

EARLY YEARS SCIENCE PROVISION MAP

Play, Observe & Ask

Sensory Play

Learn: that plants have different textures

You need: a variety of leaves, flowers, seeds (including dandelions if possible)

Play, observe & ask

- What do these objects look/feel/smell like?
- How do they change during the session? Why? (Some will wilt quite quickly.)
- Can you sort them? How will you do this?

Role Play

Learn: that some plants are grown for food

You need: table, chairs, toy oven, pans, menus, notepads to take orders, café signs, vegetables (pretend or real)

Set up a vegetable café.

Play, observe & ask:

- What meals can we make using these vegetables?
- Which part of the plant are we using?
- Which vegetables need to be cooked?
- Which of these foods are healthy?

Small World

Learn: what seeds need to grow

You need: seeds /seed packets, pots, trowels, etc.

Play, observe & ask:

- How can we help a seed to grow?
- How long will it take?
- What will happen first?
- What will your seed grow into? How do you know?

Water Play

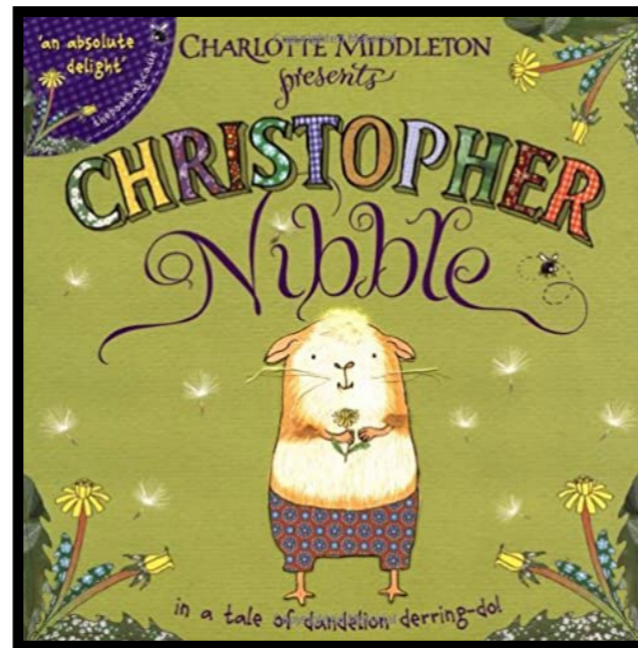
Learn: that some objects float and some sink

You need: real flowers, paper, scissors

Play, observe & ask:

- Do flowers float?
- Can you make a paper flower to float on the water?
- If you fold its petals in, what happens when you put it on the water?

Background science: Paper is made of tiny wood fibres tightly packed together but there are very small gaps between these fibres. When paper gets wet, water is drawn into these spaces and it swells which causes the folded petals to open up.



Malleable Play

Learn: to name the parts of a plant

You need: yellow and green modelling dough, pipe cleaners, lolly sticks, wool, dandelion plant/flower or picture of dandelion

Play observe & ask:

- Can you make a dandelion plant?
- What can you use for the flower/stem/leaves etc?

Outdoors



Learn: that we grow plants for food.

You need: seeds, compost, trowels, watering cans, pots, growing area

Play, observe & ask:

- Which plants do we like to eat?
- How do we plant our seeds?
- Will they grow quickly or will it take a long time?
- How can we take care of our plants?
- The eating part won't happen for a while, but when it does; Which part of the plant do we eat? Do we need to cook it? How?

Construction

Learn: what plants need to grow well

You need: boxes, paper, blocks, pipe cleaners, twigs, some transparent materials such as clear polythene (from plastic bags)

Play, observe & ask:

- How can we stop animals eating our plants?
- Can you make a structure to protect a growing plant?
- Can the plant get water and light? How?
- What materials have you used? Why did you choose them?

Key Science Vocabulary

parts of a plant - stem, leaves, roots, flower, seeds

water, light, compost/soil

textures - rough, smooth, hard, soft, fluffy, hairy, furry

other properties of materials - shiny, waterproof, float, sink

vegetables - potato, carrot, pea, bean, cabbage, lettuce, cucumber, etc.

Further Science

Find out about guinea pigs. Do any of the children have them as pets? Do they eat anything other than dandelions? How would you care for a pet guinea pig?

Blow dandelion seeds. How can you make them travel further? Why is it useful for the wind to blow the seeds away?