

**PODAR**  
INTERNATIONAL SCHOOL  
Udupi

## FROM THE PRINCIPAL'S DESK

### CONTENTS

1. Did You Know?
2. If I lived in an Igloo...
3. The Elves Save the Day!
4. Animals of the Arctic and Antarctic
5. Riddle Time
6. If I came across a Polar Bear...
7. Interesting Facts About Penguins
8. Glaciers and Climate Change
9. Movies and Books Recommendations
10. Movies and Books Review
11. The Inuit
12. Careers
13. Art from the Poles
14. Spotlight @PIS
15. Brain Play
16. Bites and More

**"Take pride in how far you've come. Have faith in how far you can go. But don't forget to enjoy the journey."**



**Shri Uday Kumara A.N**  
Principal

In this fast-paced world of the 21st century, education is changing at an accelerated speed. We at PIS, Udupi have always tried to inculcate creativity, Critical thinking skills, innovation and divergent thinking along with proper values of life for its students. The school conducts an array of activities throughout the year, bringing out all these skills among children.

This edition of the school magazine "The Curio Mag" gives space to imagination and unlocks the thoughts and values of children. The students were fascinated by the theme on Poles - The Frozen Ends consisting of the Arctic and Antarctic, and are always looking for a way to delve deeper into the realm of the cryosphere, including how climate change is impacting the world's ice caps and glaciers - as well as what those changes mean for people living far from the poles. The climate, the flora, the fauna and how the Poles impact our lives. While learning about facts, it also allows them to express themselves creatively using different forms of artistic expression.

The theme on Poles - The Frozen End has given the students an insight into writing articles, scripts, content writing, compiling information and story writing. Since it is one of the efficient learning modules for self-development, to learn and to express one's thoughts and ideas.

In fact, we were surprised and glad to see the articles on "Glaciers and Climate change" about the "animals of the Arctic and the Antarctic" which most of us have almost forgotten. The book reviews, movie recommendations have been infotainment.

I congratulate the entire team for their whole-hearted support, hard work and dedication in making this magazine very creative. I am sure that the positive attitude, sincere efforts and innovative ideas exhibited by our young writers will surely take our readers to the fantastic world of fantasy, imagination and innovation.

I take this pleasant opportunity to thank all our contributors and reviewers for making this editorial a special and unforgettable one. Suggestions and feedback are welcome from all our readers for the overall improvement of the magazine.

Regards,  
Principal

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Samarah Mathias-Grade IX, Hrithik Sebin-Grade IX

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# Did You Know?

The average ice sheet thickness in Antarctica is 1 mile.

When you are standing on the North Pole, any direction you point is South.

There is no land in the North Pole.



The date is different on different sides of the North Pole.

More than 300 large lakes exist underneath the ice sheet in South Pole.

Antarctica nearly doubles in size in the winter months.



Antarctica is the only continent without reptiles and snakes.



There is no land in the North Pole.

Both the Poles do not have a time zone.



The North Pole does not belong to any country.

Sled dogs have been banned from Antarctica in 1994.

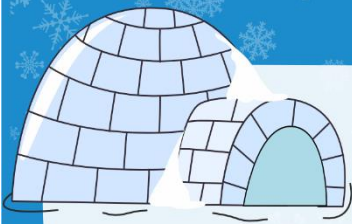
The largest recorded iceberg in South Pole was bigger than Jamaica.

At the North Pole, the sun rises and sets just once a year.



NORTH POLE

SOUTH POLE



## If I lived in an Igloo...

If I lived in an igloo, then I would enjoy the pleasure of it. It would be so fun to live in such a nice house. Whatever I see there will only be made of ice. I will decorate my house very nicely. Outside my house I will make a snowman. My Igloo will be way larger than me, my family and friends. I will invite my friends for a sleepover. After that I will call my family members to enjoy with the snow and ice. I will do ice skiing there.



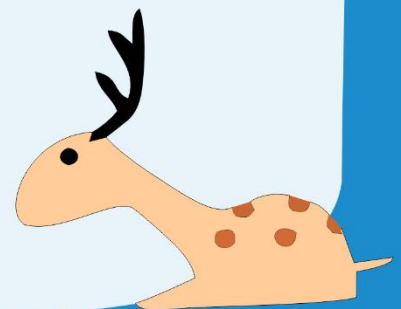
**Izma Banu**  
Grade – VI

It isn't as cool as you think. It is actually warmer inside. You are in the wind, and snow acts as an insulator. Once you have enough people inside, their body heat warms the place up. In time, the heat of the bodies and oil lamps cause the inside of an igloo to slightly melt them, increasing the insulation effect and strengthening the igloo.

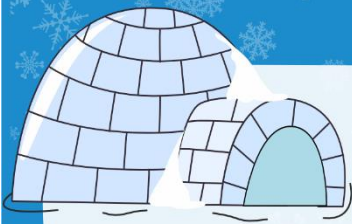
You get this equilibrium effect where the shell is frozen, but inside the air is warm; as warm as spring time, and just warm enough that you will not freeze to death, presuming that you keep the igloo inhabited. You sleep on a ice shelf, which is covered in layers of animal hides, which keeps the ice from melting while keeping you warm. The animal hide is also used as a blanket and everyone cuddles up to feel the warmth. Snow is a very good insulator, so an igloo is easy to heat. A Coleman lantern will keep the temperature nice and toasty, around zero degree Celsius. You don't want to get much warmer than that, because the inside will melt. This is not the end of the world, but Ice is not a good insulator, so you don't need to worry much. Another very interesting thing is that snow is also a very good insulator and so the inside of an igloo is very 'dead'. It's actually really soothing. So even if there is a storm outside, it's nice and quiet inside.



**B. Prahallad Nayak**  
Grade – I B







## If I lived in an Igloo...



I would be wearing a furry coat to keep me warm from the bitter cold outside. When the slight warmth crept in and it became warm enough to go outside, I made snow angels, built a snowman, had snowball fights and went sledging with my friends!

Living in an igloo is not always easy. You have to go outside even if it is very cold to hunt or fish for food. Though igloo life is hard, I enjoy little things like waking up to enjoy my cup of hot chocolate. I also get to enjoy some spectacular natural phenomenon such as the northern lights, which you don't get to see in cities. In igloo life, I have learned to live in harmony with nature and my loved ones. I love living in my igloo!



Aditi Pai  
Grade – VIII

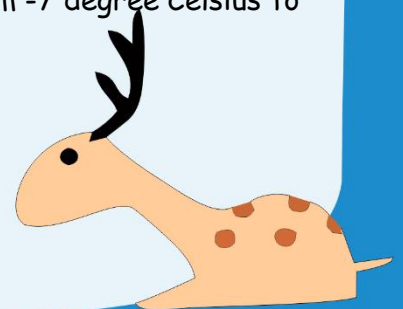
Living in an igloo is a unique experience that requires careful preparation and attention to the environment. The dome-shaped structure of an igloo provides insulation against the cold outside and traditional Inuit clothing and small heaters can help keep you warm. An Igloo also known as a snow house or snow hut, is a type of shelter built of suitable snow. Although igloos are often associated with all Inuit, they were traditionally used only by the people of Canada's central arctic and Qaanaaq area of Greenland.

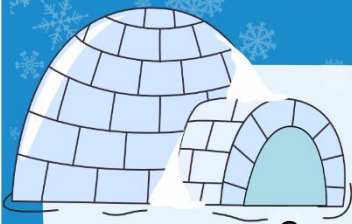
### Community of Igluit

Other Inuit tended to use snow to insulate their houses, which were constructed from whale bone and hides. Snow is used because the air pockets trapped in it make it an insulator. On the outside, temperatures may be as low as -45 degree Celsius, but on the inside, temperature may range from -7 degree Celsius to 16 degree Celsius.



Ramya Sonewane  
Grade – I B





## If I lived in an Igloo...

One early chilly morning, I woke up inside a magical igloo. The walls were sparkling like diamonds, shimmering with different shades of blue and silver. Outside the snow was a soft fluffy carpet like a ground made of powdered sugar. I built a cute mini-snowman with a carrot nose and a cap on his head. Inside my igloo I had a beautiful fairyland set up for my Barbie doll.

There was a special corner with snow-filled fluffy pillows and a rainbow-coloured bed. At the other side of the igloo there was a set of my favourite fairy tale books. For lunch I had hot creamy soup in a bowl, carved out of shimmery ice. It was the yummiest soup I ever tasted. I would play with my toys in the snow, make snowballs and play with my friends around. I had colourful cotton candies that melted in my mouth like sweet snowflakes. And so my day in an igloo was a magical wintery wonderland where every moment was full of new icy adventure.

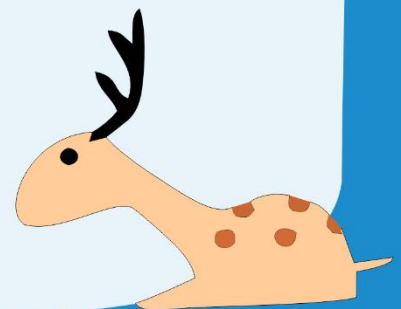


**Arya Pai**  
Grade – II A

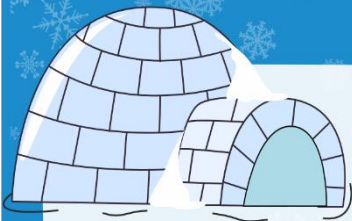
Living in an igloo is like living in a cozy snow castle. It's different from other houses because it's made up of snow and ice. Inside the igloo it's warm and cozy and everything looks different. We made a small fire in the centre of the igloo for cooking our meals and staying warm. The ice walls keep the warmth in and we use animal furs and blankets to stay cozy. When the sun is out, the ice walls let sunlight in, making everything inside bright and beautiful. I can build a snowman and have snow ball fights. I can also watch animals such as reindeers, penguins and polar bears. Living in an igloo is a wonderful and simple experience.



**Reyansh Vivek Shenoy**  
Grade – II A







## If I lived in an Igloo...

An igloo ( Inuit language: iglu) or ' Snow house' is a shelter constructed from blocks of snow. Generally in the form of a dome. Although igloos are mainly associated with the Inuit people of Canada's Arctic ( as well as being found in Greenland). They are also a part of the Canadian identity.

Igloo, also spelled as Iglu, is also called aputiak, a temporary winter home or hunting -ground dwelling of Canadian and Greenland Inuit( Eskimos). The term igloo or iglu, from Eskimo iglu (house) is related to Iglulik, a town and Inuit people the igloo is usually made from blocks of snow and dome shaped. It is used only in the area between the Mackenzie River Delta and Labrador, Inuit live on sealskin or more recently ,clothes to build the igloo. The builder takes a deep snowdrift of fine-grained compact snow and cuts it into blocks with a snow knife, a sword-like instrument originally made of bone but now usually of metal.

