

Extreme Cold

In winter months, snow and ice can look pretty and be great fun to play around in, but freezing conditions can be very dangerous. Here we look at some of the vocabulary and implications of extreme cold.



Hailstorms occur when water droplets freeze in the atmosphere, and fall to the ground. These balls of ice can measure between 5–200 mm. The largest hailstones often fall during a severe thunderstorm. Snow forms higher in the atmosphere where temperatures of less than 0°C (32°F) cause water vapour to turn straight to ice crystals. When these gather together they get heavier and fall as snowflakes. Heavy snowfall is known as a ‘snowstorm’, and strong winds of 35 mph (46 kph) or more turn them into a ‘blizzard’. In blizzard conditions, it can be very difficult to see in front of you, making driving extremely dangerous!

If someone is caught in a blizzard without adequate protection they can also experience frostbite (frozen skin and body tissue) or hypothermia (low body temperature). The ‘wind chill’ can make you feel much colder, too. This is because your body loses more heat the faster the wind is blowing.

Heavy snowfall can also bring the risk of an avalanche – a moving mass of snow that may also contain ice, rocks and uprooted trees. When a large section of snow becomes unstable and begins to move downhill, it can grow in size and pick up speed rapidly. Avalanches have been known to reach 245 mph (394 kph) – about three times the speed of a downhill skier.

Did you know?

- When snow reflects ultraviolet radiation from the sun it can cause 'snow blindness'. People wear sunglasses or goggles in sunny snowy conditions to protect their eyes.
- The world's largest snowflake was 15 inches (38 cm) across and 8 inches (20 cm) thick. It was found in Montana, USA, in 1887.
- Between 1971–1972, Mount Rainier in the USA experienced one of the greatest snowfalls on record with 1,224 inches (31.1 metres) falling that year.
- During the early hours of 30 October 2008, the town of Ottery St Mary, UK, experienced an extreme hailstorm. Although the hailstones were an average size, the hailstorm lasted for about 2 hours!

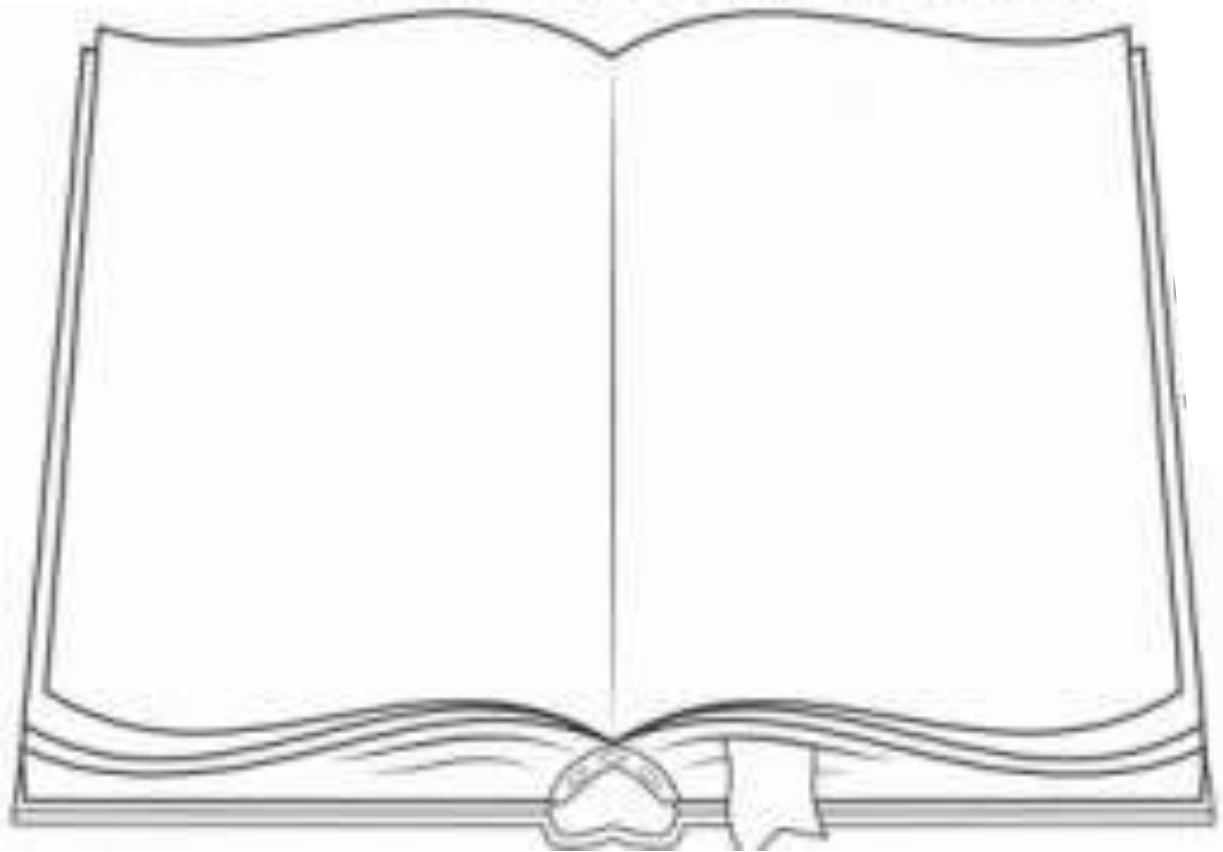
In 1947 and 1963, the UK experienced some of the coldest winters on record. Exceptional snowfall caused snowdrifts up to seven metres deep and thousands of people were stuck in their homes and villages. The army was needed to clear roads and railways and many villages had supplies flown in by helicopter. When the warmer weather eventually came in 1947, the melted snow caused rivers to burst their banks flooding surrounding areas, while in 1963, temperatures below -20°C (-4°F) caused rivers to freeze and blocks of ice were found in the sea.

In March 2018 The Beast from the East hit the UK.

Can you remember The Beast from the East?

If you can, complete this diary describing your experience.

Extreme Cold Diary Worksheet





Extreme Cold Safety Poster

What do people need to do to stay safe in extremely cold weather? Find out the potential dangers, and then design a poster warning people and offering advice on how to stay safe and warm.

Extreme Cold Safety Poster

Design a poster to alert people to the dangers of extremely cold weather and offer advice on what they can do to stay safe.

A large empty rectangular box with a thin black border. In each of the four corners, there is a solid black circle, representing a hole for a poster. The interior of the box is completely blank, intended for the student to design their poster.



Hot or Cold Clothes

Name _____

Directions: Color the thermometer to show when to wear the clothes. Color low for cold. Color high for hot.





hot

cold

