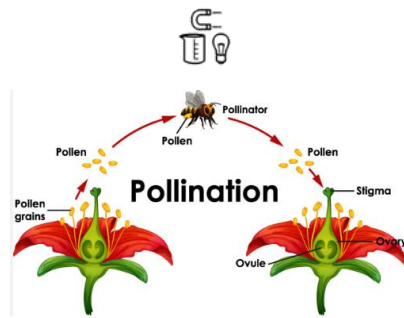



Year 5 Science Knowledge Organiser



The diagram shows a bee (Pollinator) carrying Pollen from one flower to another. Labels include Pollen, Pollen grains, Stigma, Ovary, and Ovule. The process is labeled 'Pollination'.

The life cycle of plants can include **sexual reproduction** or **asexual reproduction**.



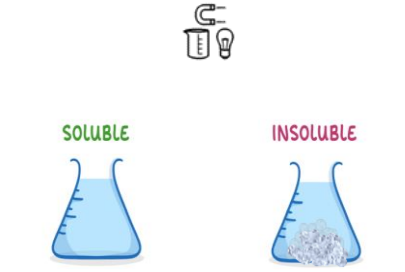
The diagram shows a circular life cycle: Salamander → Eggs → Tadpole → Larva → Salamander. Labels include Salamander, Eggs, Tadpole, and Larva.

A **life cycle** shows the changes a living thing goes through from when it is born until it dies.



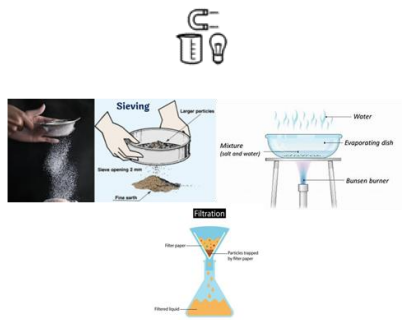
The diagram is titled 'CONDUCTORS AND INSULATORS'. It lists various materials under two categories: Conductors (Copper, Gold, Graphite, Water, and 'All other metals') and Insulators (Glass, Plastic, Ceramic, Rubber, Wood, Fabric, Paper, and Cork).

Glass, plastic and rubber are all **insulators**. Water and metals including copper are good **conductors**.



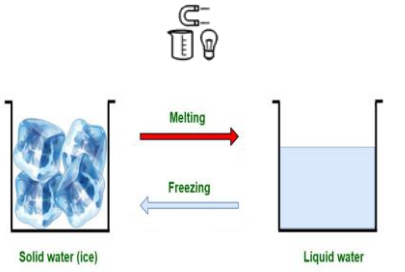
The diagram shows two beakers. The left one is labeled 'SOLUBLE' and contains a clear liquid. The right one is labeled 'INSOLUBLE' and contains a cloudy liquid with particles at the bottom.

Soluble materials can **dissolve** in a liquid to make a **solution**. Insoluble materials cannot.




The diagram illustrates three separation methods: Sieving (separating large particles from a mixture), Evaporation (using a burner and evaporating dish to separate a mixture of salt and water), and Filtration (using a filter paper to separate particles from a liquid).

Sieving, filtering and **evaporation** are all ways of separating a **mixture**.



The diagram shows a cycle between 'Solid water (ice)' and 'Liquid water'. A red arrow labeled 'Melting' points from ice to liquid, and a blue arrow labeled 'Freezing' points from liquid to ice.

Melting and freezing and boiling and condensing are examples of **reversible changes**.



The diagram shows three examples of irreversible changes: burning (fire), rusting (corroded metal), and cooking (a fried egg).

Burning, cooking and rusting are examples of **irreversible changes**.

Year 5 Key Vocabulary

sexual reproduction	Sexual reproduction requires two parents to make one offspring.
asexual reproduction	Asexual reproduction needs only one parent to make one offspring. The offspring are exact copies of the parent.
life cycle	The series of changes a living thing goes through from birth to death.
insulator	A material that stops heat or electricity from passing through, like rubber.
conductor	A material that lets heat or electricity pass through, like metal.
dissolve	When a material mixes into a liquid and appears to disappear, like sugar in tea.
solution	A mixture where a material has dissolved completely in a liquid, like saltwater.
sieving	Using a sieve to separate larger pieces from smaller ones in a mixture, like separating rice from sand.
filtering	Removing solids from liquids by passing the mixture through a filter.
evaporation	The process where a liquid turns into a gas.
mixture	A combination of different materials that can sometimes be separated.
reversible change	A change that can be undone, like melting ice back into water.
irreversible change	A change that cannot be undone, like baking a cake.