- The Eskimo word igloo means shelter. It is dome shaped.
- A short door opening will be present in front of the dome.
- Eskimos build igloos during the winter season. Igloos to keep them warm.
- The insulating property of snow enables the igloo to be warm inside. The temperature remains warm by body heat alone.



Y.B. Dhanush  
Grade – III A

## The Snug igloo homes in Manali

If I lived in an Igloo, it would be very cold! First, I would make a fire to stay warm. Next, I would sip a hot coffee and relax. As it is build with snow bricks, inside.

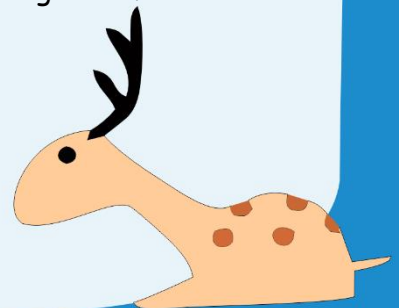


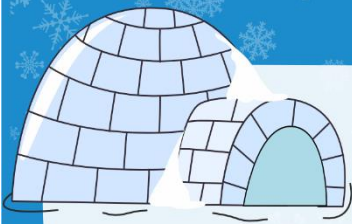
Inside the Igloo is a kitchen, dinning area ,swimming so that I could enjoy my vacation in an igloo. I would take many photographs of nature, snow animals from peeping through the small igloo door.

I can come outside to enjoy the snowfall, so living in an igloo is fun.



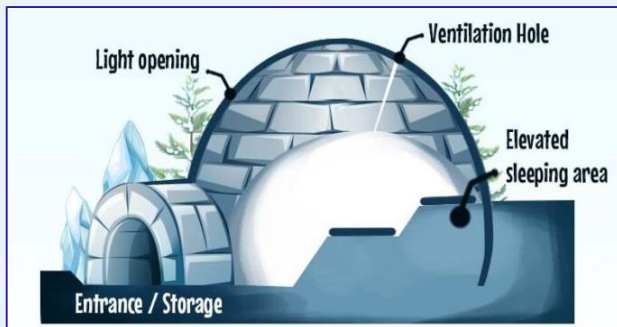
Prajna R Shef  
Grade – II B





## If I lived in an Igloo...

An Igloo also known as an Iglu comes from the Inuit word for house! Or Shelter. It was traditionally associated with Inuit's when they went on their hunting trips and they built a temporary house to protect them from the cold.



If I lived in an igloo my house would be made of ice and snow. It would be like a cosy snow fort. Igloos are special houses that people build in very cold places, like the Snowy Arctic.

Inside my igloo everything would be white and cold. The Walls would be big strong block of snow, which would keep me warm. I would wear warm clothes made from animals to stay warm. Around my igloo there would be lots of snow for playing. I could make snowmen; have snowball fights and even slide down snowy hills.

Living in an igloo means I would have to learn important things. I would learn how to build how and fix my house find food like fish and stay safe in the Snowy land I would learn all of this from my family, who know lots of Snowy Secrets.

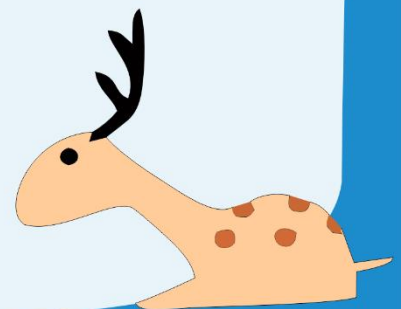


Even though it might be cold and tough Sometimes. Living in an igloo would be an awesome journey I would get to enjoy the snowy world and Learn Cool skills.

If I ever lived in an igloo I would have lots of fun.



**Shloka Prabhu**  
Grade – II A







# The Elves Save the Day!

I  
†

was the biggest moment of the year at the North Pole. All eight reindeer were hitched up, and Santa's sleigh was flying across the Christmas Eve sky.

The elves waved good-bye, cheering for Santa and the reindeer as they began their trip to deliver toys.

Well, let's go back to the workshop," Burt said to the elves. "It's time for us to clean up for the day."



As the elves put away their tools and swept the floor, Bud realised that a teddy bear little Jessica wanted for Christmas had been left behind.



"Oh, no!" Bud said. "We accidentally put a stuffed puppy dog in Santa's bag for Jessica instead of a teddy bear!"

Bud quickly called Santa on the reindeer radio to tell him the bad news.

"Jessica will be heartbroken if she gets a stuffed puppy dog instead of a teddy bear," said Santa. "Why don't you and the elf emergency crew meet me at my next stop and bring Jessica's teddy bear."

So Bud and the elf emergency crew took off on their flying reindeer with the teddy bear to meet Santa's sleigh.

They flew all around the world until Bud spotted Santa's sleigh on a house rooftop delivering toys.



"There's Santa's sleigh!" exclaimed Bud. "Let's go!"

The elf emergency crew quickly landed their reindeer on the rooftop and Bud delivered the teddy bear to Santa Claus.

"Ho! Ho! Ho!" Santa laughed. "Jessica will be so happy to receive this teddy bear. You elves have saved the day!"





# Animals of the Arctic and Antarctic



Earth unique forbidding ice creams of the Arctic and the Antarctic have revealed a trove of secrets to Census of marine life explorers, who were especially surprised to find at least 225 species live both in polar seas despite a distance of more than 13,000 kilometers distance in between Arctic and the Antarctic share only a few living animals species , for example, Arctic hosts many land animals such as Arctic Foxes and Arctic Wolves, Arctic Hares and funny - looking lemmings, mighty Polar Bears, musk, Reindeers while there are no land animals in Antarctic. Only creatures adapted to live in cold waters are found both in Arctic and the Antarctic such as species of Whales and Seals. Arctic is home of Walruses where as many Leopard Seals hunt in Antarctic.

## Walrus: -

Walruses are one of the largest seals or related to the seal species living in the Arctic Circle. The species of walruses can be grey, brown or reddish depending on the weather. Walruses can weigh 1,000 - 4,000 pounds. Walruses can be long as 9 - 14 feet. Their most important survival tools are their tusks. Walruses can live on ice floes for a long period of time. Walruses' average life span is forty years, unless humans or natural enemies hunt them normally. Walruses eat 3,000 - 6,000 clams per eating.



**B. Prahallad Nayak**  
Grade - I B

## Seals: -

Seals are semi aquatic marine animals. They prefer cold sea water and they are excellent swimmers. Most of the seals live in the Arctic and the Antarctic waters. They feed in water and breed on land. They mostly eat fish. They are fin footed. Seals have thick layer of fat called blubber under their skin to keep them warm. There are around 33 species of seals. Seals live on average for 25 - 40 years. Females live longer than Males.

Penguin and polar bear are two different types of animals found in the Arctic and Antarctic region. Penguins live in Antarctica (to the South). They are flightless birds with flippers instead of wings. Polar bears live in the Arctic to the North. They have strong legs and large flat feet with help them to swim and walk on ice. PENGUIN eats squids and fishes. While polar bear mainly eat animals like seals, but overall both penguin and polar bear love to eat fish.



**P N Ayur Rao**  
Grade - I B







# Animals of the Arctic and Antarctic



The Arctic and the Antarctic are geographic opposites and not just because they sit on opposite ends of the globe. They also have opposite land sea arrangements. In the Arctic, there is an ocean surrounded by continents, while the Antarctic is continent surrounded by the oceans. Both the Arctic and Antarctic are very cold because they get less sunlight. Beside this severe cold temperature.

At least 235 types of cold loving species are found in both the places ranging in sizes from whales and birds to small marine snails, sea cucumber, etc. Big animals migrate to both the places whereas small species spread over under water. When confronted with the polar winter, animals adopt different strategies to survive. Many of the animals living here have outer layers of dense fur. Under this fur there is a thick layer evolved to keep safe and warm. Many marine animals have large eyes to help them spot prey and predators in the dark water.

Polar bears and Arctic Foxes are adapted to the extreme weather of this region. Walruses and seals, whales live in the ocean. Many types of Penguins including Emperor Penguin live here.

Coming to key part, Antarctic food web are krill, a small shrimp like creature that is great majority of animals and birds feed upon. Beside this even there are few plants with tiny single cells like phytoplankton that float in the upper layer of the sea. Some of the animals are dependent on this small plants. In Arctic animals are adapted to eat Lichen, a moss which grows on plants of this region.

The poles of this region are extremely cold and dry. It also has long days and nights. If any one wishing to visit, be sure to wear warm clothes.



Nishma Shetty  
Grade – II A





## ANIMALS OF THE ARCTIC

The Arctic is an ocean, covered by a thin layer of perennial sea ice surrounded by land. ("perennial" refers to the oldest and thickest sea ice)

### Different types of animals are found in the Arctic:

While on an Arctic trip, you can find many animals roaming on the land, such as Arctic foxes, hares, seals, walrus, caribou reindeer, lemmings, orca, penguins, wedding seals etc.

### Adaptations in Arctic animals :

Animals that live here have to be ready to handle cold, snow and ice. All Arctic animals have found ways to keep themselves warm. When animals find special ways to handle their environment, scientists describe it as an adaptation. There are many different kinds of birds and mammals that live in the Arctic Circle.

### Fur and feathers :

Both polar bears and snowy owls have features that protect them when they are out hunting in the Arctic. The polar bear is probably the first animal most people think of when they think of Arctic animals. Polar bears are famous for their thick white coats of fur, but their skin helps keep them warm too. Polar bears have black skin, which helps keep them warm when the sun is out. Likewise, snowy owls are covered in thick, fluffy white feathers. The feathers help trap warm air close to their skin. They even have feathers on their legs! Their feathers keep snowy owls warm.

### Blubber :

Seals and whales that live in the Arctic Ocean need to keep warm too. Both seals and whales have thick layers of blubber or fat on their bodies. Blubber is sort of like a coat'. It protects the whales and seals' organs from extreme cold.

### Digging burrows:

Some animals have thick fur or feathers, but also use other adaptations to protect them from the cold. Animals such as puffins and arctic hares make burrows or tunnels so that they are out of the wind and snow. Puffins dig burrows in the sides of cliffs when they lay their eggs, to protect their chicks.

To conclude, there are many animals that live in the Arctic Circle . All Arctic animals have developed adaptations to help them stay warm in the extreme cold. Arctic animals use adaptations such as thick fur or feathers, having blubber under their skin or making burrows to hide in.

Many different species of animals live in cold environments. They have adapted in many ways to survive the harsh climate and conditions.

Animals that live in cold climate tend to be larger, so their body mass-to-surface ratio is higher.



