



Observing changing states

The following activities and continuous provision station provides learners with a sensory experience that helps them to explore habitats, changing states and the effects of climate change. The experiment can be linked with stories that reference global warming and loss of habitat – *The Bear in the Stars* by Alexis Snell is a suitable book for this activity – and provide a safe space to introduce these concepts.

Teaching time

Continuous provision station

Learning outcomes

- demonstrate understanding of what has been read to them by retelling stories and narratives using their own words and recently introduced vocabulary
- anticipate – where appropriate – key events in stories
- use and understand recently introduced vocabulary during discussions about stories, non-fiction, rhymes and poems and during role play

Step by step

Set up your enquiry: During the summer months, place an ice block in direct sunlight – perhaps on a sunny windowsill – and observe as it changes state. Prompt learners to consider what changes are occurring with ‘I wonder’ statements.

Introduce relevant vocabulary including ‘melting’, ‘changing state’, ‘solid’ and ‘liquid’ and encourage learners to use these whilst predicting and observing the changes.

In the following session, place one ice block in sunlight and one ice block under a tree or in the shade. Now invite learners to observe both ice blocks and predict which will melt first and why, discussing the experiment as a group. Invite learners to think about what will happen, observe and explore the outcome through ‘I wonder’ statements.

In the next session, read *The Bear in the Stars* by Alexis Snell and link the story to the melting ice you have been observing. Create a safe space for learners to draw similarities between the ice that they have observed and the polar bear’s habitat. Learners will have varying levels of understanding on climate change and habitat loss, and this should be a safe space to discuss learners’ worries and misconceptions.

Once learners have been exposed to new vocabulary, they can further explore these concepts by leaving ice blocks in a tuff tray. To encourage child-led discovery, place objects inside the ice or place the ice in water and allow learners to explore.

‘I wonder’ statements

- I wonder which ice cube will melt first
- I wonder how the ice will change
- I wonder what will happen if we place the ice blocks in different places
- I wonder which will melt first – a large or small ice block

Green Skills



Suitable for

Early Years

Location

Indoors
Outdoors

Season

Spring
Summer
Autumn
Winter

What you’ll need

The Bear in the Stars by Alexis Snell, or another story book about snow or ice melting

Ice blocks for observation (you could create these by freezing a balloon filled with water)

Key vocabulary

Ice
Melting
Solid
Liquid
Habitat

Support and extension opportunities

For more activities supporting the Literacy Early Learning Goal, see the Literacy overview page, or filter for resources by Subject.



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