### **Key Learning**

### **Performing simple tests**

The children use practical resources provided to gather evidence to answer questions generated by themselves or the teacher. They carry out: tests to classify; comparative tests; pattern seeking enquiries; and make observations over time.

# <u>Gathering and recording data to help in</u> answering questions

The children record their observations e.g. using photographs, videos, drawings, labelled diagrams or in writing. • They record their measurements e.g. using prepared tables, pictograms, tally charts and block graphs.

### Conclusions.

Begin to draw and express some conclusions by looking at changes, patterns, similarities and differences in data.

# **Investigation Questions**

- How can I separate a simple solids mixture?
- How can I separate a solid from a liquid?
- What happens when I warm/cool this material? (Recognise that some things dissolve.)
- What are reversible and irreversible changes?

# Year 2/3 Science: Changing materials.



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### **Common Misconceptions**

Materials can only exhibit properties of one state of matter

Melting/freezing and boiling/condensation are often understood only in terms of water.

Key Scientific Vocabulary	
Solids	Firm & stable in shape; not liquid or fluid
Liquids	Flows freely
Mixtures	A combination of 2 or more substances
Separating	Divide into substances
Sieving	Mesh used to strain/separate substances
Heating	Make hot or warm
Cooling	At a fairly low temperature
Dissolving	Become incorporated into a liquid to form a solution
Reversible	Capable of being reversed so that previous state is restored
Irreversible	Not able to be undone/altered
Fair Test	An investigation where one variable is changed and all others are kept the same.
Constant	A feature that is kept the same
Variables	A feature that is liable to change