Kush Shetty  
Grade – IB







# Animals of the Arctic and Antarctic



## Antarctic and Arctic animals how they live and how they adapted for living

### Introduction:

Antarctic and Arctic is a very cold region and is permanently covered with thick ice sheets, human settlement is not seen in this continent, which is southern polar region & extremely cold as it is covered with snow.

### Some of animals and birds in this continent:

Bison , Arctic fox , Eagle killer whale ,moose Narwhal , penguin, polar bear , puffin , Rein deer seal , Snow owl , walry, Leopard seal orcas , Arctic dog, Hooded seal, Krill, Fur seal , Snow goose , Musk ox, etc.

### How they live:

- ❖ All animals and birds have thick water proof & wind proof coats, the layers overlap each other forming a good protection from the wind even in harsh conditions.
- ❖ In addition to providing solution bubbles also manipulates animal blood vessels to help it to stay warm.
- ❖ Small extremities allows seals & penguins to hold on to their heat every efficiently.
- ❖ All animals and birds trek 50-120 km over Ice to breeding colonies which can contain up to several thousand individuals.

### How they are adapted to this continent:

- ❖ Their bodies are streamlined.
- ❖ Their wings are shaped like flippers that help them to fly underwater.
- ❖ They have very thick skin with a lot of fat stored under it that's keep them warm.
- ❖ Animal and birds huddle together in groups of thousands so as to keep them warm.
- ❖ Penguins have black feathers that absorbed heat from sunlight and keep them warm.
- ❖ They have solid bones that enable them to stay underwater.
- ❖ Their layer of fat under their skin.



Harshavardhan B Y  
Grade – IB





## A Brief Introduction to Arctic and Antarctic Wildlife

The Arctic is in the North Pole and the South Pole is in the Antarctica. Based on these vertical maps with North Pole on the top and South in the bottom, we can see that the Arctic is an ocean surrounded by land, while Antarctica is land surrounded by ocean on all sides.



The North Pole is in the middle of the Arctic Ocean which is surrounded by the land masses of North America, Europe and Asia so there is a land connection meaning that land animals can more easily reach the Arctic unlike Antarctica where animals must be able to swim or fly across hundreds of miles of frigid and storm-prone ocean even at the narrowest point. Both North Pole and South Pole land masses occupy an extremely low temperature areas on Earth. This way, the life-forms that exist there require a lot of effort for adaptation to its atmospheric conditions. Penguins, Polar bears, Polar Hares, etc. are common sight here.

### The ARCTIC HARE

These wide variety of wildlife include land mammals, birds and other animals. Land mammals are those animals that live on Land and are mammalian. Below given is the image of Arctic Hare, which is a land mammal.



**Arctic Skua** is a polar bird that usually feeds on carcass and other dead bodies.

**Green Land Shark:** The largest fish in the Arctic, so strange as to be almost other worldly. Greenland sharks live mainly in the ocean depths and like some other cold blooded Arctic animals' live life in slow-motion-for hundreds of years ,they are the longest living vertebrates known.



U V Nimisha Rao  
Grade – II B





## Discovering The Wonders of The Arctic and The Antarctica

Welcome to the frozen worlds of the Arctic and Antarctica, where incredible sights remarkable creatures await for your exploration. Let's take a closer look at the magic that lies within these distant polar regions.

### The Arctic's charms:

The Arctic might be a small ocean but it is home to some of the most dazzling sights on Earth. Have you ever heard of the Northern lights? These colourful lights dance in the night sky, creating a breathtaking show and guess who calls the Arctic home? Polar Bears! These powerful creatures are built to handle the cold and ice and they're great swimmers, using the frozen sea as their playground.

Yet, the Arctic is facing a huge challenge. Climate change is making the ice melt, and this is bad news for polar bears and other animals they are struggling to find food and place to live, its up to us to take care of our planet and help protect the Arctic's beauty .

### Antarctica's Secrets:

Now, lets head to the opposite end of the earth. Where Antarctica sits. This place is the home to the largest ice sheet ever, covering almost all the fresh water ice on our planet. Despite the ice cold, Penguins, Seals and sea birds live here! They have learned to survive in this tough environment, showing us how nature can be super creative.

Antarctica has a cool history too. Once upon a time, it was a forested land but over many years, it transformed into the frozen desert we see today, Thanks to the Antarctica treaty, scientists can explore this special place and learn its secrets without harming it.

### Inuit smart ways:

Imagine living in the Arctic. Where its super cold. The inuit people are experts at surviving there. They make cozy igloos and wear warm animal skin clothes. They also eat protein packed foods like seal and whale and when its comes to moving around, they use sled pulled by dogs, its all about working together and using smart tricks to stay warm and safe.

Today, the inuit keep their traditions while enjoying modern things too. They have comfy homes and use both old and new ways to get around. Its mix of their history and today's world, showing how they are really good at balancing both.

### Special polar creatures:

The Arctic and Antarctica are like zoo full of unique animals. In the Arctic, you will find polar bears and sneaky Arctic foxes. Down in Antarctica, Penguin's, Seals, Whales and sea birds steal the show. These animals are pros at staying warm and finding food in icy places. But there is a problem climate change and pollution are putting their home at risk. We need to step up and help protect them.

As ewe explore these amazing places, let's remember that we are all part of the big picture. By learning from nature and taking care of our planet, we can keep the magic of the Arctic and Antarctica alive for generations to come.



**Nathaniel John Benette**  
Grade – IV A







# Animals of the Arctic and Antarctic



## POLAR BEAR:

These are one of the most well-known animals that live in the snow. They weigh up to 600 KG and are expert swimmers! They spend most of their time traveling on the ice, looking for mates and hunting for seals, which they eat for food. Polar bears have thick fur and a layer of fat under their skin that keeps them warm in the coldest environments. They live in areas where the temperature can drop as low as -40°C.



## ARCTIC FOXES :



These are small to medium-size canids native to the Northern Hemisphere and Arctic regions. Their size is from 46-68cm. They have large triangular ears, short muscles and long legs relative to their body. Their dense fur coats range in color from silver-gray to brown-red based on the season, with white underbellies. Arctic fox feet are bushy with furry soles that protect them from the cold and help them move quietly over snow.

## MUSK OXEN :

They are built for the cold. They have a thick coat of fur and an insulating undercoat that helps protect them from the cold Arctic winter. They can also find food in the snow, using their sharp hooves to dig through the ice and snow to find grasses, roots, tundra and mosses.



## WALRUS:



They are generally found in the Arctic seas shallow waters of the North Pole. They have huge blueberry bodies to keep them warm in the very frozen seas where temperatures often drop below zero degrees Fahrenheit. Walrus have large tusks that they use to keep their breathing holes open under the ice and for self defense.

## ARCTIC HARE:

Also known as the polar hare or the white hare, found in Arctic regions. As the winter draws near, the outer coat of the hare gets thicker and acts as a robust barrier against chilly winds, harsh winter rains.



## ARCTIC WOLF:



They live in the Arctic tundra. They are well adapted to living in cold environments and have thick fur that helps keep them warm. Arctic wolves also change color depending on the season; their coats turn white in the winter to help camouflage them against the snow. During the summer, their fur turns brown or grey.

## GENTOO PENGUIN:

The Gentoo penguin is a species of penguin that is found in the wild, with an average weight of around 15 kg (33lb). The height of a Gentoo Penguin can range from 121cm to 140 cm. It's easily distinguished from other penguin species by its orange-red beak and feet and the white patches on its head.



## HARP SEAL :



Harp seals have thick, oily fur and lots of blubber to help them stay warm in the frigid waters of the Arctic. Baby harp seals keep their fluffy white coat until they are about two weeks old. By then they shed it.



Krithi Radhakrishna Bhat  
Grade – IV A





## ANTARCTIC REGION

The Antarctic is a polar region around the South Pole part of the Earth. It is also the world's tallest, darkest, coldest and iciest continent. It is roughly the size of the US and Mexico combined and is completely covered by a layer of ice.

### ANIMALS OF ANTARCTIC REGION:-

1. Emperor penguins are the largest penguins in the world. They can grow up to around 115 to 122 cm tall—around the size of an average six-year-old child. Emperor penguins live in large colonies composed of around 5,000 to 10,000 penguins. These colonies are called "Rookery," "Waddle," or "Penguinery."

2. Leopard seals are unlike their chubby cousins. Leopard seals have long, muscular bodies with exceptionally powerful jaws filled with serrated teeth. Their jaws can open to 160 degrees and clamp down with incredible force.

3. Wandering Albatross - Snowy albatross or Goonie is a white-winged albatross. Large seabird, which has a circumpolar range in the Southern ocean.

- Orca - Also called the killer whale. It is a toothed whale belonging to an oceanic dolphin family. They feed on fish & Squid like other odontocetes do, but will also target seals, sea birds and even whale species bigger than themselves.

4. Petrel-Antarctic petrels have chocolate-brown and white wings with broad white trailing edges. The tail is white with a brownish-black tip. They are a medium sized petrel with a 100 cm to 110 cm wingspan, and an average mass of 675 g.

Antarctic petrels are found near the pack ice, icebergs, ice floes, Antarctic seas and the Antarctic continent. Flocks are often seen sitting on the ridges of icebergs. In late winter, they are occasionally recorded from Australia and New Zealand. Antarctic petrels are gregarious at sea. They roost on icebergs in flocks that have thousands of birds. Breeding colonies range from just a few nests to more than 200,000 pairs.



Shriyanvi  
Grade - I A





# Animals of the Arctic and Antarctic



## ARCTIC & ANTARCTIC REGION ANIMALS

### Arctic Region Animals:

Polar Bear  
 Caribou  
 Snowy Owl  
 Arctic Fox  
 Narwhal  
 Musk Ox  
 Beluga Whale

### Antarctic Region Animals:

Penguins  
 Whales & Seals  
 Krill  
 Wandering Albatross  
 Snow Petrel  
 Antarctic Skua  
 Blue Eyed Shag  
 Giant Petrel  
 Cape Pigeon

### How they are adapted to Polar Regions:

**Penguins:** They have very thick skin with a lot of fat stored under it that keeps them warm. They have web feet for powerful swimming. Their wings are shaped like flippers that help them to fly underwater. Feathers are tightly packed, that they provide water proofing and warmth.



**Dhyaan**  
 Grade – III B

**Polar Bear:** The Polar bears have very thick layer of fat under their skin and thick layer of fur which gives them warmth. They have very large wide paws that help them to walk on the snow. Their fur is very greasy, that sheds water easily after swimming.

Animals in the Arctic and the Antarctic are considered the last untamed wildernesses in the world. As a whole, animals in the Arctic can be found a lot more commonly than in the Antarctic. Arctic territories are connected to the continents such as North America, Europe or Asia, while the Antarctic is a harsh and isolated continent.

