Giant Ice Balls

Your child will love creating giant globes of ice and the reaction that occurs when salt and colour is added.

How to Do It

Help your child to fill a balloon with water by stretching the opening of the balloon onto the spout of the tap. Turn the tap on just a little and fill until the balloon is the size of a large grapefruit. If your child would like a coloured ball, mix two or three drops of dye or food colouring into the balloon using a funnel. Tie a knot in the balloon to seal it. Repeat (with different colours if desired) until you have a few. Freeze balloons.

The next day, help your child peel the balloon covering off the frozen ice balls to reveal orbs of ice. Your child will love to feel their weight and freezing temperature. Place the ice balls on a flat surface (outside on the grass may be best or inside on an old towel in a tray) and carefully sprinkle a teaspoon of salt on each ice ball. Watch and listen as the ice balls make small splitting sounds, crack and begin to melt in front of your eyes. As cracks appear in the ice balls, carefully drip dye into these cracks, allowing the dye to travel into different areas of the ice balls, creating new patterns in the ice.

This is a great opportunity to ask your child open-ended questions: What are you seeing? What do you think is happening to the ice? Why is it melting? What is happening to the food colouring when it is added to the ice?

What Learning is Occurring?

- Basic scientific concepts learning about freezing and melting
- Basic science skills conducting an experiment, giving feedback
- Language and communication
- Sensory developement sight, sound and touch

Age Considerations

- For younger children be aware that as ice becomes smaller it may become a choking harard.
- With older children you might investigate and wonder how and why salt melts and cracks the ice? Consider other experiences and experiments you could do together to discover what else salt can do.

Things you will need

- Balloons
- Dye or food colouring yellow, red, blue or green (optional)
- Jug/bowl of water or kitchen tap
- Funnel (optional)
- Salt
- Freezer
- Space in your freezer

Tips

- Try adding ice balls to a container of water to see what they do. Do they float? Do they sink? Does the colour begin to run?
- Keep salt away from your child's mouth and eyes

