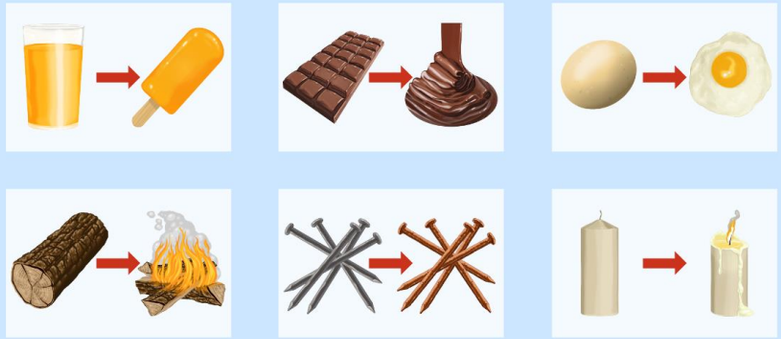
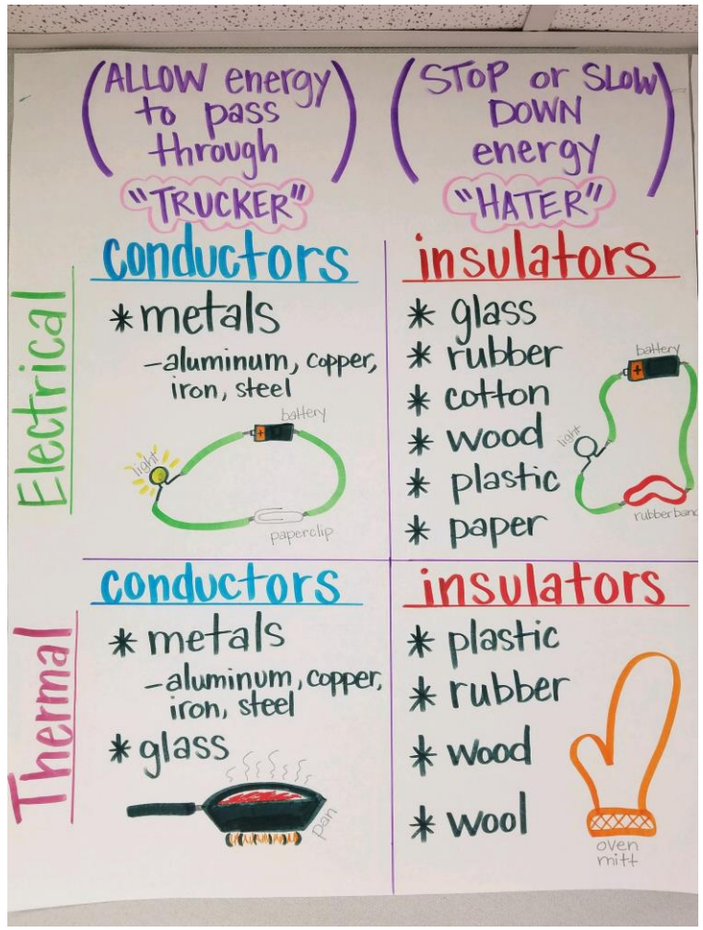
By the end of the unit, pupils will be able to answer…

