

The Yippittee!

Issue 11 - October 2012

for kids who
are crazy about
conservation!

Winter

Why does it get cold in winter? What is snow? Do fish freeze? How tall was the world's largest snowman? Find out here!

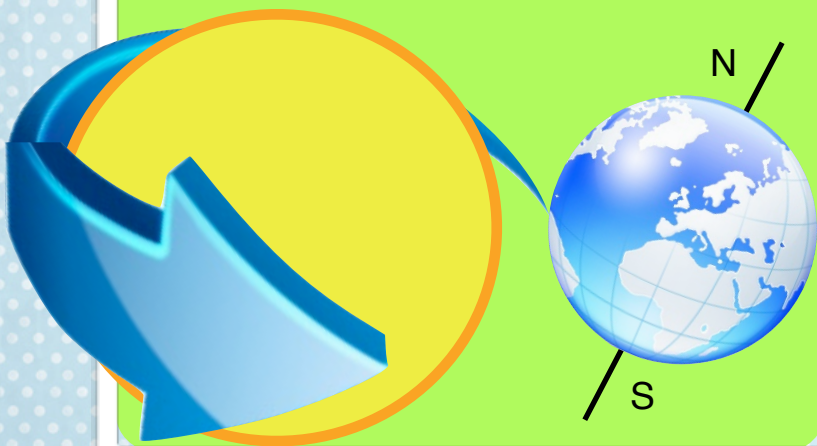
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Why do we have seasons?

Seasons are caused by the Earth's movements around the sun. As the world spins creating day and night it is also on a course around the sun. It takes 365 days (1 year) for the Earth to complete its journey around the sun. This movement creates our seasons.

The earth is tilted, it sits on its side as it circles the sun



Here we can see that the North Pole (N) is pointing away from the sun. This means that the northern half of the world, the 'northern hemisphere', is colder, creating winter.

The South pole is nearer the sun's warmth, and so it is summer here.

FACT: The sun is over 100 times bigger than the earth!

Remember: The Poles always points in the same direction.

They don't call them 'polar extremes' for nothing:

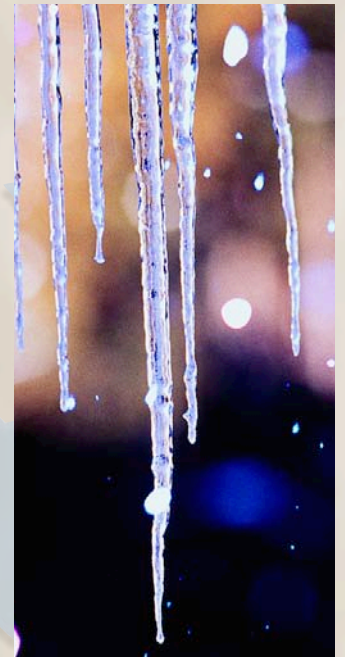
The position of the poles on our tilted earth means that polar summer days see sunlight all day long, even at midnight!

Winters on the other hand are dark all day long whether it is morning, lunchtime or in the middle of the night.

Winter Weather

Now that we understand a little more about why winters occur, let's take a closer look at wintry weather!

Water can take many forms! Clouds are made of water vapour, liquid water falls as rain and when temperatures drop below 0°C then all sorts of weird and wonderful things happen.



Snow

Snow is water vapour that freezes instantly into solid ice without first becoming liquid. Snow droplets then fall to the ground.

Ice

Ice occurs when air temperatures drop to or below 0°C. Ice can be very strong - just 61cm of fresh water ice is capable of holding a 13 ton aircraft.

Frost

Frost is made up of tiny ice crystals which are created when the air temperature drops below freezing and the water vapor in the air freezes.

Icicles

Icicles form when dripping water freezes. The dripping water freezes at the end, causing icicles to 'grow' and become elongated.

Winter Fact File

CC eupho



Coldest place on earth

Where: 'Ridge A' Antarctica

Average winter temperature: - 70°C

14,000 ft above sea level on the Antarctic plateau, it is thought to be the coldest, driest, calmest place on earth and no human has ever set foot there.

