

Jerry Clay Academy Subject Knowledge Organiser

Subject: Science (Materials) Year Group: 2 Term: Spring

Core Learning of This Unit:

- To research man-made and natural materials so that we can make our own pattern
- To identify different properties of materials so that we can identify what they can be used for
- To recognise materials around school so that we can identify why each material is suitable
- To test materials SO THAT we can choose the most suitable material to build something.
- To use what we know about climate and materials so that we can decide if mud bricks are suitable to use in England.
- To know that different materials are used for the same thing (spoons can be made from plastic, wood, metal, but not normally from glass).
- To name the properties of materials which can be squashed, bent, twisted and stretched e.g. soft, flexible, elastic.

Prior Learning:

From Year 1 children should be able to:

- Distinguish between an object and the material it is made from
- Identify and name a variety of everyday materials
- Compare materials



National Curriculum Statements:

Pupils should be taught to:

identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses

find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Key Vocabulary:

- Material: Something that an object is or can be made from.
- Properties: The characteristics of a material e.g. glass can be transparent. Transparent is the property.
- Flexible: Capable of bending easily without breaking.
- Waterproof: Keeps out water.
- Absorbent: Able to soak up liquid easily.
- Elastic: A synthetic material. Flexible: Capable of bending easily without breaking

Significant People

- John Dunlop: a Scottish inventor of (air-filled) rubber tire.
- Charles Macintosh: invented waterproof fabric.
- John McAdam: invented an effective method of constructing roads.