

## Freezing balloons

Freezing water in balloons is an amazing sensory experience and also a great opportunity for children to discover the science behind freezing and melting.

### Learning aims

- Engage in a sensory experience through touch
- Discuss the cause and effect of freezing and melting including predicting what will happen
- Use descriptive language
- Explore mathematical concepts such as comparison.

### Resources

- Balloons (biodegradable if possible)
- Glitter (biodegradable - if possible)
- Food colouring
- Water.



### Activity Outline

You could make these with the children and discuss what they think will happen at each stage or you could make the frozen balloons ahead of the activity so they are ready for children to explore.

1. Add a few drops of food colouring and a little glitter into a deflated balloon before filling with water (to add to the effect, add different colours to each balloon)
2. Once everything you need is inside the balloon, fill with water and tie the balloon (to add additional learning to the activity, fill some balloons with different amounts of water)
3. Shake well to mix the food colouring and glitter
4. Freeze overnight in the freezer or leave outside if it's cold enough
5. Once frozen solid, remove the outer balloon (just snip it and peel it away) and place it in a tray or outside on the ground
6. Encourage the children to explore the frozen balls and discover how do they feel, which is the heaviest, which is the lightest, do they all look the same or different and why?  
Encourage the children to predict what they think will happen as the frozen balls are left out in different environments.

### Extending the activity

- Use different resources to freeze water in, such as rubber gloves. Try using a different number of fingers on each glove by tying them up and see if the children can tell you how many fingers each frozen hand has
- Add plastic animals or objects such as shells inside the balloons. How can children retrieve these and how long will it take?