AskYukutia.com



Coldest inhabited place on earth

Where: Oymyakon, Siberia, North Asia

Average winter temperature: - 50°C

Just south of the Arctic circle this is the coldest place on earth where you will find humans! They keep warm by wearing animal fur in winter, but their summers are hot.

Gordon Nicoll - theweatheroutlook.com



UK's coldest winter

When: Winter 1963

Lowest temperature: -22.2°C

Blizzards, snow drifts and ice blocks made up the coldest winter in 200 years. So cold that even sea water couldn't escape the icy temperatures, as harbours such as Poole Harbour became frozen in ice.



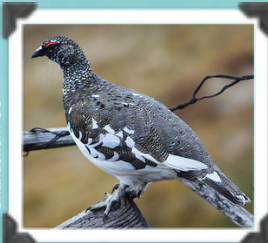
Animals in winter

Winter for animals is a particularly hard-time without jumpers and warm heated houses! But it's not just about keeping warm. Food for many animals becomes hard, sometimes impossible to find. In winter conditions staying out of harms way can also provide new challenges.

Here's a look at some of the different ways that animals survive the chill:

Adapt

Ptarmigan



Summer



Winter

Where: UK, Europe, Arctic, Russia, Asia, North America

With snow on the ground in winter the ptarmigan (with a silent 'p') would be very easy to spot, but it has a trick up its sleeve. In the winter their feathers turn completely white to blend in with the snow and hide from predators!

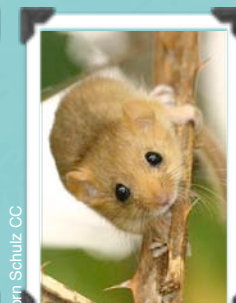
Humpback whale



Migrate

Humpback whales can be found in all oceans on earth. In spring, summer and autumn they can be found in the polar regions eating their favourite food, krill which is a type of shrimp. **In winter** they migrate to the warmer oceans around the equator. These oceans might have less food for the whales but at least here less energy is required to stay warm.

Dormouse



Where: UK, Europe, Russia

Dormice hibernate for 6 months a year! In fact the "dorm" part of its name comes from a Latin word "dormire" which means "to sleep". In hibernation their body systems slow down and their heart rate slows down to below 90% of its normal tree-climbing pace.

Hibernate

Winter Wonders



World's tallest snowman

This snowman is in fact a snowwoman! Named 'Olympia Snowe' the giant figure is just over 37 metres tall with a 100 metre scarf and old skis for eyelashes!



The UK gets an average 33 days of snow fall or sleet a year

Jack Frost

The legend of Jack Frost is said to have come from the time of the Vikings.

Jack Frost is a mythical elf-like creature who is said to be very artistic, turning leaves red in autumn and creating wonderful ice patterns on windows in winter.

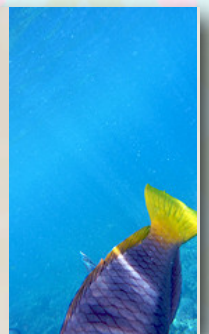
Longest winter road

A 752km (467 mile) road constructed on snow and ice in Canada, known as the 'Wapusk Trail', is the longest temporary road in the world.

The South Pole's winter temperature averages 20°C colder than the North Pole's.

Q. Do fish freeze in frozen ponds and lakes?

A. Water can be a funny thing, it boils at 100°C and freezes at 0°C but water in a lake or pond will only freeze in a layer at the top leaving plenty of liquid water for plants and fish to survive in.



Winter wordsearch



ice
winter
axis
ptarmigan
dormouse
snowman
humpback whale
seasons
frozen
temperature
snow
hibernate

Jokes and colouring in!

