

Many shades

Topic: I Can See –Colours

Time: 12 min

Age group: 4 - 7

What you need

- Water bottle
- Food colouring
- Plastic cup
- Pipette or eyedropper
- Water

What to do

Set up

- Put drops of a single colour of food colouring in a bottle of water—make sure the colour is fairly dark and concentrated.
- Provide each child and yourself with a white ice cube tray, a cup of clear water, and an eyedropper/pipette.

Activity

Tell children that they are going to make different shades of the same colour, using water and food colouring.

- Pour some coloured water in the first compartment of each ice cube tray. Ask children to describe the colour of the water. What does it remind them of?
- Use an eyedropper or pipette to put some of that coloured water into the next compartment of your ice cube tray. Ask, what do you think will happen if we add a little bit of clear water to this coloured water? Have the children add a few drops. Ask children to describe the colour change.
- Have children spend time making shades of the coloured water in their own ice cube trays. Circulate and engage individual children in conversation. Share observations and thoughts.

The science

- A single colour can have different shades, from very light to very dark.
- Diluting coloured water with clear water creates a lighter shade of the same colour.

Science talk

Description words

Encourage children to use the names of the colours, and descriptive words such as shade, light, lighter, dark, and darker; action words such as describe, drop, and mix.

Science process words

Observe, notice, compare, same, different, change, predict and record.

Open ended questions

- How do you think your colours are different from others? How are they the same?
- Point to two different shades: How is that shade of (insert colour) different from this shade?
- Compare how these two look: Which shade do you think is the darkest? Which is the lightest?
- How did you make that colour so light? Can you show me how you did that?

Skills

Observing, predicting, recording, learning vocabulary around colours, learning about the concepts of shades.

Stay Safe

- Watch out for possible spills and have cleaning supplies at hand

Extending the activity

You can extend this activity by freezing the ice tray and having the children paint using the different shaded iced cubes they created.

Other science links

Shades, light, colours.

Cross curricular links

Literacy (increasing vocabulary)

