

Focus plan for Knowledge and understanding of the world

(Goals for exploration and investigation) Activity - Make a rainbow Date -

Learning intention

To use materials to investigate and begin to understand a natural phenomenon

Resources

Pictures of rainbows. A shallow dish, a mirror, a jar of water, a torch, a sheet of white paper, plasticine or blu-tak.

How the activity will be carried out

Look at the pictures of rainbows and talk about them. Invite the children to remember any they have seen, what was the weather like? Talk about the colours, explain you are going to try to make a rainbow together. As you do this, talk it through with the children, carefully explaining each step, encouraging questions. Half fill the dish with the water, then place the mirror in the water so it slopes back, and fix it to one end of the dish with the plasticine or blu-tak. Holding the torch near the mirror, shine it on the part of the mirror under the water. If you hold the piece of paper above the torch, a rainbow should appear on the paper - you may need to move or tilt the torch a bit to help it appear. You can show the children this way that the effect of the water on the white light is to split it into the colours from blue to red, this is what happens when it rains on a sunny day. Invite them to try making a rainbow themselves, allowing them as long as they need. The children might like to make pictures of their rainbow.

Questions to ask/Language to use

What can you see here? How many/what colours? When does it happen?

Rain, sun, light, white, split, shine, bend, fix, pour, halfway, tilt, torch, water, move, look, hold, above, near, count

Differentiation (Birth to Three)

Looking at the pictures of the rainbows after the experiment, encourage the children to name the colours. Provide different coloured tissue and paper pieces for them to select the appropriate ones to make a collage of a rainbow.

Extension

Leave the resources out for the children to recreate the experiment to fully explore this phenomenon. Encourage them to try to recreate rainbows in other ways, using their imagination and the design and make area.

Evaluation