Polar Bears and Narwhals are found exclusively in the Arctic. The Polar Bear, Caribou, Snowy Owl, Arctic Hare, Arctic Fox, Narwhal, Walrus, Musk Ox and the Beluga Whale are some of the animals which live in the Arctic.

An Antarctic animal is any creature that lives in the Southern Continent- the coldest and driest continent in the world. Sixty percent of the World's Seal population lives in Antarctica, with around six different varieties, the Elephant Seal, the Leopard Seal, Weddell Seal, Crab eater Seal, Ross Seal and the Fur Seal. These and Penguins are the only land animals in the Antarctic. Of all the animals in Antarctica, Penguins are the superstars. These Antarctic animals are both abundant and easy to observe, The Antarctica Penguin population is estimated to number 75 million.

### How are they adapted to their environment and how they live?

Many of the animals living in Antarctica have outer layers of sense fur or water repellent feathers. Under this fur or feather layer is a thick layer of insulating fat. Many marine animals have large eyes to help them spot prey and predators in the dark waters.

Since bodies with long legs, ears and tails lose warmth faster than those with shorter limbs, many Arctic animals as Arctic fox and hare, have evolved more compact bodies than their southerly counterparts to better conserve heat.



**Blaine Colaco**  
 Grade – I B







## Adventure

Last summer I took a fun trip to the North Pole with my parents. It was so cold there that I had to wear all my warm clothes. I was surprised to see so much snow in summer. We made a snowman. I gave it a big carrot nose and a red hat. I called him Olaf.

In the evening, we snuggled inside our cozy little igloo. I saw your black shadow on the wall. My parents were sleeping. I went outside quietly. It was a reindeer! His name was Ru. He was big with brown fur and a red nose. I played with Ru. Soon he wanted to go. His son Dolf was lost.

I wanted to help him. I rode on Ru towards the forest. We met a big white polar bear. It was Mr. Frosty. He had got some fish for dinner. Does that he had heard soft sounds in the bushes. Could that be Dolf?

We rode ahead and came into the bushes. I heard soft sounds. I saw small shiny eyes in the dark. The baby Dolf was stuck. I helped him out of the bush. Ru was so happy! He gave Dolf a big kiss. It was time for me to go back to my parents. But Ru said he had a surprise. He took me to a little house with lots of reindeers. It was Santa's home!

Santa said I was a good girl. He and Ru said thank you.

He gave me a box of candy and a reindeer toy. I flew with Santa and Ru. The sky had bright colours like Diwali. At home, it was called the northern lights. Santa flew me to the igloo. I went to sleep. In the morning, I showed my parents the candy and toys. What a fun adventure!!!!

**"If it scares you, it might be a good thing to try."**



**Parnavi Upadhyai Das**  
Grade – I A





## Arctic

**The Arctic region:** It is a polar region located at the North of the Earth. Region of extremes i.e. extreme cold, extreme seasonal changes in daylight and extreme winds.

Characterised by cold winters and cool summers.

**Animals of Arctic region:** They include - Polar bears, Arctic foxes, Reindeer, Klabruses, Seale and various species of Whales.

**Antarctic region:** It is the coldest place on the Earth.

**Antarctic region**

**Animals of the Antarctic region:**

They include=" Penguins, seals, whales, Krill and seabirds.

### Adaption of polar animals.

They have developed various adaptations to live in their extreme environments:

- ❑ **Thick insulation:** Many Arctic animals like polar bears and Arctic foxes have thick fur or blubber to insulate them from the cold.
- ❑ Similarly, penguins & seals in Antarctica have thick layers of blubber to keep warm up camouflage. Arctic Animals often have white fur or feathers to blend in with snowy hand scraps, helping them to hide from predators or approach prey, unnoticed. Penguras K seals in Antarctica have dark- coloured backs and lighter bellies, which help them to camouflage
- ❑ **Reduced surface area:** Some animals like the Arctic. They have small care and legs to reckon heat loss. Penguins (Antarctica) have short wings functioning as flippers for swimming.
- ❑ **Counter current threat exchange:** Whales and seals have a specialized vascular system that allows them to transfer the beat between worm and cold blood, helping to maintain body temperature.
- ❑ **Huddling behavior:** Penguins & Seals in Antarctica often buddle together into large groups to conserve heat.
- ❑ **Migration:** Many Arctic and Antarctic animals move to more hospitable regions during harsh winters.
- ❑ **Adapted limbs:** Maximum animals like seals and whales have evolved streamlined bodies and flippers making them highly efficient swimmers. Penguins also have flipper like wings swimming and powerful legs for walking on land.
- ❑ **Salt tolerance:** Antarctic fish have adapted by producing antifreeze proteins that prevent ice-crystals forming in their blood.



Aadhvin  
Grade - I B





# Animals of the Arctic and Antarctic



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Aadhvin  
Grade I B







# Animals of the Arctic and Antarctic



## Adaptations of animals present in the Arctic and Antarctic regions

Animals that live in extreme climate (hot and cold) possess special features to protect themselves from such conditions. Importantly, these adaptations present in animals help them get accustomed to that particular habitat they live in. The polar regions show an extreme cold climate as it is covered with snow for most of the time. In this region, the sun does not set for 6 months and in another 6 months it does not rise. As a result of this, the temperature of the region may go as low as - 37c during the winter season.

### Adaptations in animals :

1. Reason will have fur that protects from extreme cold.
2. Some animals will have thick layers of skin which also protect animals.
3. Most of the animals and birds in this region are good swimmers with wings and large paws that aid in swimming.
4. Animals like penguins huddle together to keep themselves warm.



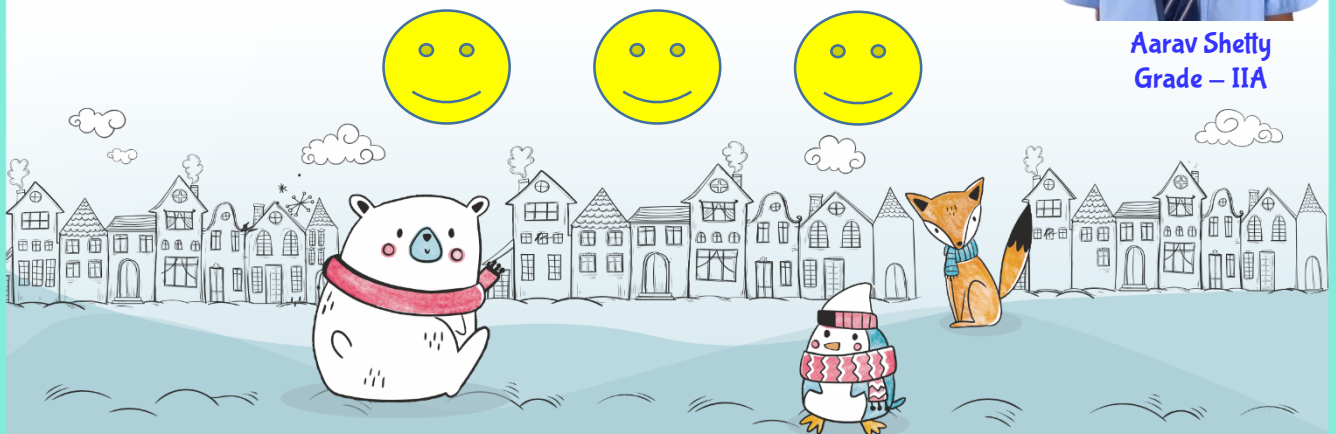
Avyukt Sandeep Anchan  
Grade – III B

## Animals of the Arctic and the Antarctic

Animals of the Arctic and the Antarctic are Penguins, Elephant Seals, Snow Petrels and Killer Whales. Animals living in Antarctic have outer layers as dense fur. Under this fur, there is a thick layer of insulating fat. They have large eyes to help them spot their prey in the dark water.



Aarav Shetty  
Grade – IIA



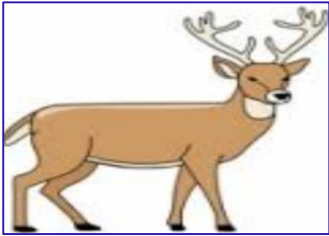


# Animals of the Arctic and Antarctic



The ends of the earth are similar in some ways. There's complete darkness at the crux of winter they contain large unexplored regions and only certain wild life survive in such extremes.

Because they are on opposite sides of the world the Arctic and the Antarctic do not share the same seasons. The Arctic enjoys winter from October to March while Antarctic's winter is from March to September. The Arctic has a considerable flora with Some 900 flowering plants. Species living at both poles include cold water worms, crustaceans, Sea cucumbers and Snail like pteropods. They make up two percent of the 7500 Antarctic and 5.500 Arctic animals.



A large portion of the Arctic region includes the Arctic Ocean which is home to an amazing array of wild life, including endangered bowhead whales, endangered polar bears, beluga whales, endangered ringed seals and pacific walruses.

Antarctic animals the most abundant and be known animals from the Southern Continent penguins, whales, seals, albatrosses other seabirds and a range of invertebrates you may have not heard of such as krill.

Physical adaptations are Sometimes the easiest to spot many of the animals living in Antarctica have outer layers of dense fur or water repellent feathers. Under this fur or feather layer is a thick layer of insulating fat. Many marine animals have large eyes to help them spot prey and predators in the dark waters.



These circles denote the most Northern and Southern locations where at least once a year, the sun remains continuously above the horizon for 24 hrs. In the winter the areas below the Antarctic polar Circle experience days when the Sun doesn't rise.



**Himani S suvarna**  
Grade – III B



# Riddle Time!

1.

What falls in the winter but never gets hurt?



2.

These keep your hands warm and nice and protect them from cold ice.



4.

I'm the light in the day or night  
I can be seen in many shades of green. But to see me, you must go forth to the North.  
What am I?



3.

I'm big and white and furry  
And I like to swim and run  
I eat seals for my meals



5.

If you went to Antarctica you would see a lot of me  
I float on top of the water  
Am as cold as it can be.



6.

If you come to the Arctic you will see me everywhere, I am pulled by huskies to slide downhill. What am I?



7.

Even if they are starving, natives living in the Arctic will never eat a penguin's egg. Why not?



8.

You can slide down the mountain when you put me on, I can be made from plastic, steel & sometimes I'm wooden.  
What am I?



Answers:  
1. Snow, 2. Polar Bear, 3. Polar Bear, 4. Northern lights, 5. Ice, 6. sledge, 7. Penguins only live in Antarctica, 8. Skis





# If I Came across a Polar Bear...



The world is full of awe-inspiring creatures, but few can match the magnificence and sheer power of the polar bear. These majestic creatures, perfectly adapted to the harsh Arctic environment, have long fascinated and intrigued me. The thought of coming across a polar bear in its natural habitat is both thrilling and daunting, as it would be a rare and unforgettable encounter that would require utmost caution and respect for nature.

