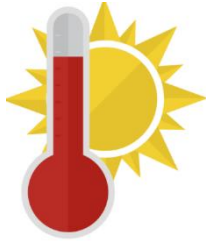


## Why does my hot chocolate go cold?



Why is it cold outside? Why does snow melt? How can we keep warm? This half term, we'll wrap up warm and head outside for a winter walk to spot frosty windows, icy puddles, frozen spiders' webs and steamy breath. Back in the classroom, we'll warm up with a hot chocolate and wonder how we can keep it warmer for longer. We'll experiment to find the best materials for this and, by observing melting ice, we'll discover how it turns into water. I wonder how we can speed up the melting process?



Through the project, we will share what the different heat sources are, how these heat sources affect different materials (such as ice changing to water or a raw egg to a boiled egg), and how this affects the children in their everyday lives. Real experiences such as lighting fires will deepen engagement and understanding. Throughout the project, we will explore the children's understanding of how to keep themselves safe around heat sources and will support the children to learn how to keep their bodies at a comfortable temperature.

To support the children's understanding of heat sources, how temperatures affect materials and how to keep themselves safe around natural and man-made heat sources, we will be reading the following stories:



We're hoping to take some of the children to watch a Snow Mouse production at the Egg Theatre in Bath whilst the rest of the children may be visited by a scientist! The project is predominately science focused and will have the children observing, exploring, noticing, experimenting, predicting, hypothesizing, measuring and recording! The children will be exposed to this language alongside the following project-related vocabulary:

Nouns; ice, water, icicle, snow, paper, wood, plastic, metal, sun, fire, temperature, different/difference, thermometer

Verbs; to freeze, to melt, to heat, to change, to change back

Adjectives; frozen, melt, wet, cold, slippery, smooth, hot, different/difference, hard, soft

Prepositions; in, on, under, on top

**Supporting your child at home. At home you could support your child with this project by:**

- Supporting your child to notice frost, frozen puddles, and ice in the mornings and when you go for walks.
- Supporting your child to notice the temperature when they step outside. How does it compare to the temperature inside? Can they tell you how it feels? What language do they use to describe the temperature?
- Draw attention to changes of state when you cook at home. For example, when cooking pasta, explore how it feels before it goes in the hot water and again afterwards, how has it changed?
- Comment on how food and drinks get colder if they are left on the side.
- Talk about the clothes you wear as the weather gets colder. Do you need a woolly hat today? You'll probably need a coat. What about your hands –how could you keep them warm?