

Medium Term Plan: Supporting Implementation of LTP/Progression Grid

Subject: Science **Year: Y1 Everyday Materials**

NC/PoS:

- 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
- 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.

Prior Learning (what pupils already know and can do)

Show understanding of what an object is and what a material is.

Name common materials e.g. paper, card, fabric, glass etc.

End Goals (what pupils MUST know and remember)

- know objects are things we can see or touch and can be made from one or more materials
- know a material is the matter from which a thing is or can be made from
- know a natural material is any product that comes from plants, animals, or the ground
- know examples of natural materials are water, wood, rock, cotton, iron, oil, leather
- know manufactured materials are materials that have been produced by man
- know examples of manufactured materials are plastic, metal, glass, brick, paper, fabric, foil
- Know that everything is made up of materials
- Know materials can be grouped according to their properties
- Know varied materials, have different properties
- Name different properties: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent

Key Vocabulary: object, material, plastic, metal, glass, brick, paper, fabric, foil, water, wood, rock, cotton, iron, oil, leather, air, natural, manufactured, ice, silk, paint, sponge, fur, feather, sand, wool, concrete, property, hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent, flexible

Session 1: review prior learning: give the children different materials to sort

Children learn to distinguish between object and material. Objects are things we can see or touch and can be made from one or more materials and a material is the matter from which a thing is or can be made from

Suggested resources:

<https://www.youtube.com/watch?v=7puHegpyGbY> objects and materials

https://www.youtube.com/watch?v=8uM_RU3vzXU Objects are made of materials

Vocabulary: object, material

Session 2: Recap: what is the difference between an object and a material?

Name at least six of each.

Children learn to group objects through observation

Suggested activities:

Group objects according to material – include balloon filled with air and one filled with water, use a variety of household objects and ones from school

Children can record in their own way.

Vocabulary: plastic, metal, glass, brick, paper, fabric, foil, water, wood, rock, cotton, iron, oil, leather, air

Session 3: How might we group materials?

Children learn a natural material is any product that comes from plants, animals, or the ground: examples are water, wood, rock, cotton, iron, oil, leather

Manufactured materials are materials that have been produced by man: examples of manufactured materials are plastic, metal, glass, brick, paper, fabric, foil

Suggested resources:

<https://www.youtube.com/watch?v=0yKoHAWVhuE> Natural and manmade materials



Vocabulary: natural, manufactured, ice, silk, paint, sponge, fur, feather, sand, wool, concrete

Session 4: what is the difference between a manufactured and manmade material?

Give examples

Children learn that everything is made up of materials and materials can be grouped according to their properties

Suggested resources:

https://www.youtube.com/watch?v=340MmuY_osY Materials and their properties

Children sort a variety of materials

Vocabulary: property, hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent, flexible

Session 5: Name properties of different materials

Children learn to name different properties: hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; absorbent/not absorbent; opaque/transparent

Suggested activity:

Children complete a material walk around the school

Give the children a property on card and they locate materials which have that property

Vocabulary: property, compare

Session 6: name a property – which materials have this property?

Children perform simple tests to explore questions about materials

Suggested activities:

Provide the children with a variety of materials and get them to predict which one would be most suitable. Test their predictions.

What is the best material for an umbrella?

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What is the best material for lining a dog basket?
What is the best material for curtains?
What is the best material for a bookshelf?

Vocabulary: prediction, predict, simple test

Link to career scientist:

https://pstt.org.uk/application/files/1116/2851/6355/Materials_scientist_-_Pearl_Agyakwa.pdf