



Science

Everyday materials

Year 1

Summer Term

## Key Knowledge

Materials	The matter from which an object is or can be made. We create objects by treating and shaping materials in different ways. Examples include: wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil.
Properties	An attribute, quality or characteristic of materials. Properties of materials can be changed through heating, cooling and other methods. Examples include: hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky.
Using our senses to explore materials	Our 5 senses are: touch, taste, smell, sight and hearing. We touch using our skin (usually our hands), we taste using our tongues by putting something in our mouth, we smell by using our nose, we see using our eyes and we hear using our ears.

## Statutory requirements

- Distinguish between an object and the material from which it is made
- Identify and name a variety of everyday materials, including wood, plastic, glass, 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 physical properties

## Key Vocabulary

Texture	The feel, appearance, or consistency of a surface or a substance
State	The physical condition of a material (solid, liquid, gas)
Hard	Not easily broken or bent
Soft	Easy to cut, fold or change its shape
Smooth	It has no lumps or bumps
Rough	It feels and looks uneven or bumpy
Bendy	Can be bent easily into a curved or folded shape
Stretchy	Can be pulled to make it longer or wider without breaking
Waterproof	It keeps water out. It keeps things dry
Absorbent	It soaks liquid up
Transparent	It can be seen through
Opaque	It can't be seen through
Dull	Doesn't reflect light. Doesn't look bright or shiny

## Pictures and Diagrams

Natural Materials			Man-Made Materials		
chalk	sand	organic oil	concrete	glass	nylon
leather	iron	gold	paper	synthetic rubber	steel
cotton	coal	wood	plastic	rayon	polyester

rubber	leather	wood	metal	plastic
<b>Soft</b>		<b>Hard</b>		
wool	cotton	stone	ceramic	ice
fabric		diamond	glass	brick
ice	plastic	paper	plastic	rubber
<b>Transparent</b>		<b>Bendy</b>		
water	diamond	fabric	leather	leaves
glass		metal		

## Possible Experiences

- Find and classify objects according to the material from which they are made.
- Feely bags of different textures to explore.
- Sort objects according to property.
- Observe changes in materials through heating and cooling (freezing water to make ice, melting chocolate, 'Will it melt?' experiments)
- Observe changes through cooking, baking biscuits or making ice cream.
- Simple tests: what is the best material for an umbrella? Lining a dog basket? Superhero costume?