

Year 1 – Autumn 2 – Materials

English Journey – The Three Little Wolves and The Big Bad Pig

NC Science

- 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.



I can use materials effectively.

Pose: Can you build a house?

<https://www.youtube.com/watch?v=CtP83CWOMwc>

The Three Little Pigs

Why did the first two houses fall down? Why did the third one stay standing? What materials did they build their houses out of? What material could have been used instead for the first two houses?

Place the children in small groups or pairs and challenge them to build the three pigs' houses using an array of materials: art straws, hay/straw, little twigs or lolly sticks, and Lego. Allow them to explore the different materials and encourage them to talk about them using their scientific vocabulary. Ask the children to verbalise how the materials feel and behave, asking questions such as: does it feel soft? Strong? Will it be good material for building a house? Will it blow down when the Wolf blows? Why will it blow down? What useful properties do the materials need to have, to be good materials for house building? Ask each group of children to tell you which material will be the most successful for house-building and why. Video the children retelling the story of the 3 little pigs, giving explanations as to why the houses fall down. Use a hair dryer to blow the houses down.

Why did they not all choose bricks? (more expensive, heavier, harder work to build with)

What other materials could the three little pigs use?

Can you build a house?

NC Working Scientifically

- Observing closely, using simple equipment
- Performing simple tests
- Identifying and classifying
- Using their observations and ideas to suggest answers to questions
- Gathering and recording data to help in answering questions.



Which material should I use for the roof of my house?

I can describe the physical properties of materials.

Pose: Which material should I use for the roof of my house?

Plan (adult led): What properties do we need for a roof? Hard, smooth, strong, waterproof. Which materials are hard and smooth? (Recap prior learning).

Now we need to carry out a test to find out which materials are waterproof. Explain that, if a material does not absorb water, it is said to be waterproof. Children use poppets to drop water onto different materials. Has the material absorbed the water or allowed it to pass through?

Pick (adult led): The item we look at will change every time.

Predict: Which materials do you think will be waterproof? Why?

Present: Children present their findings in a table: waterproof/not waterproof. They glue the materials in the correct column.

Provide: Which material should I use for the roof of my house? Which material is hard, strong and waterproof? What objects are made from this material that I could use for my roof?

Which material should I use for the windows in my house?

I can describe the physical properties of materials.

Pose: Which material should I use for the windows in my house?

Plan (adult led): What properties do we need for a window? Hard, smooth, strong, waterproof and transparent. Which materials are hard, smooth and waterproof? (Recap prior learning).

Now we need to carry out a test to find out which materials are transparent. Explain that, if a material does allow light through it, it is said to be transparent. If it does not allow light through it is opaque. Children test different materials to see if they can see through it.

Pick (adult led): The item we look at will change every time.

Predict: Which materials do you think will be transparent? Why?

Present: Children present their findings in a table: transparent/opaque. They glue the materials in the correct column.

Provide: Which material should I use for the windows in my house? Which material is hard, strong, waterproof and transparent? What objects are made from this material that I could use for my windows? Which material could I use for a pair of curtains?

I can identify how certain materials are suited to different purposes.

Oracy focused lesson

Pose: Why are certain materials suited to different purposes?

Show children a range of sentences with missing words:

Tia ate her cereal with a _____ spoon.
Jed sat at the _____ table to do his homework.

May loved her _____ teddy.

Children to discuss what the missing words could be. Could there be more than one answer? Explain that some materials are more suited to certain purposes than others.

On each table provide children with a scenario card. They discuss and decide if it is a good idea or bad idea.



True or False: I think it would be good to build a house of paper.

Provide children with a range of statement cards for them to sort into good idea/bad idea.

Why are certain materials suited to different purposes?



Enrichment Week

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