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| **Key Information** | **Key Scientists** | **Subject Specific Vocabulary** |
| ***Material*** *is not just fabric but all the ‘stuff’ in the world* | **Leo Hendrik Baekeland (1863-1944)****Leo Hendrik Baekeland** was a chemist, manufacturer and inventor who invented Bakelite, the first plastic to be used widely in industry. **Charles Goodyear (1800-1860)** Charles Goodyear was an American inventor who experimented with, perfected, and promoted the use of rubber. **Prof Frances M Ross (present)**Frances Ross is a Professor in Materials Science and Engineering. She has won many awards over the years for her investigations into the growth of materials. | **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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