| Science Knowledge Organiser | | | | | Year 1/2  Autumn 1 |
|---|---|---|---|---|---|

| Materials | Year | Main Foci: | Physics |
|---|---|---|---|

| What should I already know from Reception/Year 1 |
|---|
| There are different materials that are used for different purposes. These materials have different properties. |
| Some children will know that some materials are used for specific jobs because of their properties – e.g. stretchy, waterproof |

| Vocabulary | |
|---|---|
| object | something made using a material |
| material | a resource used to make objects |
| man made | a material that is changed or made by humans |
| natural | a material found in the natural environment |
| properties | characteristics that define and differentiate a material |
| squash | to push |
| bend | to push from both ends |
| twist | to trun from both ends |
| suitable | if something is good for a purpose |

| What will I know by the end of the unit? | |
|---|---|
| What is manmade? | A manmade material is one that is made or change by humans – plastic, paper, glass, brick |
| What is natural? | A natural material is one that is found in the natural environment – wool, rock, clay, metal |
| What is the difference between a material and an object? | A material is what items are made from e.g. plastic, glass, rock, clay, metal. An object is the item that is made such as a door, spoon, drinking cup, plate. Etc. |
| How can we compare and group materials? | By looking at the properties of a material, we can sort them into groups with similar items – e.g. a metal spoon is heavy, so is a brick and a wooden door. A paper plate is flexible, so is a plastic fiddle toy and a metal paperclip. |
| Which material is suitable for which purpose? | By looking at the properties we can judge if it will be suitable for a purpose – a metal spoon is strong and waterproof so suitable for liquid, a paper spoon would get wet and a stone spoon would be too heavy. A window is made of glass so that it lets the light in, wood would not let light through so would be unsuitable. |
| How can solids be changed? | By squashing an object (we push it) we can make something flatter and wider: bending a material (we push both ends) we curve it: twisting a material (turning both ends) makes it twisted. |

| Science Knowledge Organiser | | |
|---|---|---|
| | **Year** | **Main Foci:** |