electrical conductivity	to allow electricity to pass through it or along it.
thermal conductivity	the ability of a given material to conduct/transfer heat.
dissolve	the process where a solute in gaseous, liquid, or solid phase dissolves in a solvent to form a solution.
solution	a mixture of two or more substances that stays evenly mixed.
insoluble	when it is put in water it stays as a solid.
filtering	used to separate an insoluble solid from a pure liquid or a solution.
sieving	a seperating process that is used to remove particles of insoluble or undissolved material from a liquid, usually by using a barrier with small to medium-sized holes.
residue	something that remains behind or is left over.
reversible	when materials can be changed back to how they were before the reaction took place.
irreversible	when materials can not be changed back to how they were before the reaction took place.

Scientific Enquiry

Questions:

- How can materials be grouped?
- What materials are soluble?
- How can mixtures be separated?
- What changes of state are reversible/ irreversible?

Skills:

- Investigate
- Observe
- Questioning and analysing
- Making connections
- Compare
- Evaluate their findings

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1. What materials will dissolve in water?		
2. What is the scientific term given to a material which will dissolve in water?		
3. Give an example of a reversible change and an example of an irreversible change linked to materials:	Reversible change: Irreversible change:	Reversible change: Irreversible change:
4. Draw a line from each word to its meaning.	conductor insulator solution suspension a mixture containing the particles of another substance that won't dissolve a material that allows heat or electricity to easily travel through it a material that does not allow heat or electricity to travel through it a liquid containing the particles of another substance dissolved in it	conductor insulator solution suspension a mixture containing the particles of another substance that won't dissolve a material that allows heat or electricity to easily travel through it a material that does not allow heat or electricity to travel through it a liquid containing the particles of another substance dissolved in it
5. When finding out which materials dissolve in a liquid, what two things could you do to make a material dissolve faster?		