

EARLY YEARS SCIENCE PROVISION MAP

Play, Observe & Ask

Sensory Play

Learn: what lives in a beach habitat; the harmful effect of plastics
You need: sensory tray set up as a beach with sand, shells, stones, seaweed, driftwood, feathers.

You could include plastic lids, bottles, forks etc... and learn about the effects of pollution.

Play, observe & ask

- Can you name these objects?
- Where do you find these?
- Can you describe these objects?
- Can you sort the objects? How will you do this?
- How can litter hurt sea life?

Small World

Learn: how things move

You need: small world people, 'tuff' tray set up with the different places - tree, beach etc...

Retell the story, noting all the objects and animals that move.

Play, observe & ask:

- How did the hat move?
- What was it used for?
- How was the hat reused?
- Was the hat a good habitat?

Malleable Play

Learn: changing the shape of an object can make it float.

You need: small ball of modelling clay (e.g. Plasticine*), water tray
Encourage the children to find out whether a ball of modelling clay floats. Then make a boat out of the modelling clay.

Play observe & ask:

- What happens when you place the ball in water?
- What happens when you change the shape of the ball?
- Can you make a boat that will float?
- How can you make your boat move? (blowing)
- Which is the best boat? (To test - how many marbles can your boat hold before it sinks?)

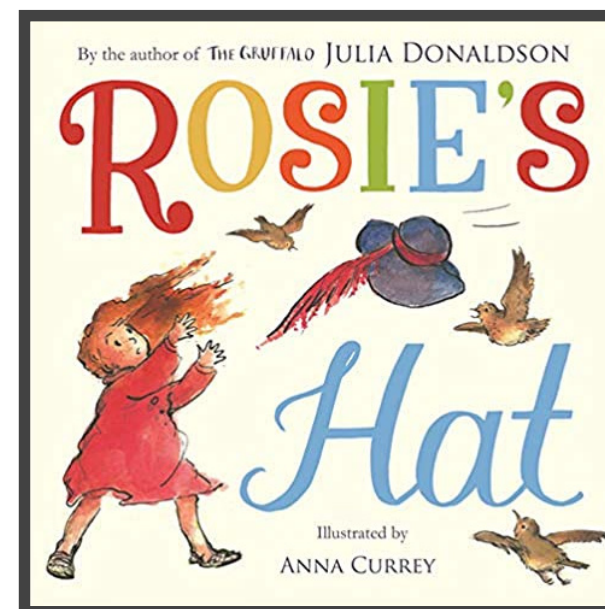
Water/Sand Play

Learn: properties of materials by building sandcastles

You need: dry sand, water, variety of buckets, hats, mixing tools

Play, observe & ask:

- What type of sand makes the best sandcastle?
- How will you mix the sand?
- How much water will you need?
- How much sand will you use?
- Which container is best? Why?
- How do you know which is 'best'?



Role Play

Learn: there are some people who help us (firefighter Rosie).

You need: role play clothes, fire station set up and small world people

Play, observe & ask:

- What does a firefighter do?
- What number do you ring if there is a fire?
- What will you do if you see a fire? (Fire safety)

Outdoors

Learn: how wind can change the position or appearance of things

You need: pictures of wind erosion, trees, feathers, straws

Play, observe & ask:

- What is wind?
- How do you know if it is windy?
- Where is it windy?
- Can you make a wind?
- How can you show me the wind? (Use a feather and a straw.)
- Can you change the direction of the wind?
- Which object travels furthest in the wind? Why do you think this is?

Construction

Learn: to build strong structures

You need: sticks, tape, blocks, construction materials

Play, observe & ask:

- Can you build a ladder to get the hat out of the tree?
- How tall will the ladder be?
- What will you use to make it?
- How will you put the sticks together?
- What shapes will you use?
- Will it be strong? How can you test it?

Key Science Vocabulary

beach, habitat, sand, pebbles, shells, seaweed, rockpools, driftwood, feathers, litter, rubbish, plastic, pollution
sand, water, mixture, wet, dry, sticky
wind, breeze, blow, flutter, air, move, bend
float, sink, shape, ball, flat/flatter/flatten

Further Science

Find out about the lifecycle and growth of humans and other animals (e.g. birds, cats, dogs).
Which animals make nests? When does this happen? (relate to seasonal changes)
Reusing materials - Why is this a good idea? How can we do this?
Design and make a hat that will fly.