**Glossary of terms to describe properties of Materials (7-12 years)**

Blue shading indicates the properties you would normally expect children aged 7 and over to have already encountered

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| **Property** | **Definition** | **Example** |
| Absorbent | Materials that can soak up liquids | Paper, cotton, wool, toweling |
| Brittle | Materials which will break rather than change shape when a force is applied | Glass, ceramics |
| Dull | Materials that do not reflect light well | Wood, rubber, cardboard |
| Durable | Materials that are hard wearing and withstand damage | Brick, slate, stainless steel |
| Elastic | Materials that are springy. They can change their shape by being stretched or compressed when a force is applied and will return to their original shape after the force is removed. | Rubber, a pair of tights |
| Electrical conductor | Materials that allow electricity to flow through them. | Metals, graphite |
| Electrical insulator | Materials that do not allow electricity to flow through them. | Plastic, glass |
| Flexible | Materials that can be bent, folded or rolled. | Leaves, paper, fabric, rubber |
| Fragile | Materials that are delicate and become damaged easily. | Glass, tissue paper, polystyrene |
| Hard | Materials that cannot be easily scratched, dented or forced into a different shape | Diamond, metal |
| Impermeable | Materials that do not allow water or liquids to pass through them | Concrete, granite, plastics, rubber |
| Magnetic | Materials that are attracted to a magnet. | Steel, iron, nickel |
| Opaque | Materials that block light and do not let it pass through them. | Metal, wood, rock |
| Permeable | Materials that allow water and liquids to pass through them | Paper, fabric, sand |
| Reflective | Materials that send the light back | Glass, some plastic, metals |
| Rigid | Materials that are stiff and do not bend | Glass, steel, some types of wood & plastic |
| Rough | Materials with an uneven surface | Brick, sand, tree bark |
| Shiny | Materials that reflect light well | Metals, cut diamonds and other precious stones |
| Smooth | Materials with an even, continuous flat surface | Glass, marble, glazed ceramics, some plastics |
| Soft | Materials that can be easily scratched, dented or forced into a different shape. | Playdough, fabric, chalk |
| Strong | Materials that won't crack or break easily when forces push or pull them | Metal, rock, some types of wood |
| Thermal conductor | Materials that allow heat to flow through them. | Metals, graphite |
| Thermal insulator | Materials that do not allow heat to flow through them. | Wood, plastic, fabric |
| Tough | Materials which change shape rather than break when a force is applied to them | Steel, aluminium |
| Translucent | Materials that allow **some** light to pass through them but block some of the light. | Tissue paper, thin fabrics |
| Transparent | Materials that allow light to pass through them and also allow us to see through them | Glass, water, some plastic |
| Waterproof | Materials that do not let water soak into or pass through them | Plastic, wax, rubber |
| Weak | Materials that crack or break easily when a force is applied to them | Paper, tissue  Polystyrene, cork |