

Year 1 Materials

(Chemistry)



Prior and future learning

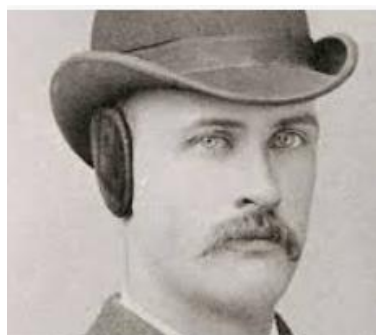
Prior Knowledge	What's next?
<ul style="list-style-type: none"> • Use all their senses in hands-on exploration of natural materials. • Explore collections of materials with similar and/or different properties. • Talk about the differences between materials and changes they notice. • Explore the natural world around them. • Describe what they see, hear and feel whilst outside. 	<ul style="list-style-type: none"> • I can identify the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • I can compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. • I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Track your learning

How I will show what I have learned			
I can distinguish between an object and the material from which it is made.			
I can identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.			
I can describe the simple physical properties of a variety of everyday materials.			
I can compare and group together a variety of everyday materials on the basis of their simple physical properties.			

Key knowledge I need to understand
<ul style="list-style-type: none"> • 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

Scientist: Chester Greenwood (inventor of earmuffs)



Working scientifically assessment: Materials transparency, reflectiveness



Possible texts to read:
Who sank the boat – Pamela Allen

Link to maths curriculum:

Measurement:

- Comparing how much materials stretch (*Compare lengths and heights, using the vocabulary long/short, longer/shorter, tall/short, double/half, specified in the national curriculum*).
- Comparing objects (*Compare mass/weight, using vocabulary heavy/light, heavier than, lighter than, specified in the maths curriculum*).

Vocabulary	
absorbent	material that soaks up liquid easily
bendy	an object that bends easily into a curved shape
brick	rectangular blocks of baked clay used for building walls, which are usually red or brown
dull	a colour or light that is not bright
elastic	a rubber material that stretches when you pull it and returns to its original size and shape when you let it go
fabrics	cloth or other material produced by weaving together cotton, wool or other threads.
foil	sheets of metal as thin as paper
glass	a hard transparent material
man-made	things are created by people
metal	a hard substance such as iron, steel, gold, or lead
natural	things that exist in nature and are not made by people
opaque	if an object or substance is opaque , you cannot see through it
plastic	a material which is light in weight and does not break easily
rock	the hard substance which the Earth is made of
rough	uneven and not smooth
shiny	things are bright and reflect light
smooth	no roughness, lumps, or holes
soft	not rough or hard
stiff	firm or does not bend easily
stretchy	slightly elastic
transparent	If an object is transparent, you can see through it
waterproof	does not let water pass through it
wood	the material which forms the trunks and branches of trees