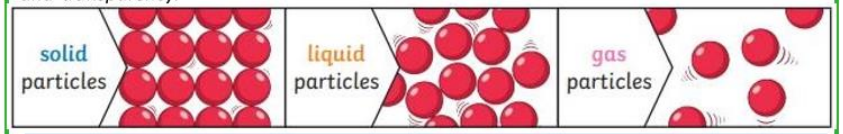
Eagles Class - Science Knowledge Organiser Spring Term 2 - Properties of materials

Knowledge

Compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, (electrical & thermal), and response to magnets.
Know that some materials will dissolve in liquid to form a solution, and describe how to recover a substance from a solution.
Use knowledge of solids, liquids and gases to decide how mixtures might be separated, including through filtering, sieving and evaporating.

Science (Properties and Changes of materials)

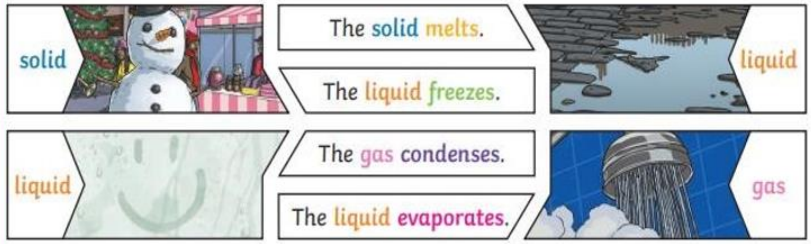
Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity and transparency.



Dissolving

A solution is made when solid particles are mixed with liquid particles. Materials that will dissolve are known as soluble. Materials that won't dissolve are known as insoluble. A suspension is when the particles don't dissolve.





materials	*The substance that something is made out of, e.g. wood, plastic, metal.*
solids	*One of the three states of matter. Solid particles are very close together, meaning solids, such as wood and glass, hold their shape.*
liquids	*The state of matter can flow and take the shape of the container because the particles are more loosely packed than solids and can move around each other. Examples of liquids include water and milk.*
gases	*One of the three states of matter. Gas particles are further apart than solid or liquid particles and they are free to move around. Examples of gases are oxygen and helium.*
melting	*The process of heating a solid until it changes into liquid.*
freezing	*When a liquid cools and turns into a solid.*
evaporating	*When a liquid turns into a gas or vapour.*
condensing	*When a gas, such as water vapour, cools and turns into a liquid.*
transparency	*A transparent objects lets light through so the object can be looked through, for example glass or some plastics.*
Soluble	*When a substance is able to be dissolved (especially in water).*
Reversible	*A process that can be changed back to the previous state.*
Dissolve	*To become part of a liquid to form a solution.*
Volume	*A space occupied by a solid, liquid or gas.*

