

Subject: Science

Year1: 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)

Know materials have different properties. Know there are natural materials and manmade. Can group collections of materials with similar and/ or different properties. Can discuss differences between materials.

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, oil, leather
- know manufactured materials are materials that have been produced by man
- know examples of manufactured materials are plastic, metal, glass, brick, paper
- 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, water, wood, rock, cotton, oil, leather, air, natural, manufactured, feather, sand, wool, property, hard/soft; stretchy/stiff; shiny/dull; rough/smooth; bendy/not bendy; waterproof/not waterproof; opaque/transparent, flexible

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

LO: TO recognise the difference between objects and materials.

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.

Use Kapow Lesson 2: Material Detectives. Stop when you reach the independent task. Children will be recording in their books next session.

Other resources: <https://www.youtube.com/watch?v=7puHegpyGbY>

objects and materials

[https://www.youtube.com/watch?v=8uM\\_RU3vzXU](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.

LO: To identify everyday materials

Use the 'Main Event' section from Kapow Lesson 1: Naming materials and do the sorting activity. 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 in their books: write lists, draw hoops/circles and draw/write the objects inside. (Can use the cutting sticking activity as an adaption if needed)

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

Session 3: Recap: How might we group materials?

LO: To identify natural and manmade materials

Children learn a natural material is any product that comes from plants, animals, or the ground: examples are water, wood, rock, cotton, 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: Recap: what is the difference between a manufactured and manmade material? Give examples

LO: To describe the properties of materials

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

Use Kapow Lesson 3: Introductions to properties. Use the 'Adult-led task' sheet as a starting point to help the children write their own sentences in their books.

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

Session 5: Recap: Name properties of different materials

LO: To identify the properties of materials.

Provide the children with a variety of materials and get them to predict which one would be most suitable:

What is the best material for an umbrella?

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?

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: Recap: name a property – which materials have this property?

Working scientifically LO: To plan a test and suggest what might happen

Use Kapow lesson 5: Is it waterproof?

Complete the Adult-led task in the main event section of the lesson and children record which materials are waterproof. The record sheet provided can be used as a scaffold for those who need it.

Vocabulary: prediction, predict, simple test

Link to career scientist:

[https://pstt.org.uk/application/files/1116/2851/6355/Materials\\_scientist -  
\\_Pearl\\_Agyakwa.pdf](https://pstt.org.uk/application/files/1116/2851/6355/Materials_scientist_-_Pearl_Agyakwa.pdf)