

## Focus plan for Mathematics

(Goals for shape, space and measures )

Activity - Ice play

Date -

### Learning intention

To begin to understand concepts such as 'greater' and 'smaller' in relation to quantity.

### Resources

Water tray (which needs to be transparent!) with a small amount of water in (to reduce the initial impact of the ice on small hands and fingers). Add 'icebergs' made by freezing water in different containers (turned out so they move freely), have small world polar creatures frozen in, water aprons, semi-permanent marker pen, books or pictures of the sea around the Poles and the animals that live there.

**NB** - If it has snowed, this whole activity can be carried out using just snow, with or without the animals and their input.

### How the activity will be carried out

Talk about arctic conditions, looking at your books and pictures together. Talk about conditions there and how to dress. Draw the children's attention to the level of water in the tray - together draw a line outside the tray with your marker to indicate the level of water. Together, add the icebergs to the water tray and invite the children to play freely, to feel what really cold water is like. As the children access the area, ask about what they feel and can see, changes that are happening, encourage all the children to access this area, examining the animals as they appear. As you close the session, remove the animals with the children, asking where the icebergs may have gone. When this has been done, invite the children to look at the line you drew together earlier - hopefully you will have a greater depth of water (depending on how vigorous the play has been!) so the children will be able to help you draw a new line, above the first. Together you can now discuss what might have caused this change, making the smaller level at the beginning becoming greater - if you like, you can measure the difference.

### Questions to ask/Language to use

How much? Has anything happened? What? Why?

Wet, hard, cold, slippy, shallow, bigger, smaller, look, what, greater, less, more, smaller, mark, measure, why.

### Differentiation (Birth to Three)

Concentrate more on the experience of the medium, how it is changing, what is being revealed as it does, then - 'oh, look, there's *more* water now' If appropriate you wonder why.

### Extension

Ask the children how much more water they think there is - ask them if they would like to see how much that is. They can then scoop the water out, pouring it into a see-through container, until the original level is achieved. They might like to measure the amount in the new container - this can link to measuring rain in a rain gauge.

**Evaluation - continue overleaf if necessary**