

Year 2 Science Knowledge Organiser – Materials

Selected Vocabulary and Definitions	
Properties	A way to describe something
Materials	The 'stuff' an object is made out of
Liquid	Liquids can flow or be poured easily
Solid	Firm or stable in shape
Surface	An outside part or layer of something
Object	A thing that can be seen or touched
Waterproof	Keeps out water
Absorbent	Soaks up liquid easily
Transparent	See through
Opaque	Not able to see through
Hard	Not easily broken
Soft	Easy to cut, fold or change shape
Stiff	Doesn't change shape easily
Shiny	Reflects light easily
Dull	Not very bright or shiny
Rough	Has an uneven surface
Smooth	An even surface with no lumps or bumps
Bending	To shape or force into a curve or angle
Squashing	To crush or squeeze
Stretching	To make longer or wider without breaking

Curriculum Objectives
Materials
I can identify and compare the suitability of a variety of everyday materials.
I can say why I would choose a material for a particular job.
I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.
I can find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam.
I can compare the uses of everyday materials in and around school with materials found in other places.

Key Knowledge	
Materials	
Types of materials	Glass Wood Metal Fabric Plastic Stone
John Dunlop	Creator of the air-filled rubber tyre. Improved bicycles and the motorcar
Charles Macintosh	Creator of waterproof fabric. Improved raincoats

EVERYDAY MATERIALS



Which material would you build a table from? Why?

Which material would you not use for a chair? Why?

What happens to playdough when you twist/bend/stretch it?

How can solid materials be changed?

Name: _____ Date: _____

Choose one material that would be suitable and one material that would be unsuitable for each object and give the reasons why.

Object	Suitable material	Unsuitable material
Cup	_____ would be a suitable material because _____	_____ would be an unsuitable material because _____
Pen	_____ would be a suitable material because _____	_____ would be an unsuitable material because _____
Rug	_____ would be a suitable material because _____	_____ would be an unsuitable material because _____
Bucket	_____ would be a suitable material because _____	_____ would be an unsuitable material because _____

