

# Knowledge Organiser Science Year 2 Autumn

## Materials



St Elizabeth's Catholic Primary School  
"Love one another as I have loved you"

### Prior knowledge



#### Year 1

- ❑ To distinguish between an object and the material from which it is made.
- ❑ To identify and name a variety of everyday materials including wood, plastic, glass, metal, water and rock.
- ❑ To describe simple physical properties of a variety of everyday materials.
- ❑ To compare and group together a variety of everyday materials on the basis of their simple physical properties.

### Knowledge and skills covered in this topic



- ❑ Children will explore materials.
- ❑ Children will explore wood, paper and cardboard.
- ❑ Children will explore brick and rock.
- ❑ Children will explore glass and plastic.
- ❑ Children will explore metal.
- ❑ Children will explore fabrics.
- ❑ Children will explore the same object, different material.
- ❑ Children will investigate how materials bend, squash, twist and stretch.
- ❑ Children will plan a waterproof experiment.
- ❑ Children will carry out a waterproof experiment.



### Scientific skills developed in this topic



- ❑ Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them
- ❑ Perform simple tests.
- ❑ Identify and classify.
- ❑ Ask simple questions and recognise they can be answered in different ways.
- ❑ Observe closely using simple equipment.
- ❑ Using own observations and ideas to answer questions.



### Key words



**Bend:** To force something to curve.

**Breakable:** Easy to break.

**Brick:** A man-made building material.

**Brittle:** Hard but can be broken easily.

**Controlled variable:** What will be kept the same.

**Dependent variable:** What will be measured.

**Dull:** Not clear, bright or shiny.

**Fabric:** A material made by weaving or knitting threads together.

**Flexible:** Can change shape easily. Can bend easily without breaking.

**Hard:** Not easily broken, bent or pierced.

**Independent variable:** What will change e.g. the material.

**Light weight:** Fabric that is thin, light and easy to lift.

**Man-made materials:** Materials that have been made by humans.

**Material:** What an object is made from e.g. a saucepan can be metal.

**Natural materials:** Materials that come from plants, animals or the earth.

**Opaque:** Materials you cannot see through.

**Pebble:** A small smooth rock that has been shaped by water.

**Rock:** A natural material found on or underneath the Earth's surface.

**Recycle:** To change rubbish into a material that can be used again.

**Rigid:** Cannot change shape easily.

**Rough:** Having an uneven surface that is scratchy, lumpy or not smooth.

**Shiny:** A surface that can reflect light easily, e.g. a mirror.

**Soft:** A material that can easily change shape or is gentle to touch.

**Smooth:** Having an even surface with no lumps.

**Stone:** A smaller rock.

**Strong:** Not easily broken.

**Squash:** To crush or squeeze something.

**Stretch:** To make something longer without ripping.

**Tough:** Not easily broken.

**Transparent:** Materials you can see through.

**Translucent:** Allow some light to pass through so you cannot see through clearly.

**Twist:** To force or bend something out of shape.

**Waterproof:** Does not allow water to pass through it.