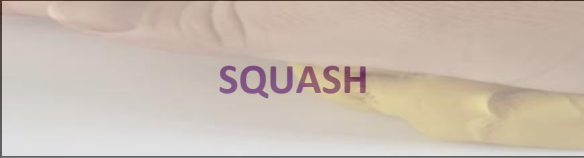



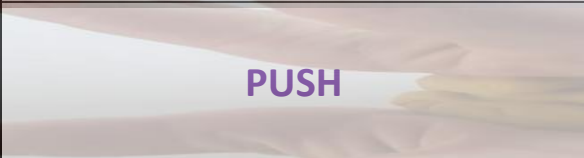




## Properties of materials

	<b>WOOD</b> Hard, stiff, strong, opaque, can be carved or formed into any shape.		<b>PAPER</b> Lightweight, flexible, can be coloured and come in different forms.
	<b>BRICK</b> Strong, stiff, opaque, structural, can be solid or hollow. Vary in size and colour.		<b>CARDBOARD</b> Durable, strong, light, stiff. Can be moulded and bent easily.
	<b>PLASTIC</b> Waterproof, strong, can be made to be flexible or stiff, smooth or rough.		<b>FABRIC</b> Soft, flexible, hard-wearing, can be stretchy, warm and absorbent.
	<b>METAL</b> Strong, hard, easy to wash, can be melted and moulded, generally shiny.		<b>RUBBER</b> Hard-wearing, elastic, flexible, strong, bouncy, strong.
	<b>GLASS</b> Waterproof, transparent, hard, smooth, fragile, can be heated to change shape.		<b>STONE</b> Strong, used for building, comes in different forms.

## Changing materials

	<b>SQUASH</b> Crush or squeeze with a force so that it becomes flat or a different shape.
	<b>BEND</b> Shape or force something into a curve or angle.
	<b>TWIST</b> Rotate, twisting around a stationary point making a spiral shape.
	<b>STRETCH</b> By pulling to make something longer.
	<b>PUSH</b> Place a force in order to move something away.
	<b>PULL</b> Place a force to cause a movement towards something.
	<b>SQUEEZE</b> Firmly press or force something through a narrow space.



## VOCABULARY

**Materials** - what objects are made from.

**Suitability** - having the right properties for purpose.

**Properties** - What a material is like and how it behaves.

**Waterproof** - keeps water out.

**Shock absorbent** - absorbing energy to sudden shocks/impact.

**Reflective** - to reflect light.

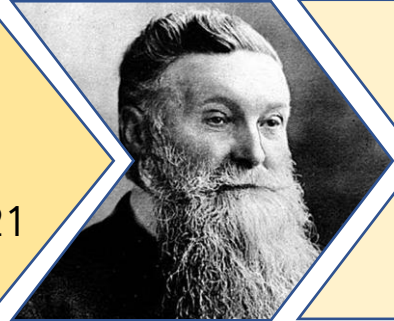
## Famous Scientists (Science Capital)

John  
McAdam  
1756-1836



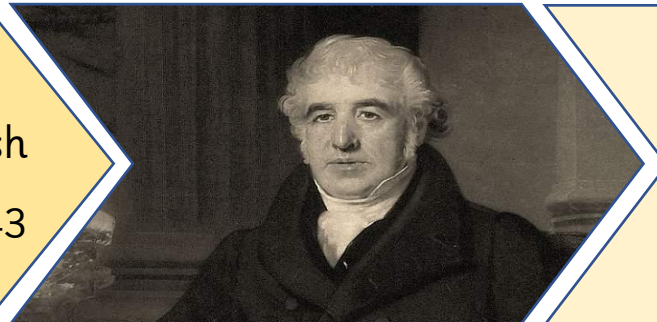
Scottish engineer who experimented with using new materials to build roads, inventing a new process called 'macadamisation'. His effective and economical method of constructing roads is used across the world.

John  
Dunlop  
1840-1921



Scottish engineer and veterinary surgeon. Made rubber devices, invented the pneumatic tyre and developed the use of them in cycle racing.

Charles  
Macintosh  
1766-1843



Scottish chemist and inventor of waterproof fabric. His process involved painting a dissolved rubber solution into cloth. The Macintosh raincoat is named after him.

