

Green makes White Teachers' Notes

Arctic Animal Identification Game

Print off the sheets of illustrations and animal information - 'animal *identification cards.pdf*' and 'animal *identification sheets.pdf*'

This is a reading and science exercise that needs sharp observation and comprehension skills. It is suitable for mixed ability 8 to 12 year old kids. You may simplify the project for younger or less able learners by asking for only names to be put to pictures and asking for verbal descriptions of the animals rather than using the written examples. It is best used with the story, 'Green Makes White' as animal types will become more readily memorable and exciting. However, you can use a good mammal encyclopaedia or other books on Arctic wildlife in your preparation too.



Preparation

Read the 'Green makes White' story. Look at the black and white illustrations next to the letter at the back. Find their corresponding colour images in the story.

- Talk about **males** and **females** and that **young animals** look different from the adults too; for example the Harp seal and its fluffy white baby.
- Talk about the differences between **Mammals and Fish**. Talk about and define **Predators** and **Prey**.
- Bring Humans into your discussions. Talk about **conservation** and **threats to animals**.
- Give definitions for the words: **Diet, Identification, Appearance, Habitat**. (Tyrannosaurus Rex enthusiasts may well want to learn the scientific names for these animals too!)
- Settle students into groups of 6 or as a whole class.
- Cut out the picture copies into separate cards. Spread them all out onto a table. Let each child choose an animal to describe to the class. Have the written information cut and separated into Name, Appearance and Diet sections. (You may wish to keep the Appearance and Diet cards stuck together if you think it will be too advanced for your students)
- Mix these cards up in a box and hand round the class as though picking out raffle tickets.
- Each child reads out the writing on their chosen card and then together with the rest of the group they can work out which animal it belongs to. You may need to wait for more information cards with further clues to come up before you can find a home for all the cut-outs. You may also want to look back at the story book's illustrations for further clues.
- There is one seal missing from the picture cards. It is **the Harp seal** with its fluffy cream coloured baby. This one is for the students to find in the story or in other books and then draw.
- They can make 'Name, Appearance and Diet' information cards to go with it.

Humans and the Arctic.

Talk about **food pyramids** and **food chains** and where humans fit in. Remind kids that there must be many more fish living in the sea than there are seals to catch them and that there, in turn, must be many more seals in the Arctic than there are top predators like the polar bear or

the Orca whale or the human. Draw or construct an Arctic food pyramid that includes a large layer of prey animals, a smaller layer of immediate predators and a small pinnacle space for one member of a top predator animal. Using the Diet information cards, let the students choose their own examples for their pyramids.

Imagine a Trip to the Arctic!

A creative writing exercise, using the information gathered from the story book and elsewhere. You and your students are off on an Arctic Discovery Trip – imagine how you will prepare for it. (Dress up the paper doll template or draw your own. They can be self portraits).

- Describe how you will keep warm?
- What you will eat?
- Where will you sleep?
- What might you see?
- What dangers will you face?
- What might your feelings be?
- Will you be surprised or frightened at times?
- Will you be excited, cold, hungry, warm, tired, comfortable etc?
- Maybe you will make a friend in the Arctic who can help you survive there?
- How will you help to look after the Arctic when you are there and when you return back to your own country?



NAME

Polar Bear

(Ursus maritimus)



APPEARANCE

This is a large, powerful animal with creamy or yellowish fur and black eyes and nose. It has big, wide paws used for swimming and walking in the snow without sinking. It can be found throughout the Arctic but is mostly seen around the ice's edge by the ocean.



DIET

Its favourite food is Ringed seals, but it hunts and eats all Arctic seals; sometimes even young walruses. It can eat whales if they get trapped in ice and dead animals too, when it finds them.



NAME

Ringed Seal

(Pusa hispida)



APPEARANCE

This is the most common seal in the Arctic, with a speckled brown or grey coat of fur. There is a pattern of dark rings upon its back and sides.

