

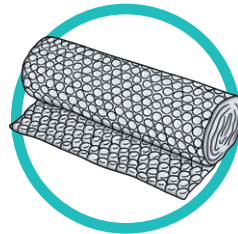


Keeping Ice Solid Experiment



You Will Need:

- 4 Small, clear bowls or similar
- 4 large ice cubes (approximately the same size)
- 1 tea towel/face towel
- 1 piece of bubble wrap, similar in size to the towel
- 1 piece of aluminum foil, similar in size to the towel
- stop watch
- recording sheets



Disclaimer

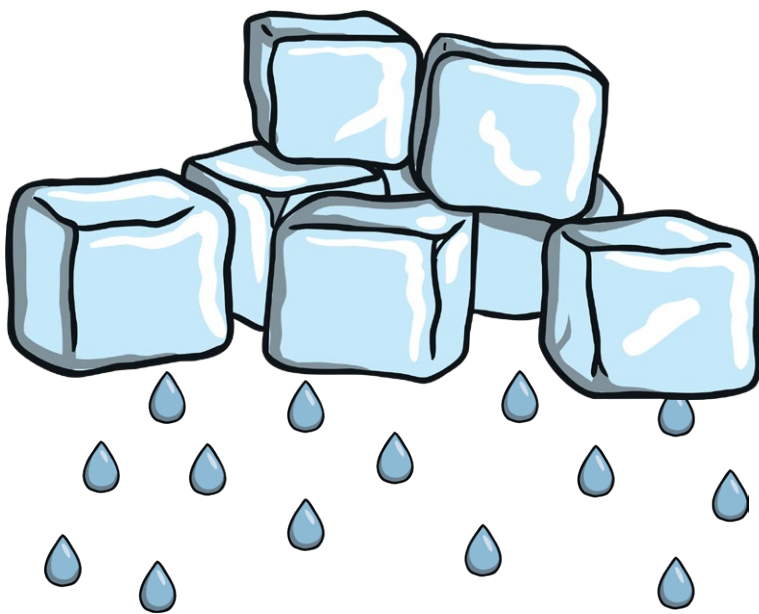
The physical activity contained within this resource may not fit your specific situation. It is your responsibility to decide whether to carry out the activity at all and, if you do, to ensure that the activity is safe for those participating. You are responsible for carrying out proper risk assessments on the activities and for providing appropriate supervision, including changing the activities as appropriate. We are not responsible for the health and safety of your group or environment so we cannot accept liability for any loss suffered by anyone undertaking any activity referred to or described in this resource. It is also your responsibility to ensure that you or the organisation you are organising it for has the relevant insurance to carry out the physical activity. If you are unsure in any way, we recommend that you take guidance from a suitably qualified professional. You may also wish to take guidance as to whether and how participants should warm up before taking part in any activity, and carefully assess any environmental risks and be sure participants have a safe space in which to take part. By using this resource, you acknowledge that it is the responsibility of supervising adults to ensure the safety of children in their care.

Instructions:

1. Place 1 ice cube into a bowl.
2. Wrap 1 ice cube in the towel and place into a second bowl.
3. Wrap 1 ice cube in the bubble wrap and place into a third bowl.
4. Wrap 1 ice cube in the foil and place in the fourth bowl.
5. Set the timer for 10 minutes and provide opportunities to stop and record observations of each bowl.

Observations:

Every 10 minutes, stop what you are doing and look at the 4 different bowls. What can you see? Is there any water in the bottom of the bowls? Is the material that each ice cube is wrapped in wet? Record what you see in your worksheet.



Student Recording Sheet

Draw and write a prediction about what you think will happen to each ice cube.

No Material

Bubble Wrap

Towel

Aluminium Foil

Student Recording Sheet

Every 10 minutes, look at the 4 bowls and write what you see.

	No Material	Bubble Wrap	Towel	Aluminium Foil
10 mins				
20 mins				
30 mins				
40 mins				
50 mins				
1 hour				
1 hour and 10 mins				
1 hour and 20 mins				
1 hour and 30 mins				

Student Worksheet

Which material kept the ice cube solid for the longest amount of time?

Which material did the ice cube melt the quickest while wrapped in?

Did any ice cubes melt faster than the one that was not wrapped in a material?

In the table, write down how long each material kept the ice cube solid for:

	No Material	Bubble Wrap	Towel	Aluminium Foil
Time				

Use the information in the table to make a graph for this experiment.

Keeping Ice Solid Experiment					
Time	1 hour and 30 mins				
	1 hour and 20 mins				
	1 hour and 10 mins				
	1 hour				
	50 mins				
	40 mins				
	30 mins				
	20 mins				
	10 mins				
			No Material	Bubble Wrap	Towel
		Materials			