

# Early Years Science Provision Map – Glass

## ICT

**Learn about:** using equipment to help with observation

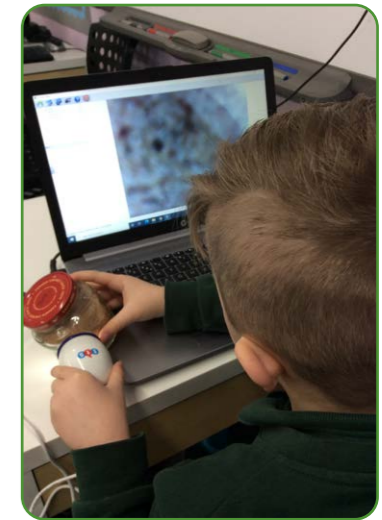
**You need:** glass jars, digital microscopes, substances for close observation (e.g. sand, compost, earth)

**Support pupils to use the digital equipment to see details.**

**Play, observe & ask:**

- What can you see?
- How is it different to looking with just your eyes?

**Key vocabulary:** microscope, observe, describe, magnify



## CONSTRUCTION

**Learn about:** what makes glass a suitable material for windows

**You need:** construction toys (e.g. duplo), boxes, materials to make windows (paper, card, plastic packaging, cellophane)

**Build model houses**

**Play, observe & ask:**

- Our houses need windows. What are real windows made from? Why?
- Which other materials have similar properties that make them suitable for windows?

**Key vocabulary:** transparent, opaque, strong

**Notes**

If possible, before doing this activity, go for a walk in the local area. Look at different sizes and shapes of windows (if you can see stained glass windows, this is even better). Emphasise that although they look different, they are all made from glass.

## Glass



## GARDENING

**Learn about:** the parts of a plant

**You need:** glass jars, compost, bulbs

Plant bulbs and discuss how to take care of them.

**Play, observe & ask:**

- How will you take care of your bulb?
- As they grow, the roots should become visible through the glass. Why does the plant need roots?
- Can you name the parts of the plant?

**Key vocabulary:** bulb, seed, grow, roots, stem, leaves, flower

**Notes**

If you have a big enough glass container then a seed potato would be ideal for this activity.

As glass jars have no drainage, watering needs to be carefully supervised!

## ART AND DESIGN

**Learn about:** habitats

**You need:** glass jars, small model animals (invertebrates work well) sand, stones, leaves, bark, grass

**Play, observe & ask:**

- Can we make a habitat for this animal?
- Where does it like to live?
- What materials will we need?

**Key vocabulary:** habitat, animal names, names of materials used

**Notes**

If completed with natural materials, this a good outdoor activity as children can compare real habitats to those they are making. Alternatively, the habitats could be made from collage materials such as paper, card, pipe cleaners etc.

## OUTDOORS

**Learn about:** worms

**You need:** large glass jar, gravel, sand, soil, leaves/grass, worms

**Make a wormery** – put a layer of gravel in the bottom of the container. Layer soil and sand until almost full, add some worms and put leaves and grass on top.

**Play, observe & ask:**

- Observe the worms – how do they move?

- What happens to the layers of sand and soil? Why?
- What happens to the leaves and grass?

**Key vocabulary:** worm, soil, sand, move, mix

**Notes**

Keep out of direct sunlight.

The soil needs to be moist but not too wet.

Monitor the worms frequently. The worms should be kept for no more than 2 weeks before being released.