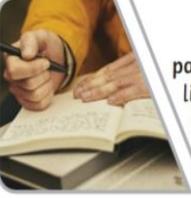


Materials

Significant Scientists		Key Knowledge	Key Vocabulary
John Dunlop	A Scottish inventor (1840 - 1921) who used rubber to invent the air-filled tyre for a bicycle. It was later developed for cars. 	Materials are what objects are made from. Some materials have certain properties which are right for a specific purpose. This is why they are used to make this object. A materials property is what it is like and how it behaves e.g. soft, stretchy and waterproof.	property A characteristic of something. waterproof Keeps out water. absorbent Able to soak up liquid easily. squash Crush or squeeze (something) with force so that it becomes flat, soft, or out of shape. bend To bend a material is a way of physically changing its shape. flexible Bends easily without breaking. twist To form a material into a spiral shape. stretch Make longer or wider without tearing or breaking.
Stephanie Kwolek	Stephanie Kwolek was a scientist from America who invented Kevlar, a very strong material. It's used in bulletproof vests, helmets, and other safety gear. Her work helps us understand how materials can be changed and used to keep people safe. 	To learn about a materials properties we squash, bend, twist and stretch it.	
Enquiry Skills		 wood: hard, stiff, strong, opaque, can be carved into any shape.	 glass: waterproof, transparent, hard, smooth.
Working Scientifically Skills		 plastic: waterproof, strong, can be made to be flexible or stiff, smooth or rough.	 metal: strong, hard, easy to wash.
Question, answer, observe, sort, group, compare, measure, test. Record results – diagram, chart.		 paper: lightweight, flexible.	 cardboard: strong, light, stiff.
 fabric: soft, flexible, hard-wearing, can be stretchy, warm, absorbent.		 rubber: hard-wearing, elastic, flexible, strong.	
 bend			
 twist			
 stretch			
 squash			