Q. How do snowmen greet each other?

A. Ice to meet you!

Q. What do you call a snowman in the summer?

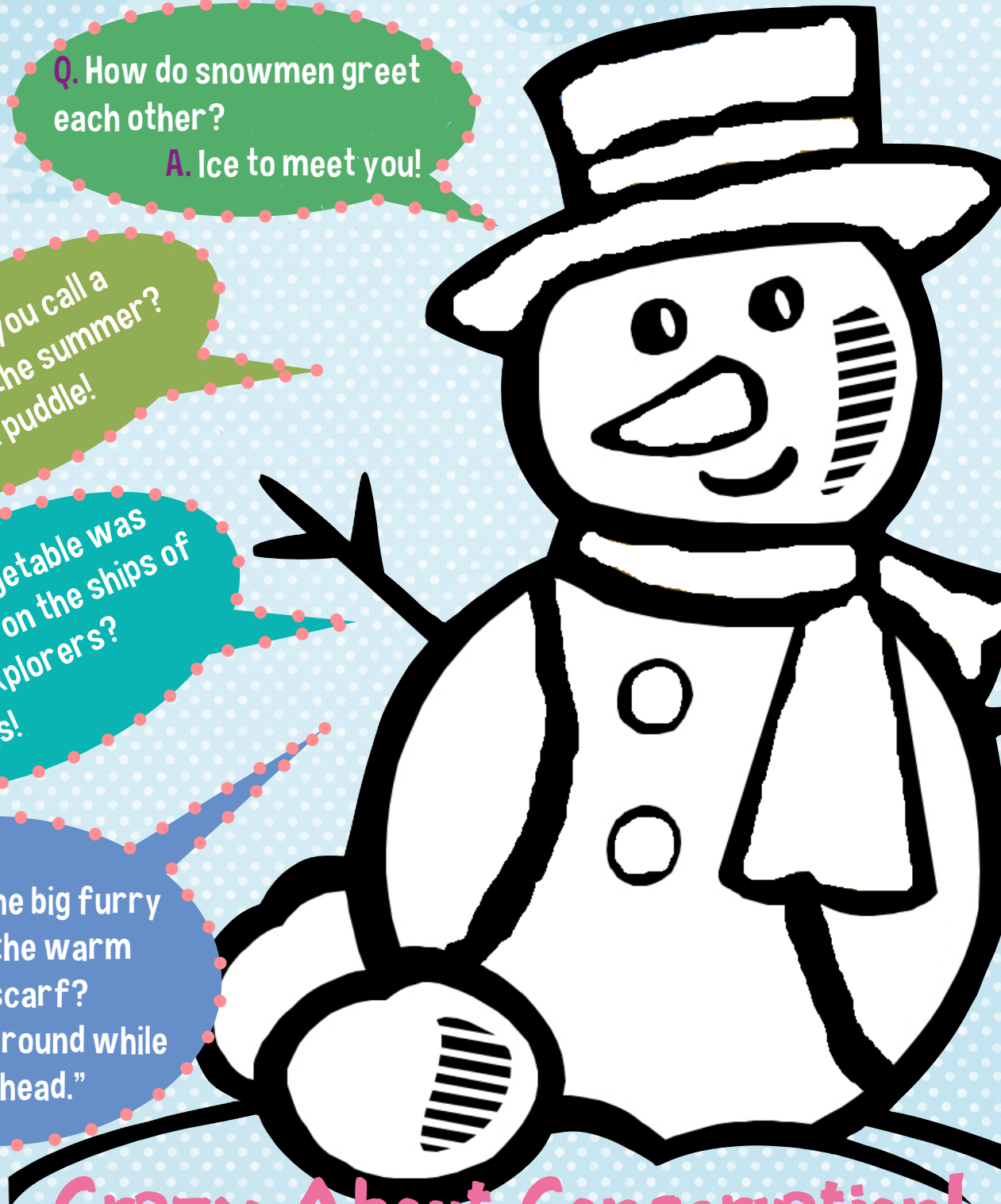
A. A puddle!

Q. What vegetable was forbidden on the ships of Arctic explorers?

A: Leeks!

Q: What did the big furry hat say to the warm woolly scarf?

A: "You hang around while I go on ahead."



Crazy About Conservation!

Send in your letters, jokes, poems, stories or pictures. We'd also love to hear your ideas for future editions of Yippitsee - please, let us know!

Crazy about Conservation! YPTE, Suite 29, Yeovil Innovation Centre, Barracks Close, Copse Road, Yeovil, Somerset, BA22 8RN or e-mail it to us at info@ypte.org.uk