## ➤ The Encounter:

Imagine a crisp Arctic morning, the air so cold it burns your lungs, and the silence broken only by the creaking of icebergs. As I explore this remote wilderness, I spot a massive, solitary figure in the distance. It's a polar bear, a living embodiment of strength and resilience. The excitement and trepidation would be palpable as I cautiously approach, keeping a safe distance to avoid disturbing this powerful apex predator.

## ➤ The Polar Bear's Behavior:

Understanding polar bear behavior is crucial for any encounter. These bears are known for their curiosity, so the polar bear might pause to observe me. As an observer, my role would be to avoid provoking the bear or posing a threat. Making loud noises or sudden movements could be perceived as aggressive, potentially leading to a dangerous situation. Instead, I would aim to be as still and non-threatening as possible.

## ➤ Photographing the Encounter:

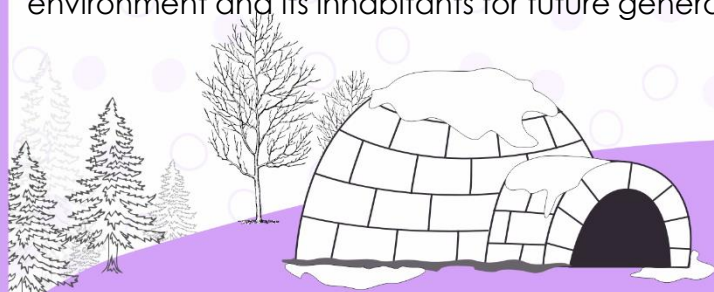
As an enthusiast of wildlife and photography, capturing this moment would be a dream come true. However, I would prioritize safety over any shot. A long lens would allow me to take stunning photographs while maintaining a safe distance. Respecting the bear's space and natural behavior is of utmost importance, and I would never sacrifice its well-being for a photograph.

## ➤ Conservation and Environmental Impact:

Encounters with polar bears in the wild should be rare, as they are a vulnerable species facing numerous threats, primarily due to climate change and habitat loss. Such an encounter would serve as a powerful reminder of the urgent need to address these issues and protect the Arctic ecosystem. It's crucial to leave no trace, ensuring that my presence does not negatively impact the environment or the bear.

## ➤ Conclusion:

Coming across a polar bear in its natural habitat would be a once-in-a-lifetime experience, a poignant reminder of the beauty and fragility of our natural world. It would require utmost respect, caution, and responsibility. Such an encounter would not only be an opportunity to witness one of the Earth's most remarkable creatures but also a call to action to protect and preserve the Arctic environment and its inhabitants for future generations.



Sanjaya S  
Grade – IX





# If I Came across a Polar Bear...

North pole has always been a spot of my fascination. My fantasy of waiting for Santa originated from the Christmas stories that my mother used to tell me. Winter months used to be the time I mesmerized about reindeers, polar bears, eskimos and much more. Now came my time at the North pole. I was literally there inside the igloo.

On a cold day while sipping my hot chocolate and eating my sandwich, I heard a loud ROAR! oh my Gosh! I screamed. I surely ran out of my igloo and went out through the front door and a big white polar bear was resting the right side of my igloo. A million thoughts ran through my mind, What If my house gets destroyed where will I live?, What if it chases me to the end of the earth my legs will hurt by running swimming, climbing from continents to oceans and through valleys, mountains, deserts etc, or what if it gobles me up! I didn't even dare to speak. I quietly tip toed back into my house and started panicking. I shook in terror and spotted the bear star in at my delicacy.

In a swift motion I took my sandwich and grabbed a chair I used my energy to break through my roof and threw my sandwich out. The bear was an excellent catcher. I saw the sandwich being gobbled up by her. Unfortunately, it started growing for more. My hands were shaking with a deep sigh, I looked up hopelessly, then came a bright idea two fishes hit the poor things face, The others slipped in to its mouth. I started getting tired of throwing fish for it to eat, but then when I looked in the bucket I realised there were 15 more fish. But polar bear didn't look hungry any more. So I think I went back to its cave, Thank god!

I got down the chair and took out my block of ice. so I can defend myself when the polar bear attacks me, I checked on all sides of the igloo, The bear actually went!, I went inside my igloo and started making another sandwich.

I was all relaxed when the polar bear came again and broke my ice door. I took out a big spoon to defend myself and for a joke I asked what do you want? The bear replied I want you, to be my friend, I replied then why did you destroy half my house!? Well then why did you try to get rid of me this morning? The bear replied. I am sorry, I was trying to move you away from my house so you don't ruin it. I don't think my actions hurt your feeling.

"It's alright!" the bear replied and it gave me a big hug. Then I heard this beep, Wait! My alarm..! Woke up realizing it had been a dream but anyways I have to get ready for school now. Bye!



Liza Sara  
Grade – VI



# Interesting Facts About Penguins

The black and white “tuxedo” look donned by most penguin species is a clever camouflage called countershading.

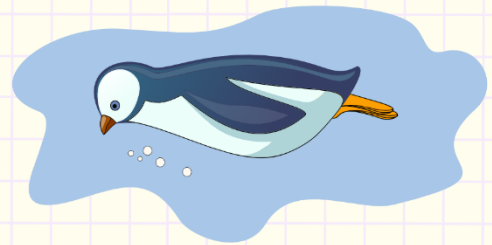
*(When swimming, the black on their backs helps them blend in with the darkness of the ocean from predators viewing from above. Their white bellies help them blend in with the bright surface of the ocean when viewed by predators and prey from below.)*

Penguins evolved to fly underwater.

*(Most birds have hollow, air-filled bones to help them stay light for flight. Penguins adapted with solid bones instead. This helps them swim because solid bones reduce buoyancy—the tendency to float.)*

Many male penguins gift female penguins with rocks in order to woo them.

*(The ladies use these rocks to build a nest.)*



Penguin feet are adapted to walk long distances.

*(Some species of penguins can march up to about 60 miles across sea ice to get to their breeding grounds. Penguin feet are also adapted to help the birds steer while swimming. They use their feet like rudders, angling them to help control direction.)*

Contrary to many popular holiday cartoons, you'll never see penguins and polar bears together in the wild.

*(That's because penguins live south of the equator while polar bears north of the equator in the Arctic!)*

A penguin's thick feathers aren't the only way this bird stays warm.

*(A gland near the base of its tail provides waterproof oil. Penguins spend several hours each day covering their feathers with this oil and give extra attention to the task before swimming.)*



Penguins may huddle together for several reasons.

*(This behaviour helps these birds protect themselves from predators. In frigid habitats, huddling helps penguins retain warmth.)*



# Glaciers and Climate Change

## All About Glaciers

Have you heard your Geography teacher say the word 'glacier'? Have they specifically mentioned what glaciers are, their purpose and their effect? Well, most of you have a brief idea about glaciers. If not, by reading this article, you will acquire sufficient knowledge about glaciers, their role in climate change and the environment in general.

A glacier is a body of dense ice perpetually moving under its weight. To put it simply, a glacier forms when lots of snow falls in one location for years, even centuries. The snow in the bottom gets compressed by the weight of the falling snow, turning into ice and forming a glacier. As it steadily flows, it creates unique landforms and picturesque views such as fjords (narrow and long bodies of water that reach inland) and cirques (mountain valley heads shaped into hollows by the erosion of glaciers). An abundant number of glaciers are present in Antarctica (91%). Sites such as Greenland, North America and Asia consist of a certain amount of glaciers.

Apart from their scenic beauty, glaciers play significant roles in several natural processes. Glaciers are an essential feature of the Earth's water cycle as they melt into liquid water by the Sun's heat and flow into oceans, streams, lakes, etc. These water bodies are resources that we utilise in our daily activities.

Glaciers are used to generate hydroelectricity in countries such as Norway, New Zealand and Canada.

Above all, glaciers play a crucial part in moderating the climate. Their white surfaces reflect the Sun's rays, thus helping to keep the climate mild. They are sentinels of climate change.

Unfortunately, due to our inconsideration towards the environment and its well-being, glaciers are melting rapidly. Human activities are the root of this global issue. After the industrial revolutions, the emission of greenhouse gases has raised temperatures, causing the glaciers to melt. Around hundreds or thousands of feet of ice melt each day. Studies state that glaciers will disappear by 2100.

Several measures must be taken to prevent this ongoing process. On the whole, the only way to stop the melting of glaciers is to stop global warming. However, it is easier said than done. It would require the unity and harmony of the whole world and this would take years to plan and execute. Therefore, we could change minor habits to improve this situation. Using alternative energy resources, planting trees, recycling, decreasing our carbon footprints and constructing support infrastructure are some methods to better this problem. As students, we could also campaign and conduct events to spread awareness. We may only be children, but we are the future of this world after all. It is in our hands to save glaciers and our future generations.



Devina Pai  
Grade – IX



# Glaciers and Climate Change

Imagine this; a young penguin wakes up to the sound of water lapping at the edge of her icy home. She spins around only to witness a huge chunk of glacier cleave away, plummeting with a thunderous crash. The resultant tidal surge nearly topples her now tiny island of ice.

Glaciers, colossal rivers of ice, are melting at an unprecedented rate, causing a number of concerns:

- **Sea Level Rise:** As glaciers melt they add more water to the oceans, resulting in rise of sea levels, and threatening marine habitats and coastal cities.
- **Ecosystem Impact:** Creatures like the young penguin depend on their icy environments. As glaciers recede, they begin to struggle to find food and shelter.
- **Freshwater Reservoirs:** Many communities depend on glacial melt water for drinking and irrigational purposes. If glaciers disappear, they will no longer be able to rely on such resources, leading to various adverse effects.
- **The Endangerment And Extinction of Animals:** As mentioned before, many animals, such as Snow Leopards, Penguins, Polar Bears, Seals, Arctic Tern and more are at high risk of becoming endangered and going to get extinct due to rising temperatures and melting of snow and ice.

Climate change, driven by human activities is the primary culprit behind the rapid melting of glaciers. Warmer temperatures cause glaciers to lose more ice in the summer than they do during the winters.

This isn't just the tale of one young penguin, it's a reflection of the larger challenges faced by our planet. By understanding and addressing the root causes of climate change, we can hope to give countless creatures a fighting chance.



Avni Harinee Garg  
Grade – VIII





# Glaciers and Climate Change

## I. Introduction

Glaciers are large bodies of ice that form from the accumulation and compaction of snow over long periods of time. They are crucial components of Earth's hydrosphere plays a significant role in shaping landscapes, regulating global climate, and providing freshwater resources. The importance of glaciers extends beyond their aesthetic beauty, as they act as natural reservoirs, slowly releasing melt water during dry seasons and replenishing rivers and lakes. Additionally, glaciers contribute to the Earth's albedo effect by reflecting sunlight back into space.

