

EARLY YEARS SCIENCE PROVISION MAP

Play, Observe & Ask

Sensory Play

Learn: features of a woodland habitat; properties of materials

You need: woodland based sensory tray – leaves, acorns, pine cones, pine needles, grass, fur, feathers, stones, etc. (collect some of the items for the tray on a walk with the children), feely bag

Play, observe & ask

- Where did these objects come from?
- What do they feel like?
- Can you identify the objects using your senses?
- Can you sort and describe these objects?

Construction

Learn: that the distance from the light source to the object affects the size of the shadow made

You need: torches, construction toys, pictures or models of animals (including a rabbit). Cover a wall or screen in white paper to help the children to make clear shadows.

Play, observe & ask:

- Can you build an animal?
- Can you make an animal shadow using the torch?
- Can you change the size/shape of the shadow? How did you do that?

Role Play

Learn: that you need a light source to make a shadow

You need: rabbit masks, shaded and light areas, sheets, branches, cardboard to build a den
Make a den. Dress up as a character.

Play, observe & ask:

- What happens to your shadow when you stand in a sunny place? In the shade?
- Where is your shadow biggest /smallest?

Malleable Play

Learn: to name body parts; the shape of a shadow changes according to the shape of the object

You need: pictures of rabbits for children to model, modelling clay/ playdough, torches

Play observe & ask:

- How many legs /ears will you need?
- Which part of the rabbit's body are you making now?
- Can you make an animal shadow using the torch?
- How is the shadow similar/different to your animal?
- What happens when you change the shape of your animal?

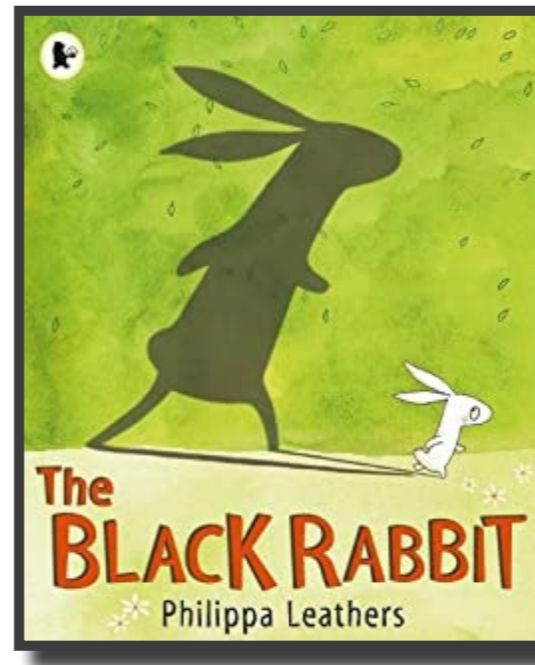
Water/Sand Play

Learn: that some animals live underground

You need: sand and water, leaves, small world animals

Play, observe & ask:

- Can you design and create a home for a rabbit?
- Why do they live underground?
- What other animals live underground?
- How can you make your burrow better/stronger?
- What is the best mixture of sand and water to use?



Outdoors



Learn: shadows are made when light is blocked by an object

You need: chalk, camera

Go get outside when it is sunny and look at your shadow and other shadows made by the Sun.

Play, observe & ask:

- Play with your shadow – what can it do?
- Can you draw around a shadow?
- Can you measure it? (maths link – children could measure sizes at different times)
- Why do you have a shadow?
- Can you run away from your shadow? Why?
- Can you and your shadow hold hands?

Small World

Learn: that the shape of a shadow changes according to position of the light source

You need: range of woodland animals, trees, etc., torches

Play, observe & ask:

- Can you re-enact the story?
- What happens when you move the torch higher/lower?
- What happens when you move the torch nearer/further away?
- Where is it easy/difficult to make a shadow of your animal? Why do you think that might be?

Key Science Vocabulary

light source, Sun, torch, light, dark, shadow, shade
tall, taller, short, shorter, wide, wider
habitat, environment, burrow
leaves, cones, grass, stones, feathers, fur
properties of materials - soft, hard, smooth, rough, smelly, spiky
body parts - head, body, legs, ears, tail, eyes
mixture

Further Science

Compare features of rabbits with other animals. What do you know about rabbits? How are their bodies different to ours? Where do they live? What do they eat?

Woodland sensory walk. What can you see/hear/smell? What can you see on the ground/at eye level/above your head?