



## Key Vocabulary

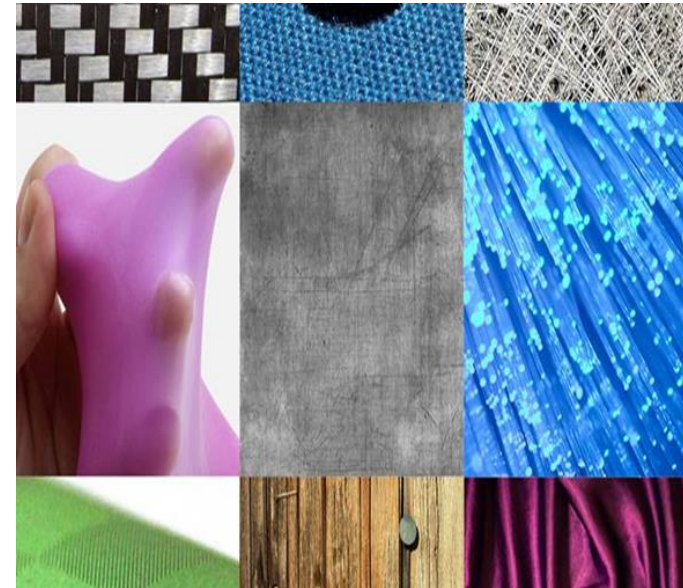
|    |             |                                                                                                                  |
|----|-------------|------------------------------------------------------------------------------------------------------------------|
| 1  | absorbent   | Material that soaks up liquid easily.                                                                            |
| 2  | bendy       | An object that bends easily into a curved shape.                                                                 |
| 3  | dull        | Doesn't reflect light                                                                                            |
| 4  | elastic     | A rubber material that stretches when you pull it and returns to its original size and shape when you let it go. |
| 5  | fabrics     | Cloth or other material produced by weaving together cotton, wool or other threads.                              |
| 6  | object      | Anything that has a shape or form.                                                                               |
| 7  | reflection  | An image that bounces off surfaces.                                                                              |
| 8  | rough       | Uneven and not smooth.                                                                                           |
| 9  | shiny       | Reflecting or glowing with light.                                                                                |
| 10 | smooth      | No roughness, lumps, or holes.                                                                                   |
| 11 | transparent | To let light through.                                                                                            |
| 12 | waterproof  | Does not let water pass through it.                                                                              |

## Sticky Knowledge

- Materials can be grouped according to their properties.
- A material is what an object is made from. Everyday materials include wood, plastic, glass, metal, water, rock, brick, paper and fabric.
- Materials have different properties, such as hard or soft; stretchy or stiff; rough or smooth; opaque or transparent; bendy or rigid; waterproof or not waterproof; magnetic or non-magnetic.
- Know about the properties of everyday materials
- Know the name of the materials an object is made from
- All objects are made of one or more materials. Some objects can be made from different materials e.g. plastic, metal or wooden spoons.
- Materials can be described by their properties e.g. shiny, stretchy, rough etc.  
Some materials e.g. plastic can be in different forms with very different properties.

## Key Questions

- Which materials are some objects made from?
- What words can I use to describe materials?
- Which materials are natural and which are manmade?
- How are objects similar / different based on the materials they are made from?
- What is the best material to make different objects from?



**Prior Vocabulary**

|    |          |                                                                   |
|----|----------|-------------------------------------------------------------------|
| 1  | Material | Anything used to make something.                                  |
| 2  | Wood     | The hard material that makes up the trunk and branches of a tree. |
| 3  | Plastic  | A Substance made from chemicals.                                  |
| 4  | Glass    | A hard, clear material that breaks easily.                        |
| 5  | Metal    | A solid material that occurs naturally.                           |
| 6  | Rock     | A solid mass that makes up most of the Earth.                     |
| 7  | Hard     | Not soft                                                          |
| 8  | Soft     | Not hard                                                          |
| 9  | Squash   | To press or crush.                                                |
| 10 | Stretch  | To spread out to reach new length.                                |

**Prior Knowledge**

- |   |                                                                                                                                     |
|---|-------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Materials have different textures. Some are soft and smooth. Others are hard and bumpy Things can grow, decay and change over time. |
| 2 | Models can be created using lots of different materials and tools.                                                                  |
| 3 | Objects are made from different materials including wood, plastic and glass.                                                        |
| 4 | Materials have different properties, such as hard or soft; stretchy or stiff; rough or smooth.                                      |
| 5 | Some heavy objects sink whilst others float. Shadows can be different shapes and sizes.                                             |

**Future Learning**

- |   |                                                                                                                                                                                                                                                                                                 |
|---|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | A material's physical properties make it suitable for particular purposes, such as glass for windows and brick for building walls. Many materials are used for more than one purpose, such as metal for cutlery and cars.                                                                       |
| 2 | Some objects float and others sink. Objects that float are typically light or hollow                                                                                                                                                                                                            |
| 3 | Know how materials can be changed by squashing, bending, twisting and stretching                                                                                                                                                                                                                |
| 4 | Know why a material might or might not be used for a specific job                                                                                                                                                                                                                               |
| 5 | All objects are made of one or more materials that are chosen specifically because they have suitable properties for the task. For example, a water bottle is made of plastic because it is transparent allowing you to see the drink inside and waterproof so that it holds the water          |
| 6 | When choosing what to make an object from, the properties needed are compared with the properties of the possible materials, identified through simple tests and classifying activities. A material can be suitable for different purposes and an object can be made of different materials.    |
| 7 | Objects made of some materials can be changed in shape by bending, stretching, squashing and twisting. For example, clay can be shaped by squashing, stretching, rolling, pressing etc. This can be a property of the material or depend on how the material has been processed e.g. thickness. |