Its babies (called 'pups') are born white. The mother digs a tunnel in the ice to have her pup in. She also makes a breathing hole at the top. Seals are excellent swimmers and divers.



DIET

This common seal likes to eat fish (like Arctic Cod and Capelin) and shrimps and shellfish too.

NAME

Ribbon Seal

(*Phoca fasciata*)



APPEARANCE

This slim, athletic seal is both fast in water and on land. It has a dark, almost black coat with beautiful bands of white around its neck, front flippers and the lower part of its body – almost as though it was wrapped up in ribbons!



DIET

This seal also likes to eat fish, shrimps and shellfish.



NAME

Hooded Seal

(*Cystophora cristata*)



APPEARANCE

This is a big seal with a blackish face and with lots of black patches splattered upon its silver, grey body. The males have a big, floppy nose that they can blow out into a most peculiar pink balloon! They do this when they are angry or surprised or when they want to get the attention of a female seal.



DIET

This seal also likes to eat fish, shrimps and shellfish.

NAME

Arctic Fox

(*Alopex lagopus*)



APPEARANCE

This is a small, furry animal that looks a bit like a dog. It has a thick, furry tail and ears like triangles! It has white fur in Winter and in the short Arctic Summer it turns a greyish brown.



DIET

This small, four-legged animal eats animals like voles and birds and also baby seals.

If it finds dead animals, it will eat those too. It is frightened of polar bears but will often try to steal some of their food!



NAME

Narwhal

(*Monodon monoceros*)



APPEARANCE

This is a small whale with lots of dark grey speckles across a whitish body. The male has an amazing, long horn growing out of its mouth – it looks like the spiral horn of the imaginary unicorn!



DIET

This small and freckled whale eats fish and shrimps.

NAME

Beluga

(Delphinapterus leucas)



APPEARANCE

This creamy white whale has no pattern on its body and has no fin on its back. It loves to sing, whistle and make clicking noises to its babies and other members in its group!



DIET

This musical whale likes to eat fish and shrimps.



NAME

Orca or Killer Whale

(Orchinus orca)



APPEARANCE

This is a dramatic looking, black and white whale with big, rounded flippers and a grey curling shape on its back. It has a large white patch above its eye and a white chin and other curling, white shapes on its stomach.



DIET

This small-mouthed, black and white whale is a fierce hunter and eats fish, seals and even other whales.

NAME

Walrus

(*Odobenus rosmarus*)



APPEARANCE

This is a very big and fat animal related to the seal family. It has a thick, wrinkled skin that can turn a pinkish colour. It has two long white tusks coming out of its mouth. It lives in big groups.



DIET

This big, seal-like animal dives to the bottom of the ocean to eat shellfish. It scrapes at rocks with its two tusks and feels around in the dark with its whiskers when it feeds. Sometimes it can even eat birds and young seals.



NAME

Blue Whale

(*Balaenoptera musculus*)



APPEARANCE

This is a huge whale – the biggest animal on Earth! It lives in the ocean and has a long head and a long body. It is a blue-grey colour with some whitish patches across it. It has a big striped throat that can stretch out when feeding and is very rare because of over-hunting by humans in big whaling ships.



DIET

Although it is a huge, huge animal, it eats one of the smallest creatures in the ocean, but it needs to eat enormous amounts of them to stay alive! These tiny things are called 'zooplankton' or 'krill' (they look like a tiny shrimp). This long whale gulps mouthfuls of water into its stretchy throat and then sieves this 'plankton' through fibres in its mouth.

NAME

Bowhead Whale

(*Balaena mysticetus*)



APPEARANCE

This is a big-headed whale with a white lower lip with black spots on it. The rest of its body is black with a few bits of speckled white under and around its tail. It has fibres in its mouth that it uses to collect up small creatures in the sea. This whale, like so many other animals, is in danger from pollution from industries in and around the Arctic.



DIET

This big whale eats huge 'clouds' of tiny animals ('Krill' or 'Plankton') that live in the ocean.



NAME one more.....



APPEARANCE



DIET