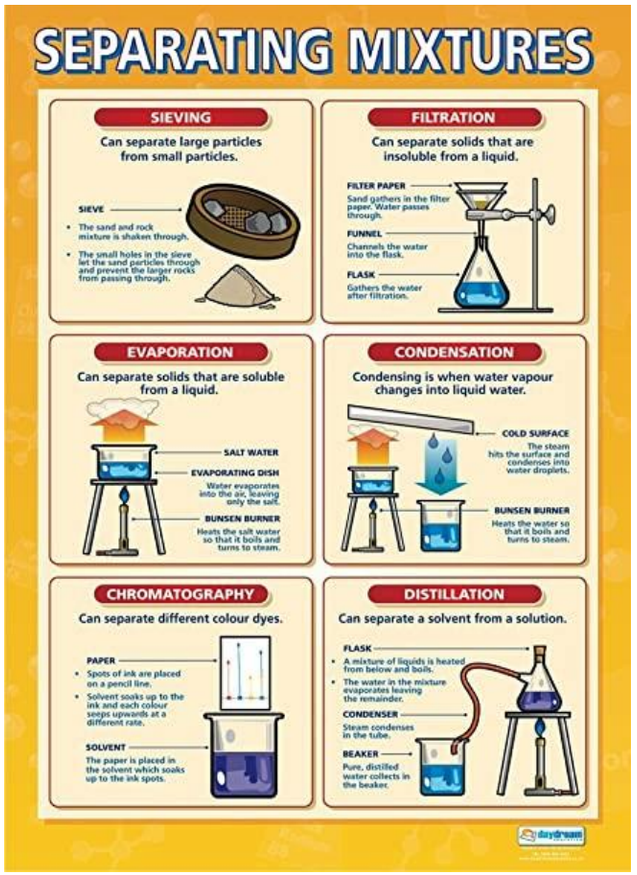
- How can we compare and group different materials?
- How can we separate different mixtures of materials?
- What are reversible and irreversible changes?

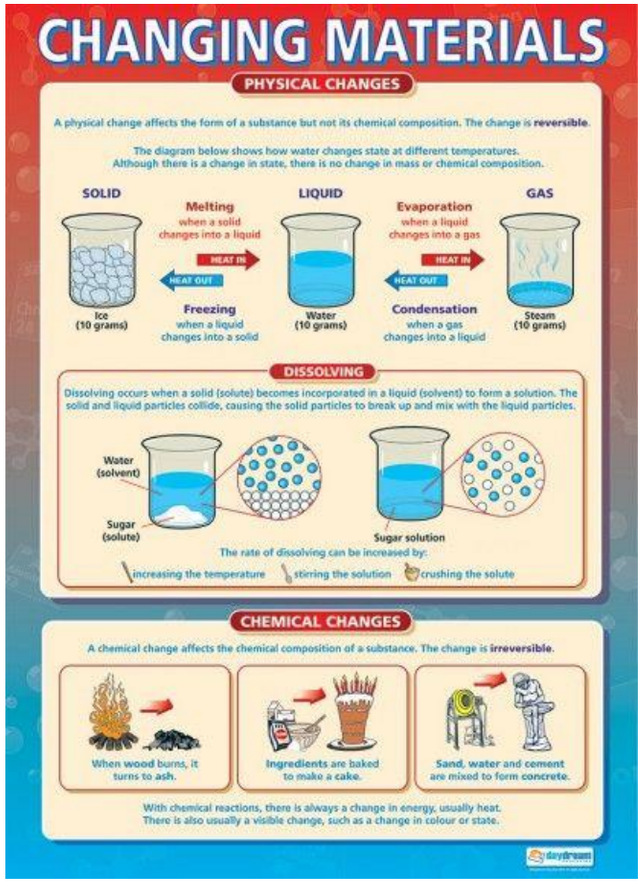
Vocabulary	Definition
conductor	anything that allows passage of heat, electricity or sound
dissolve	to mix completely with liquid
filter	a device used to remove solids from liquids or gases
insoluble	not able to be dissolved
insulator	anything that does not allow passage of heat, electricity or sound
irreversible change	when changed, it cannot be changed back to its original form
reversible change	when changed, it can be changed back to its original form
sieve	a device used to remove solids from liquids or smaller solids from larger solids
soluble	able to be dissolved
solution	a mixture that contains two or more unlike substances

Reversible and Irreversible Changes









Investigate!

- Investigate the properties of different materials to make recommendations
- Explore adding a range of solids to water and other liquids
- Investigate rates of dissolving by carrying out comparative and fair tests
- Separate mixtures by sieving, filtering and evaporation, choosing the most suitable method and equipment for each mixture
- Explore a range of irreversible changes and carry out comparative and fair tests
- Research new materials produced by chemists (eg Spencer Silver, Ruth Benerito)