## II. Formation of Glaciers

Snow accumulates in areas where the amount of snowfall exceeds the amount of snowmelt. Over time, this accumulated snow compacts and turns into ice due to the pressure exerted by the weight of the overlying snow. This process, known as compaction, causes the snow to undergo physical and chemical changes, transforming it into dense glacial ice. As more and more snow accumulates and compacts, the glacier begins to flow under its own weight, slowly moving downhill due to gravity.

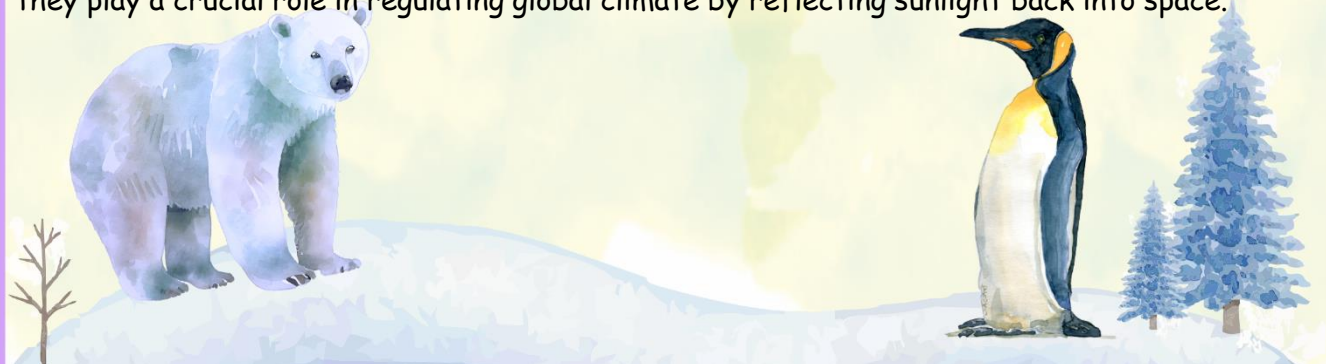
During compaction, the air spaces between snowflakes are reduced, causing the snow to become denser. As the snow continues to accumulate, the weight and pressure cause the ice crystals within the snow to recrystallize, forming larger and more tightly packed grains. This recrystallization process further increases the density of the snow, eventually transforming it into solid glacial ice.

The temperature plays a crucial role in glacier formation as it determines whether the snow will melt or remain frozen. In colder regions, where temperatures consistently stay below freezing, the snow can accumulate over time and eventually transform into glacial ice. Precipitation, such as snowfall, also contributes to glacier formation by providing the necessary material for the ice to build up and grow over time.

## III. Types of Glaciers

Valley glaciers are long, narrow glaciers that form in mountain valleys and flow downhill due to gravity. They are typically found in high-altitude regions and can carve out deep valleys as they move. Ice caps, on the other hand, are smaller than ice sheets and cover relatively small areas. They form when snow accumulates and compacts over time, creating a thick layer of ice. Lastly, ice sheets are massive continental glaciers that cover vast areas of land. They can be found in Greenland and Antarctica.

Ice caps are usually dome-shaped and can range in size from a few square kilometers to tens of thousands of square kilometers. They are commonly found in polar and subpolar regions, such as Iceland and the Canadian Arctic. Due to their smaller size, ice caps tend to respond more quickly to climate change compared to larger ice sheets. Additionally, they play a crucial role in regulating global climate by reflecting sunlight back into space.





# Glaciers and Climate Change

Ice sheets are massive continental-scale ice formations that cover vast areas, typically exceeding 50,000 square kilometers. The two largest ice sheets on Earth are the Antarctic Ice Sheet and the Greenland Ice Sheet. These ice sheets hold the majority of the world's freshwater and have a significant impact on global sea levels. They form over thousands of years as snow accumulates and compresses into ice, creating immense thicknesses that can reach several kilometers. The melting of ice sheets is a major contributor to rising sea levels.

Glaciers are characterized by their slow movement, which is caused by the weight of the ice and the force of gravity. They also have distinct layers, or stratification, due to the accumulation of snow and ice over time. Ice caps, on the other hand, have a dome-like shape and are typically less than 50,000 square kilometers in size. They are often found in polar regions and can be surrounded by mountains. In contrast, ice sheets are much larger and can cover millions of examples of famous glaciers include the Perito Moreno Glacier in Argentina and the Franz Josef Glacier in New Zealand, both of which are valley glaciers. For ice caps, notable examples include the Vatnajökull Glacier in Iceland and the Barnes Ice Cap in Canada. As for ice sheets, the most well-known example is the Antarctic Ice Sheet, which covers nearly 14 million square kilometers. Another prominent ice sheet is the Greenland Ice Sheet, spanning over 1.7 million square kilometers.

## IV. Unique Features of Glaciers

Crevasses are one of the unique features of glaciers. They are deep cracks or fissures that form on the surface of glaciers due to the movement and stress exerted by the ice. These crevasses can vary in size and shape, ranging from small cracks to large, gaping chasms that can be several meters wide and deep. They are formed when the glacier flows over uneven terrain or encounters obstacles, causing the ice to crack and split apart. Crevasses can pose a significant hazard.

Another feature commonly found on glaciers are glacial seracs. These are towering blocks or columns of ice that form as a result of the crevasses and the movement of the glacier. Glacial seracs can be incredibly unstable and prone to collapse, making them a dangerous obstacle for climbers and mountaineers. Their significance lies in their ability to create treacherous conditions and increase the risk of avalanches, making navigation through glacial terrain even more challenging.

In essence, glaciers are nature's timekeepers, shaping landscapes and holding tales of ages. From the quiet creation of valley glaciers to the grandeur of ice sheets, their formation mirrors the steady accumulation of knowledge. As we unravel their mysteries, we glimpse the delicate balance between temperature, snowfall, and gravity, much like the balance we strike in our pursuit of education.

Beyond their breathtaking appearance, glaciers reveal intricate features like crevasses and glacial seracs, underscoring their dynamic nature. In this dance between ice and land, we find parallels with our academic journey—both slow yet transformative. So, as we stand before these icy wonders, let them remind us that every study is a voyage, every discovery a layer peeled back, uncovering the beauty and brilliance that lie beneath.



**Sarah Francisca Mathias**  
Grade – IX



# Glaciers and Climate Change

A glacier forms when snow accumulates over time, turns to ice, and begins to flow outwards and downwards under the pressure of its own weight. They slowly move downward due to the pull of gravity. Most glaciers are found in Greenland, The Canadian Arctic and Antarctica. The purest form of water is found in glaciers. Most glaciers were formed during the last ice age. Glaciers begin life as snowflakes. Glaciers have white surfaces that reflect the Sun's rays.



This helps keep our current climate mild. When glaciers melt, darker surfaces are exposed, which absorb heat. This raises temperatures even more.

**Glaciers are very important to us, here are a certain reasons why:-**

- They play an important role for the Earth's water cycle.
- Keeps the Earth cool.
- It is a habitat to many animals.
- Contains most of the available drinking water on Earth.

As you have seen in this article glaciers play a very important role for us and our surrounding but now because of us glaciers are melting. This may lead to many problems in the future. So we should try our best and also spread awareness to stop polluting to save the glaciers. Thank you...



**Aastha Arun Devadiga**  
**Grade – VI**





# Glaciers and Climate Change

## GLACIERS

- ❑ A glacier is a persistent body of dense ice that is constantly moving under its own weight. It forms due to the continuous accumulation and compression of ice over many years( or centuries).
- ❑ Eventually, the glaciers melt, abrade rock and other debris and carry them along as the glaciers melt. This process leads to the formation of many landforms such as cirques, moraines and fjords.
- ❑ Glaciers are humongous and gigantic masses of moving ice that cover about 10% of the earth's surface. By " humongous" I mean that they cover nearly 13 million km<sup>2</sup> or about 98% of the whole Antarctica continent, with an average thickness of ice 2,100 m (7,000 ft).
- ❑ The largest glacier in the world is Lambert-Fisher Glacier in Antarctica. It is approximately 250 miles (400 kilometres) long and 60 miles (100 kilometres) wide.
- ❑ It's really important to recognize the vital role that glaciers play in maintaining the Earth's temperature and making life possible for all of us. Without them, things would be very different indeed.
- ❑ •Due to the high emissions of carbon dioxide and other greenhouse gasses, the temperatures have risen leading to the melting of glaciers on a large scale. Let us see the gains and losses of the melting of glaciers.
- ❑ Glaciers work as giant freshwater reservoirs. They support the earth's life system and have great use in our day-to-day activities.
- ❑ Glacier melts deliver nutrients into lakes, rivers, and oceans. Those nutrients can drive blooms of phytoplankton— the base of aquatic and marine food chains.
- ❑ Meanwhile, gradual glacier melt sustains stream habitats for plants and animals.
- ❑ Unfortunately, the melting of glaciers has a detrimental effect on the earth, as is the case with most things.
- ❑ Melting glaciers add to rising sea levels, which in turn increases coastal erosion and elevates storm surges as warming air and ocean temperatures create more frequent and intense coastal storms like hurricanes and typhoons. •Also, if all of the ice on the earth were to melt, then the global sea level would rise by more than 195 feet (60 meters).
- ❑ Glaciers have bright white surfaces that reflect the sun's rays back into the atmosphere. However, when glaciers melt, darker surfaces are exposed which absorb heat. This raises temperatures to a level where there could be no ice left in the Arctic and the Antarctic.
- ❑ Many aquatic species in mountainous environments require cold water temperatures to survive. Some aquatic insects--fundamental components of the food web--are especially sensitive to stream temperature and cannot survive without the cooling effects of glacial meltwater. Such changes in stream habitat may also adversely impact native trout and other keystone salmon species.

People are not the only ones impacted. In the Arctic, as sea ice melts, wildlife like walrus are losing their home and polar bears are spending more time on land, causing higher rates of conflict between people and bears.

Therefore, it is clear that we need to save the glaciers from disappearing. Glaciers are vital for the balance and health of the planet and its inhabitants. To protect them, we need to take urgent action to reduce greenhouse gas emissions and slow down global warming. By collaborating, we can protect the glaciers and ensure a brighter tomorrow for ourselves and those to come.

THANK YOU!!



Prarthana P Rao  
Grade – VIII





# Glaciers and Climate Change

Glaciers are majestic formation that have been shaping the earth's landscape for millions of years. However these giants are under threat due to the increasing issue of climatic change the complicate relationship between glovers and climate change is a matter of great concern as consequences of their decline extended for beyond their immediate surroundings.

