# Hallcroft Infant & Nursery School

# Science Lesson Sequence

## Spring 1 - Year 2

## Uses of Everyday Materials

**What we already know, remember and can do:**

- Name objects and identify the materials they are made from.
- Recognise that objects are made from materials that suit their purpose.
- Recall that a property is how a material can be described.

**Working Scientifically**

- Sort objects based on the materials they are made from.
- Group objects based on their properties.
- Suggest ways to test materials for their properties.
- Make predictions and recognise whether they were accurate.
- Use their observations to answer questions.
- Begin to recognise if a test is fair.

| | Learning Objective | What will be known and remembered (Substantive) | What will be... (Disciplinary) | Revisited Vocabulary | New Vocabulary |
|---|---|---|---|---|---|
| 1 | **Knowledge** - I can recognise that objects are made from materials that suit their uses.<br><br>**Working scientifically** - I can recognise that objects can be grouped. | **Knowledge**<br>✓I can name objects with the same use that are made from different materials.<br>✓I can name a material that is used to make objects with different uses. | **Working scientifically**<br>✓I can sort objects based on properties. | Fabric<br>Glass<br>Material<br>Metal<br>Object<br>Plastic<br>Property<br>Rock<br>Wood | Suitable |
| 2 | **Knowledge** – I can recognise that objects are made from materials that suit their uses. | **Knowledge**<br>✓I can describe the properties of materials.<br>✓I can explain why a material is suitable for its object's use.<br>✓I can explain why some materials would not be suitable for a particular use. | | Fabric<br>Glass<br>Material<br>Metal<br>Object<br>Plastic<br>Property<br>Rock<br>Wood | |
| 3 | **Knowledge** – I can recognise that the shape of some solid objects can be changed.<br><br>**Working scientifically** – I can record data in a table. | **Knowledge**<br>✓I can observe how actions change the shape of solid objects.<br>✓I can describe what happens to objects after an action has been performed. | **Working scientifically**<br>✓I can record my findings in a table. | | Bend<br>Elastic<br>Flexible<br>Pull<br>Push<br>Stretch<br>Squash |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | Twist |
| **4** | **Knowledge** – I compare the suitability of materials for particular uses.<br><br>**Working scientifically** – I can gather data and use it to answer a question. | | **Working scientifically**<br>✓I can work in a group to carry out a test.<br>✓I can use non-standard units to measure.<br>✓I can compare results to answer a question. | | Compare<br>Data<br>Elastic<br>Flexible<br>Material<br>Property<br>Stretch<br>Stretchy<br>Suitable |
| **5** | **Knowledge** – I recognise that the strength of some materials can be changed.<br><br>**Working scientifically –** I can record data in a block graph. | | **Working scientifically**<br>✓I can measure strength using non-standard units.<br>✓I can label the categories on a block graph.<br>✓I can use a block graph to answer questions. | Material<br>Property | Block graph<br>Data<br>Non-standard unit<br>Record<br>Suitable<br>Strong |
| **6**<br><br>**Outcome** | **Knowledge** – I can group materials based on their properties (toughness).<br><br>**Working scientifically** – I can answer questions based on results. | **Knowledge**<br>✓I can name properties of materials that make them suitable for their uses. | **Science in Action**<br>✓I can give examples of how plastic is harmful to the environment.<br>✓I can select environmentally friendly materials. | Material<br>Object<br>Plastic | Environment<br>Pollution<br>Property<br>Recycle<br>Reduce<br>Reuse<br>Suitable |

Materials have properties that suit the uses of many different objects.

Metal is waterproof, strong and stiff.

Objects are often made from different materials.

metal

wood

plastic

Some solid objects are made from materials that can change shape.

stretch

twist

bend

squash

| | |
|---|---|
| material | What objects are made from. |
| property | How a material is described. |
| suitable | The best choice. |