

WHO LIVES HERE?

Key words:

home
materials

Key information:

It is not necessary for children to use the word 'properties' to describe the different features of a material, but it is important for them to recognise that materials differ, and to use their first hand observation and prior knowledge to describe these differences.

ACTIVITY SUMMARY:

This activity introduces the big chemistry idea that there is an enormous range of materials in the world, all with different properties that make them suitable for different purposes. The focus for the children's investigation will be homes. Children will find out how the structure of different homes and the materials used make them suitable for their different inhabitants. Children will have the opportunity to make their own model homes for different types of animals. A visit to an open farm or wildlife centre where children can compare the homes of a range of animals will ensure essential first hand experience for this activity.

Learning intention:

Children can describe a range of homes and give reasons why different homes are suitable for their inhabitants.

EYFS cross curricular links:

Expressive arts and design: Exploring and using media and materials – How many windows does your clay house have? Design and make a house from clay. Use clay tools to add details such as doors, windows or a brick pattern.

Communication and language / Understanding the world: Understanding / The world – What do you need to build a house? Create an outdoor building site (role play area) for the children to build houses. Use plastic or wooden building bricks, wheelbarrows, high visibility vests, cement mixer and spade.

Understanding the world / Expressive arts and design: The world / Exploring and using media and materials – What makes the strongest house? Use a variety of large and small construction kits, for example, large building bricks, small building bricks, wooden blocks, plastic tiles, to investigate which construction equipment makes the strongest house.

Mathematics: Shape, space and measures – What shapes can fit together? Look at a bee hive and the way that the hexagon-shaped wax cells fit together. What other shapes tessellate like a hexagon? Communication and Language / Literacy: Reading – Read a selection of stories about houses, for example, 'The House that Jack Built', 'The Wise Man and the Foolish Man'.

RESOURCES (FOR FOCUS ACTIVITY):

- Science Photos
- Variety of materials suitable for making a model of an animal's home, including sticks, leaves, soil, water, bricks, wooden planks, ice cubes, wool, string, Perspex sheets
- Access to a digging area to build setts, burrows, dens
- Digging tools, such as rakes and trowels
- Range of small world or stuffed animals
- Digital camera or tablet

RESOURCES (FOR INDEPENDENT ACTIVITIES):

- Range of cutting and joining materials
- Resource sheet (Card match)
- Science Photos
- Paper or plastic cups, shoeboxes
- Doll's house with furniture and small world people
- Tweezers
- Natural building materials (as for Focus activity)

EXPLORE:

Display the Story slideshow and play the story to the children. Ask them to talk to a friend about where Rubina and her family are staying on their holiday. Play slide 2 again.

Ask: *Who put this tent up? Who is staying in it? Why do they need it?* Establish with children that Rubina and her family are on a camping holiday and this is their home for their stay. It is required for shelter from the weather, as somewhere quiet and warm to sleep and to store their belongings.

Play slides 3-5, again and ask the children to spot the other homes in the story.

Ask: *Who lives in this home? Why do they need their home? What do they do in their home? Who built this home? What is it made from? What is the same about all four of these homes? Is anything different? Can you think of any other homes? Who built them?*

Key information:

Spiders make their temporary homes by producing silk threads from special glands on their abdomen. The webs help to trap the prey that the spiders eat.

Wild birds make their own nests in trees, hedges or in buildings, using twigs, leaves, grass and other materials that they find. They build a nest as a safe place to lay and incubate their eggs and nurture their young. (Links can be made to Activity plan 3 'What is inside an egg?'.)

Humans live in houses that are usually built by someone else, such as a builder. Houses are designed to be warm, dry, safe places in which families can live. In the UK they are often made from bricks, wood and glass.

ENQUIRE (FOR FOCUS ACTIVITY):

Tell the children that they are going to find out about some different homes. Give each pair of children a photo from the Science Photos. Ensure that you provide a mix of homes, including those that are made by humans for others and those that are made by the homeowner.

Ask: *Who lives there? What do they use their home for? What is it made of? Who made the home? Repeat this activity at least twice to enable children to consider more than one home.*

Tell the children that they are going to make a model of a home for an animal of their choice, including humans. Allow them time to consider their choice of animal. Explain that they should think about what the home will be made of, where it will be built and what it will look like.

Depending on the animal chosen and the availability of the necessary materials, facilitate the collection of materials for the children and let them build their home.

Ask: *What materials did you use? Why? How is this home the same as the photo? How is it different? Is there anything you want to change?*

Take photos of the models and encourage children to draw and write about their homes.

ENQUIRE (FOR INDEPENDENT ACTIVITIES):

Tabletop activity: Who lives here? Use the cut out cards from the Resource sheet. Match the home to the home owner and to the materials from which it is made.

Outdoor area: Where do these animals live? Use a variety of animals, for example, owl, fox, badger, rabbit, hedgehog (either stuffed toys, photographs or small world figures). Can you find a suitable habitat for these animals to build their home, for example, owl in a tree, hedgehog under a pile of leaves?

Small world tray: What is in your house? Provide a doll's house with furniture and small world people for making human homes.

Tabletop activity: Can you make a model of a dovecot? Provide plastic cups, boxes, cutting and joining materials to make a multi-space dovecot.

Tabletop activity: Can you make a model of a hutch or a stable? Provide a range of cardboard boxes, joining and cutting materials to make a home for a horse, donkey, rabbit or guinea pig. Ensure that the model features key aspects of the home for that animal.

Outdoor area: Can you make a home for this bird in the wild? Place a range of leaves, sticks and mud in various locations so that, like a bird, children have to go and collect small items one at a time. Tell them that they can only use tweezers to collect everything, to act like a beak.

REFLECT AND REVIEW:

Ask the children to pick a photo of a home that they have found out about and to tell you who made it, who lives in it and why it is a good home for them. The children should do this several times, giving them the opportunity to refer to a range of homes built by humans and animals.

EVIDENCE OF LEARNING:

Listen carefully as children describe the homes. Do they tell you who lives there? Can they tell you what materials the home is made of? Do they refer to the properties of that material and why it is a good material for the home?

SCIENCE AT HOME:

Can they draw or find a picture of an animal in its home in a wild or domestic setting? Can they take a photo of a family pet asleep in its favourite place? Can children bring their photos to school to show an adult? Can they talk about why they think the animal sleeps there and what it likes about the home?