

Materials Progression – New Curriculum

Year 2

Everyday materials

Pupils should be taught to:

- distinguish between an object and the material from which it is made
- identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties
- find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Uses of everyday materials

Pupils should be taught to:

- identify and compare the uses of a variety of everyday materials, including wood, metal, plastic, glass, brick/rock, and paper/cardboard.

Year 3

Everyday materials

Pupils should be taught to:

- based on testing, explore differences between materials, including attraction to a magnet, and floating or sinking
- compare and group together a variety of everyday materials on the basis of whether they are attracted to a magnet or will sink/float.

Year 4

States of matter

Pupils should be taught to:

- compare and group together materials according to whether they are solids, liquids or gases
- explain that some materials change state when they are heated or cooled, and measure the temperature at which this happens in degrees Celsius (°C)
- compare and give reasons, based on measurements, for changes to the state of water, using correct scientific vocabulary
- identify the part played by evaporation and condensation in the water cycle.

Year 5

Properties of everyday materials and reversible change

Pupils should be taught to:

- compare and group together everyday materials based on evidence from comparative tests and fair tests, including hardness, solubility, conductivity and insulation (electricity and heat), behaviour with magnets
- explain that some substances will dissolve in liquid to form a solution, and how to recover a substance from a solution
- use knowledge of solids, liquids and gases to decide how mixtures might be separated, including filtering, sieving and evaporating
- give reasons, where appropriate, for the uses of everyday materials based on evidence from comparative tests and fair tests, including metals, wood and plastic
- demonstrate that dissolving, mixing and change of state are reversible changes.

Year 6

Changes that form new materials

Pupils should be taught to:

- explain that some changes result in the formation of new materials, and that this kind of change is difficult to reverse.