The ultimate change is causing glaciers to retreat at an alarming rate rising global temperatures lead to increased melting, resulting in the loss of ice mass. This phenomenon has been observed worldwide from the arctic to the Himalays.

Glaciers act as natural reservoirs ,storing vast quantities of fresh water as they melt, This water is released in to rivers and lakes, sustaining eco systems, and providing a vital source of drinking water for millions of people. However the accelerated melting of glaciers due to climate change threatens the availability in regions heavily reliant on glacial melt water.

The melting of glaciers contributes to rising see levels, as the released flows, in to the oceans, This phenomenon as the profound impact on coastal regions where sea level rise worsen the risk of flooding, erosion and low lying coastal areas are particularly vulnerable as their existence is threatened by trespassing waters.

More over the displacement of costal communities and of livelihoods further compound the social and economic consequences of glaciers retreat.

Glaciers retreat has a significant on the earth's climate system as glaciers melt, They reduce the amount of reflective ice cover, exposing darker surfaces absorb more solar radiation leading to further warming.

Glaciers support unique ecosystem that are adapted to cold and icy conditions as glaciers shrink, these ecosystems are disrupted, causing a users of biodivers and potential extinctions of specialized plant and animal species.

Additionally, the loss of glaciers meltwater alters river ecosystems, affecting fish populations and other aquatic organisms that depend on a steady water supply.



Souha Nussrath  
Grade – IX



# Glaciers and Climate Change

## CLIMATE CHANGE

Weather changes day to day - sometimes it rains, other days it's hot. Climate is the pattern of the weather conditions over a long period of time for a large area. And climate can be affected by Earth's atmosphere. Our Earth is surrounded by an atmosphere made up of gases. When sunlight enters our atmosphere, some of the sun's heat is trapped by the gas, and some bounces back out into space. By trapping that heat, our atmosphere keeps Earth warm enough to live on. Without it, our planet would be very cold, like Mars. Earth's climate has always naturally cycled through change, caused by how much of the sun's energy was absorbed by the atmosphere. In fact, over the past 650,000 years, the Earth has gone through seven ice ages and warming periods.

But during the past few hundred years, oil, gas, and coal have powered homes, cars, and factories. These energy sources release a gas called carbon dioxide ( $CO_2$ ) into the atmosphere. This gas traps heat that would otherwise escape Earth's atmosphere. That increases Earth's temperature, which contributes to the planet's warming.

The Earth's average temperature increased about 1.5 °F in the past hundred years. It doesn't sound like much, but scientists think that the temperature increase has caused melting glaciers, droughts, and coral reef die-off.

### What can we do about it?

- Instead of travelling in a car, use public transportation, walk or ride your bike when you can. Biking or walking 16 kilometers each day instead of riding in a car can save up to 1.9 tons of carbon dioxide.
- Reduce and reuse things as much as possible.
- Wash your clothes in cold water, and hang them to dry.
- Wear a warm sweater at home in the winter instead of turning up the heat, and open your windows instead of blasting the air conditioning in the summer.

Your everyday actions affect people, plants, and animals all over the world - including polar bears. So be cool by doing your best to keep Earth well..... cool!



Hrithik Sebin Manuel  
Grade – IX





# Glaciers and Climate Change

## Glaciers

Once, there was a world where every biotic and abiotic component lived in harmony. The Sun gleamed, the flora and fauna thrived and every inch of the Earth flourished. Alas, all that has come to an end. Now, the Sun is harsh, the animals and plants are dying and almost every inch of the Earth is fighting for its life. One of the major issues is the glacial regions.

What once was a hyperborean place with massive chunks of ice, humongous glaciers and icy, crisp air, is now just a big puddle of melted glaciers and abnormal temperature. The temperature that should have been recorded was at least 0 degrees Celsius but it has been recorded as 18.3 degrees Celsius. That is the average temperature of the air conditioning in most of our homes!

It is primarily the selfishness of human beings that has caused this catastrophe. Do you have any idea just how many greenhouse gases are released when we turn on the AC or use any heavy machinery? This is truly the start of an endless cycle. Thus, let us all UNITE, stop the wars, stop the hate and take a moment to think consciously about the toll mother earth has taken due to our actions.

**"WE NEED TO STOP PEDALLING AND WE HAVE TO STEP ON THE BRAKES OF THIS TREACHEROUS AND RUSTY CYCLE."**



Ritika Pai  
Grade – VIII





# Glaciers and Climate Change

## Glaciers

The impact of glaciers on our planet is significant due to their incredible formations of ice. Glaciers are highly sensitive to changes in temperature and are considered a key indicator of climate change and global warming. Rising global temperatures have led to accelerated melting of glaciers worldwide. As the temperature increases, glaciers lose more ice through melting than they gain through snowfall. The imbalance results in a net loss of mass and shrinkage of glacier size. The melting of glaciers contributes to rising sea levels. As glaciers melt, the water flows into the oceans. This poses a threat to coastal communities and low lying areas, increasing the risk of flooding and erosion.

Glacier retreat also affects freshwater availability. Glacier melted water is an important source of freshwater for many reasons, especially during the dry season. As glaciers shrink, the availability of this vital resource diminishes, leading to water scarcity and potential conflicts over water resources.

Furthermore, the loss of glaciers has ecological consequences. Glacier melted water sustains a unique ecosystem and provides habitats for various species. Addressing climate change and reducing greenhouse gas emissions is crucial to mitigate the impact on glaciers. Forces to limit global warming and transition to renewable energy sources are essential for preserving these majestic ice formations and the ecosystem they support.

In conclusion, the effects of climate change and global warming on glaciers are undeniable. The melting point of glaciers contributes to rising sea levels, water scarcity and ecological disruptions. Taking actions to reduce greenhouse gas emissions is vital to protect these fragile natural wonders and communities that depend on them.



Aiza Rida  
Grade – IX



# Glaciers and Climate Change

## Glaciers

A glacier is a large accumulation of crystalline ice, snow rock sediment and other often liquid water that originates on land and moves down slopes under the influence of its own weight and gravity.

There is still some uncertainty about the full volume of glaciers and ice caps on earth, but if all of them were to melt, global sea level would rise approx 70m, flooding every coastal city on the planet.

Melting glaciers adds to rising sea levels, increases coastal erosion and causes storm surge and contributes to global warming.

Why are glaciers important? Ice acts like a protective cover over the Earth and our oceans. These bright white spots reflect excess heat back into space and keep the planet cooler. In theory, the Arctic remains colder than the equator because more of the heat from the sun is reflected from the ice back into space.

It is very important to save glaciers. Glaciologists believe that despite the massive ice loss, we still do have time to save the glaciers from their predicted disappearance.

In order to curtail climate change and save the glaciers, it is indispensable that global  $CO_2$  emissions be reduced by 45 % over the next decade, and that they fall to zero after 2050.

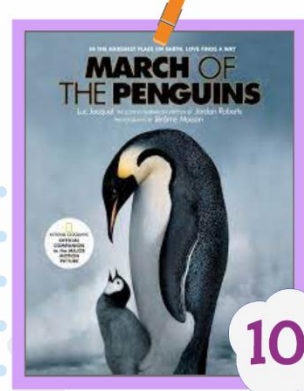
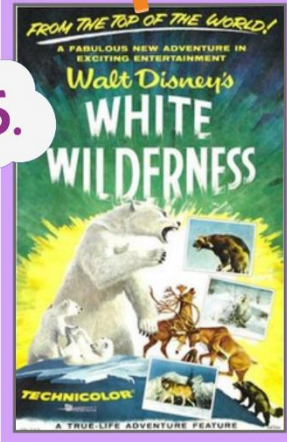


G. Avni Prabhu  
Grade – IX



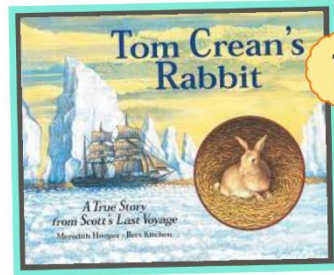


# Movie Recommendations





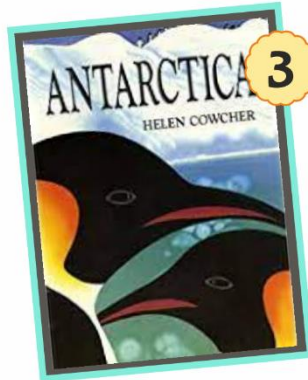
# Book Recommendations



**Tom Crean's Rabbit**  
By Meredith Hooper



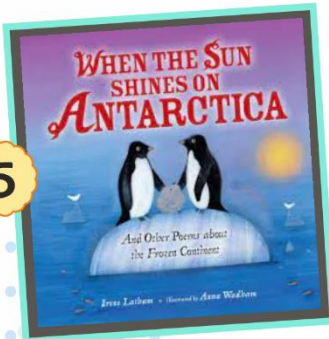
**The Mystery in Icy Antarctica**  
By Carole Marsh



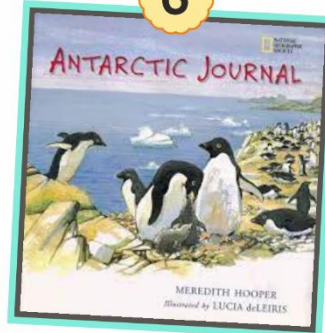
**Antarctica**  
By Helen Cowcher



**Ice Wreck**  
By Lucille Recht Penner



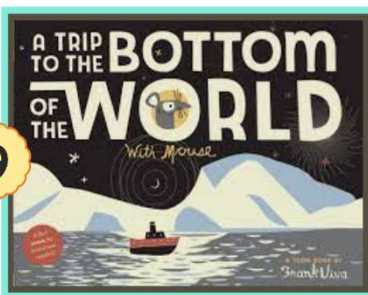
**When the Sun Shines on Antarctica**  
By Irene Latham



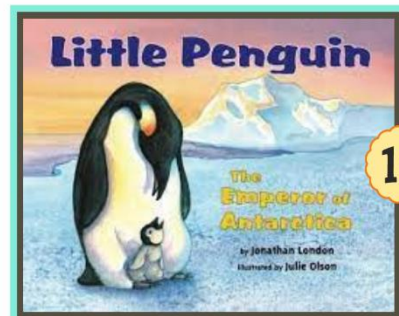
**Antarctic Journal**  
By Meredith Hooper



**Lost and Found**  
By Oliver Jeffers



**A Trip to the Bottom of the World with Mouse**  
By Frank Viva



**Little Penguin the Emperor of the Antarctic**  
By Jonathan London

# Review

## Movies & Books

Title of the Movie/Book:

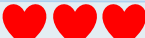
### The Arctic Dogs

Movie/Book Summary:

Swiftly an Arctic fox, works in a mail room of the Arctic but he wants to be a top dog, at the husky couriers. To prove he can be one of them, he takes one of the sledges and delivers an mysterious package to a unknown location. Once he reaches there he came across a hidden fortress, that belongs to Otto Von Warlus who is a evil genius wants to rule the world by drilling a hole beneath the snow-packed surface to release an ancient gas to melt the Arctic and thus rule the world. Swiftly enlists help of his friends to defeat the evil minded Otto and stop the Arctic from melting.

