How can you group or separate materials? Year 5

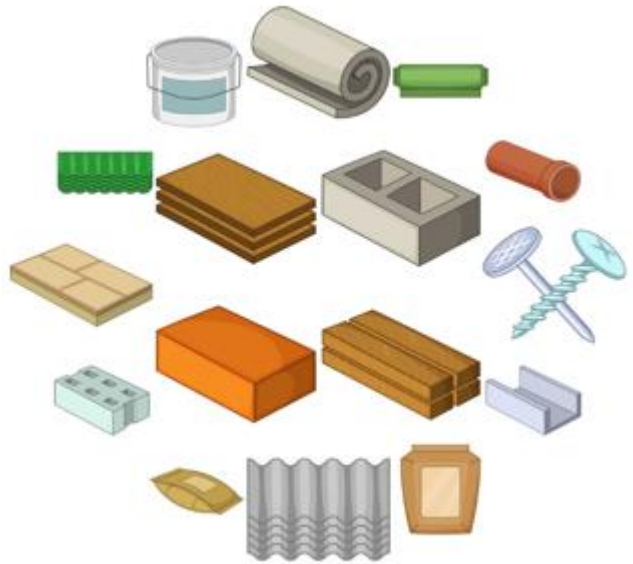
Subject Specific Vocabulary

soluble	Is a chemical property referring to the ability for a given substance, the solute, to dissolve in a solvent.
conductive	means something that can let electricity or heat pass through it
transparent	means a material that allows most light to pass through it without scattering, so objects on the other side can be seen clearly. Examples include glass and clean water
evaporating	Evaporation is the process of a substance in a liquid state changing to a gaseous state due to an increase in temperature and/or pressure.
dissolve	To dissolve is defined as to become broken up or absorbed by something or to disappear into something else.
properties	Properties are the features of materials- is it smooth or rough? Hard or soft? Is it flexible or rigid?
thermal	Means anything related to heat or temperature. For example, thermal energy is the energy something has because it's warm.
filtering	The process of separating solid pieces from a liquid or gas by passing it through a material that lets only the liquid or gas through.
melting	Melting is a physical process that results in the transition of a substance from a solid to a liquid through heating.
separate	Separate, part, and divide mean to break into parts or to keep apart.

Grouping materials by properties

PROPERTY	YES	NO
ELECTRICAL CONDUCTOR	Copper, aluminum, gold, silver, steel, sea water	Glass, air, plastic, rubber, wood, oil, diamond
MAGNETIC	Steel, nickel, cobalt, iron, uranium, platinum	Paper, glass, plastic, rubber, wood, wool
TRANSPARENT	Glass, water, clear plastic	Wood, rubber, oil, steel, copper, iron, silver
WATERPROOF	Plastic, rubber, metal, glass	Tissue, sponge, fabric

Materials are the substances that things are made from.



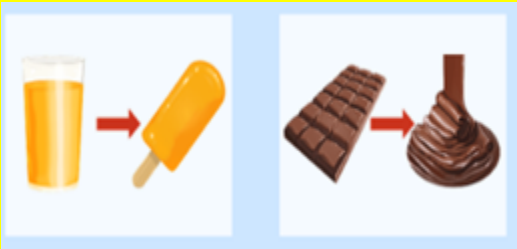
Sticky Knowledge

Materials can be grouped or separated based on their properties

Can describe properties of one material using the following terms:

- Soluble/insoluble
- Transparent/opaque
- Magnetic/non magnetic
- Conductive/insulator

A reversible change is melting, mixing or dissolving and can be changed back again.



An irreversible change cannot be undone, for example: burning, rusting or decaying.

