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| **Key Information** | **Key Scientists** | **Subject Specific Vocabulary** |
| ***Material*** *is not just fabric but all the ‘stuff’ in the world* | **John Boyd Dunlop (1840-1921)****John Boyd Dunlop** was a Scottish inventor who was familiar with making rubber devices. He reinvented pneumatic tyres for his child’s tricycle and then developed them further for use in cycle racing. **Charles Macintosh (1766-1843)** Charles Macintosh was a Scottish chemist who was best know for inventing waterproof fabric. **John McAdam (1756-1836)**John McAdam was a Scottish engineer and road-builder. He was the inventor of the tarmacadam road surface. This created an effective and economical way to construct roads.  | **elastic (property)** | Elastic materials can be stretched and when one stops pulling them, they return to their original shape |
| ***Solids, liquids and gases*** *- All materials can exist in all states, dependent on temperature and pressure.* | **texture** | The feel of a material is its texture. Smooth means that it doesn’t have lumps so things easy to slide. Rough means having a coarse, uneven surface. Sharp means have edges that are able to cut. Abrasive means that it will wear away other surfaces if rubbed against them. |
| ***Solids*** *– These have a definite shape and keep it.* | **strength** | A strong material is one that is difficult to break. In order to test strength we need to apply a force. |
| ***Liquids -*** *Not all liquids are the same. They look and feel different. All liquids will pour. Thicker liquids pour more slowly. Liquids take the shape of their container.* | **Types of materials** | wood, plastic, glass, metal, water, rock, brick, fabric, sand, paper, flour, butter, milk, soil |
| ***Gases -*** *Gases will fill the space that they are in. If it is in a larger area the pressure will be less than if it were in a small area.* | **Properties of materials** | hard/soft, stretchy/not stretchy, shiny/dull, rough/smooth, bendy/not bendy, transparent/not transparent, sticky/not sticky |
|  | **Verbs associated with materials** | crumble, squash, bend, stretch, twist |
| **Senses** | touch, see, hear, smell and taste |
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