Outdoor Learning

Lesson Plan

Year 3

Science

Chemical Sciences

- A change of state between solid and liquid can be caused by adding or removing heat (ACSSU046)

Resources and Preparation:

- 6 x balloons
- tape measure
- food colouring (3 colours)
- 6 x A3 white card
- water

Introduction (20mins)

Make a class list of everyday items that melt and change from a solid to a liquid. Discuss what might affect how quickly something cold will melt, e.g. its size and/or the air temperature.

Experiment 1:

Create 3 different coloured ice balls of different sizes with water balloons filled to various capacities using the following method:

- Place the end of the balloons over a tap and fill with cold water (to different capacities in each of the 3)
- Add a couple of drops of liquid food colouring into the water in each balloon (a different colour for each)
- Tie the balloons and give it a few shakes to mix the colour in.
- Place the ice balloons in the freezer overnight.
- The next day, peel off the balloons to reveal your coloured ice balls!

Choose 1 location within your school grounds, e.g. out in the sun on the oval and place each ice ball on large blank sheets of card. Encourage children to estimate how long it will take for each sized balloon to fully melt and then children observe, record and reflect on their findings.

Experiment 2:

Create 3 different coloured ice balls this time all the same size using the method above. Once they have been formed, estimate and monitor how long each sized ice ball takes to turn fully turn to liquid when place on A3 card in various areas of the school, e.g. in the sun on the oval, in the shade near the classroom and inside the classroom. Children observe, record and reflect on their findings.

Mapped to the Australian Curriculum

national science week

Nature Play QLD