

Our Intent is: To develop inquisitive children who are excited about investigating with curiosity, "How can scientific enquiry explain the world?" Exploring answers by gathering and analysing evidence.



Forton Primary School Science

Nicky Nook Class Spring 2 Year A

Key Concept: Everyday Materials

Key Question: True or False: Any material can be used to create everyday objects.

Unit Overview:

Manipulating different materials and why certain materials are used for a specific purpose.

N.C. LINKS: Living Things and their Habitats

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.
- describe the simple physical properties of a variety of everyday materials
- compare and group together a variety of everyday materials on the basis of their simple physical properties.

Vocabulary:

- Material
- Squashing

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- Bending
- Twisting
- Stretching
- Properties
- Compare
- Group
- Wood
- Metal
- Plastic
- Suitability
- Manipulate

New Knowledge Progression:

- Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, water, 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 (applying a force).

Building on Prior learning from EYFS:

Explore/observe – look closely at/notice.
Describe – Talk about what the notice/observe; talk about changes they notice and changes over time.

Record – draw pictures, take photographs, make models or scrapbooks.

Building on Prior learning when B follow A:

- Distinguish between an object and the material from which it is made.
- Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock.

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- Some materials can be found naturally; others have to be made.

Questioning – show an interest I /be curious about, ask questions about what they notice/ observe or changes that occur.

Explain – talk about why things happen/occur; talk about how things work.

Research – talk to people (visits/visitors/family), think of questions to ask to find things out and find out how things work; use first hand experiences/use secondary sources (eg books, photographs, internet).

Equipment and measures – use senses/use simple equipment to make observations (eg magnifiers, pipettes, egg timers, digital microscopes etc).

Compare/sort/group/identify/classify – notice similarities, notice differences: talk about similarities and/or differences.

Test – make suggestions, show resilience, work with others.

- Describe the simple physical properties of a variety of everyday materials.
- Compare and group together a variety of everyday materials on the basis of their simple physical properties.
- 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
- Some materials can be found naturally; others have to be made

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	Vocabulary - use simple vocabulary to name and describe objects, materials, living things and habitats.	
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Key Skills (Disciplinary)

- Use simple scientific language to talk about / **record** what they have noticed.
- Use observations to make suggestions and / or ask questions.
- **Observe** and describe simple processes / cycles / changes with several steps (*e.g. growth cycle, simple food chain, saying how living things depend on one another*).
- **Observe** closely and communicate with increasing accuracy the features or properties of things in the real world.
- Begin to use simple scientific language (from Y1 PoS) to talk about or **record** what they have noticed.
- Use observations to make suggestions and / or ask questions.
- Look / **observe** closely and communicate changes over time.
- Look / **observe** closely and communicate the features or properties of things in the real world.
- **Observe** closely using their senses.
- **Name / identify** common examples, some common features or different uses.
- **Name** / identify common examples and some common features.
- **Name** basic features of objects, materials and living things.
- Say how things are similar or different.
- **Compare** and contrast simple observable features / characteristics of objects, materials and living things.
- Raise their own logical questions based on or linked to things they have observed.
- With help / scaffolds, begin to ask questions such as 'What will happen if...?'
- Ask simple questions about what they notice about the world around them.
- Demonstrate curiosity by the questions they ask.
- Make suggestions about who to ask or where to look for information.

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- Use simple and appropriate secondary sources (such as books, photographs, videos and other technology) to find things out / find answers

Sequence of Lessons:

1. LO: Identify a variety of everyday materials.
2. LO: Describe the physical properties of a variety of everyday materials.
3. LO: Investigate the suitability of a variety of everyday materials.
4. LO: Compare natural and man-made materials.

Enhancements:

Materials Treasure Hunt

End of Unit Outcome:

Build houses for the three little pigs – which material works best?