Tier 3 Vocabulary

Strong	Resistant to tearing
Weak	Liable to break or give way under pressure
Hard	Resistant to scratching or pressure
Soft	Easy to mould, not firm to the touch
Tough	Resists cracking; opposite to brittle
Brittle	Hard but liable to break easily
Elastic	Returns to original shape when force removed
Plastic	Retains new shape when force removed
Stiff	Not easily bent or changed in shape
Flexible	Easily bends
Solution	Mixture of a solid and a liquid
Solute	The stuff that dissolves
Solvent	Liquid (usually) that does the dissolving
Dissolve	When a solid mixes with liquid to make a solution
Soluble	When something can dissolve
Insoluble	When something cannot dissolve
Electrical Conductor	Allow electricity to pass through easily
Electrical Insulator	Does not allow electricity to pass through easily
Thermal conductor	Material that can transfer (move) heat from one object to another
Thermal insulator	Material that cannot transfer (move) heat from one object to another.

Working and thinking scientifically

We are being scientists by:

- Comparing the properties of a range of materials
- Identifying some factors that affect dissolving
- Using scientific language and ideas to explain dissolving
- Using results to draw simple conclusions about dissolving
- Reporting on findings from enquires
- Using results to draw simple conclusions and suggest improvements
- Report and present findings from enquires

Key Facts

There are standing groupings based on materials	E.g. rigid, wooden etc
Materials are chosen for use	based on their proper-
Thermal and electrical conductors/insulators are	different
A solution is a mixture of	a liquid and a solid
A solute dissolves in a	solvent
Factors that affect dissolving are	movement, heat, size
Some mixtures can be separated by processes	Filtering, sieving, evap-
Some mixtures cannot be separated if	An irreversible change

Pictures and Diagrams

A sugar cube disintegrates into microscopic particles

Tiny sugar cubes in still water → Sugar cubes being distributed throughout the solution → A "Sugary" solution

Science ABC

EXAMPLE

solute   solvent