Movie/Book Reviewed By: **Rafan Zakir Hussain, Grade – VI**



How many hearts do you give this movie? 

1 heart means the movie was really bad. 5 hearts means it was great!

Title of the Movie/Book:

### The Polar Express


Movie/Book Summary:

The Polar Express tells us about Christmas eve in the late 1950s. A boy was sleeping. While sleeping, a white light flashed through the window. When the boy went outside to check what the light was? He saw a train called the Polar Express waiting for him to go to their destination, which was the North Pole, to meet Santa Claus and to see his factory. On his way, he meets friends on board, and his experience on his journey to the North Pole. In the last scene, he receives a gift from Santa, which is a bell. The ringing of the bell could only be heard by him but cannot be heard by his family, and in his old days he still shakes the bell to remember his journey on The Polar Express.

Movie/Book Reviewed By:

**Mohammed Rayhan Hussain, Grade – VIII**



How many hearts do you give this movie? 

1 heart means the movie was really bad. 5 hearts means it was great!

# Review

## Movies & Books

Title of the Movie/Book:

**Lost And Found -Oliver Jeffers**


Movie/Book Summary:

Lost and Found is a beloved children's book by Oliver Jeffers. It follows a boy's journey to help a penguin to find its way home, teaching valuable lessons about friendship and determination. The book has won awards and been adapted into a film and stage production. It's praised for its humour, originality, and heartwarming message. A must-read for all ages.

Movie/Book Reviewed By:

**Prarthana P Rao, Grade – VIII**



How many hearts do you give this movie?   
1 heart means the movie was really bad. 5 hearts means it was great!)

Title of the Movie/Book:

**Arctic Dogs**


Movie/Book Summary:

In my opinion, the story, animation and the style are really good. The story is not very creative. I feel like it's kind a common, like there is a sad part, but it doesn't last long and there's this person trying to destroy their home by melting the ice and just a bunch of friends trying to stop him. Like every cartoon I have seen, it has always included this type of story. I barely got 20 minutes to watch this, and i just knew the story, like what was going to happen next. But still I really appreciate the animation and the style. So, yeah, it's pretty good.

Movie/Book Reviewed By:

**Ilham Ayesha Fayaz, Grade – VII**



How many hearts do you give this movie?   
1 heart means the movie was really bad. 5 hearts means it was great!)



A sense of exploration is a quality that many people look for in careers. Some people are passionate about adventures and enjoy investigating the world around them. If you're among those who dream of exploring the North & South Pole then a few career options are available that will allow you to explore, know and see the continent in all its moods.

Atmospheric Physicist

Biologist

Ecologist

Geologist

Glaciologist

Mariner

Meteorologist

Oceanologist

Scientist



# The Inuit

## HISTORY OF INUIT PEOPLE

The Inuits are the descendants of what anthropologists call the Thule people, who emerged from Western Alaska around 1000 CE. They had split from the related Aleut group about 4000 years ago and from Northeastern Siberian migrants.



The Inuit have learned to make do with what their difficult environment offers them: polar animals, ice, stones, etc. Their staple diet is the fat and meat of Seals, rich in iron and Vitamin A, which helps them withstand the cold.



But above all, they have adapted culturally: their clothes, snow-shoes, dog sleds, kayaks, hunting adapted culturally: strategies etc. are all purpose-designed for the Arctic. The Inuit needed thick and warm clothes to survive the cold weather.



They used animal skins and furs to stay warm. They made shirts, pants, boots, hats and big jackets called anoraks from Caribou and seal skin. They use harpoons to hunt seals, walruses, and the bowhead whale. They also ate fish and foraged wild berries. A high percentage of their food was fatty, which gave them energy in the cold weather.

## CULTURE OF THE INUIT

The region is home to the Inuit people with its population living in a hunting based culture that spans over 5000 years. Harvesting, hunting and travelling remains at the heart of Inuit culture and way of life. Hunting is at the core of Inuit culture.

## TRADITION AND MODERNITY

Hunting and fishing remains the basis of the Inuit civilisation. In return, they treat nature with great respect. Today, the confrontation with the modern world Sometimes proves difficult (alcoholism, suicide), but in general they have learned to use modern tools (Inuit language papers and magazines, Internet snow-scooter, aircraft) to cement their future. In Canada, the Inuit have managed their own autonomous territory, Nunavut, since 1999.



Their lifestyle today bears little resemblance to that of their grandparents. Their Kayaks have been replaced by motor boats, they live in wooden houses instead of igloos made of snow or earth, they use guns instead of harpoons and travel on snow Scooters instead of dog sleds. Some of them have paid jobs and the rest live off welfare.



# The Inuit

## INTERESTING FACTS :

- ❖ A member of the Inuit people is called an Inuk.
- ❖ The warm soft boots worn by the Inuit are called mukluks or Karnik.
- ❖ In order to mark areas and to keep from getting lost, paths were marked with a pile of stones called an inuksuk.
- ❖ The Inuit women were responsible for sewing, cooking, and raising the children. The men provided food, by hunting and fishing.
- ❖ The Inuit had no formal marriage ceremony or rituals.
- ❖ After hunting, they would perform rituals and sing songs in honour of the animals spirit.



**Dhruv M Salian**  
Grade – I B

Inuit are a group of culturally similar people living in Canada, Denmark, Greenland and United states.

**Languages-** Inuinnaqtun, Inuktitut.

### **Inuvialuktun and Greenlandic**

Diet-High in protein and very high in fat Clothing: Clothing and foot wear is made from animal skin, sew together using needles made from bones and threads made from animal products.

### **Tattoo-Kakiniit**

Kakiniit are the traditional tattoos of the Inuit of the North American Arctic. The practice is done almost exclusively among women, with women exclusively tattooing other women with the tattoos for various purposes.

It is done with needles made of sinew or bone soaked in suet and sewn into skin. Inuit art, carving, print making, textiles, Inuit throat singing are very popular.



**Aashvi**  
Grade – II A





# The Inuit

## ➤ How do people live in Arctic region?

The Arctic or circumpolar, people are the Indigenous inhabitants of the Northernmost regions of the world. For the most part, they live beyond the climatic limits of agriculture, drawing a subsistence from hunting, trapping and fishing from pastoralism.

## ➤ Where do people live in the Arctic?

Most of the Arctic is sparsely populated. About two thirds of the population lives in Urban and urban areas. Extensive uninhabited wilderness areas are found especially in Northern Canada and Russia and in Greenland. Greenland is covered by a continental glacier, which is why settlement is concentrated on the Coasts.

## ➤ How do people survive?

Animals continue to be the main source of food and materials for many Arctic people. Fish and meat are prepared in a variety of ways in the Arctic. Before propane stoves were used, Inuit boiled food in soapstone Kettles, over a flame in the Arctic region.

## ➤ Why do few people live in the Arctic region?

Today, more than 2 million people live north of the Arctic Circle. Towns have grown up here. Mining facilities, along the rivers and on the coastal But because the Arctic Climate is so harsh, very few people from further south settle permanently in the Arctic. Usually they move back to Warmer zones after few years.

## ➤ What is the life style of Arctic?

To adapt to the harsh climate, they developed warm dwellings and protective clothing. Many Arctic people now live with modern homes and appliances however, there's still a desire to pass on traditional Knowledge and skills - such as hunting fishing herding and native languages to younger generations.

## ➤ How did the Inuit adapt to their climate?

The genetic differences allow the Inuit to physically adapt to survive Arctic conditions and live healthily on a traditional diet which is rich in omega-3 -polyunsaturated fatty acids from marine mammal fat.



Sheza Fathima  
Grade – II A



# The Inuit

Indigenous people are the first inhabitants of an area and their descendants. The Inuit are the one such indigenous people of the Arctic and Subarctic regions of Greenland, Labrador, Quebec, Nunavut, the Northwest Territories and Alaska. Inuit means "People". The Inuit population is estimated to be more than 1,80,000.

In Inuit communities, hunting and fishing were the primary sources of food and men are traditionally responsible for these duties. Seals, Walrus, Whales, and Caribou were the most common targets of Inuit hunters. The women play a crucial role in the survival of the group. The Inuit women are considered equally as important as men. Because of this, women are given due respect and an equal share of influence or power.

Traditional Inuit religious practice includes animism and shamanism in which spiritual healers mediate with spirits. Inuktitut is one of the principal Inuit languages of Canada. The Inuit need thick and warm clothing to survive the cold weather. They use animal skins and fur to stay warm. They make shirts, pants, boots, hats, and big jackets called anoraks from caribou and seal skin. During winters they live in houses made of snow blocks generally referred to as igloos or built of stone or sod over a wooden or whale bone framework. In summer many Inuit's live in animal skin tents.

Few interesting facts about Inuit

- A member of the Inuit people is called Inuk.
- The warm soft boots worn by the Inuit are called mukluks or kamik
- To mark areas and to keep from getting lost, paths are marked with a pile of stones called inuksuk.
- The Inuit have no formal marriage ceremony or ritual.
- Inuit show affection to their children or loved ones through a "Kunik" which is like inhaling a person's essence through their cheek
- Inuit invented sledding

Inuit face multiple challenges including land erosion, climate change, urbanisation, shrinking communities, significant social and economic inequalities compared with other populations of the countries in which they live. Snowmobiles have replaced dogsleds for land transport. Rifles have replaced harpoons for hunting purposes. Out board motors, store bought clothing and other manufactured items have entered the culture and money unknown in the traditional Inuit economy has become a necessity. Many Inuit have abandoned nomadic hunting and now live in cities working in mines and oil fields. Others have formed cooperatives to market home made handicrafts, fish catches and tourism ventures.



Kiara Alayna Frank  
Grade – IV B



# The Inuit

## The Frozen Ends...

The Inuit are an indigenous Arctic people who speaks the languages of the Eskaleceton family and who resides in four countries surrounding the North Pole, Greenland, Canada, the United States and Russia.

One of the most longstanding pieces of Inuit clothing is the Parka, which enabled past Inuit population to survive in some of the coldest environments on Earth.

Some Inuit still have a diet consisting of fish and some land animals, with very little fruit and vegetables.

Igloos were used as a temporary shelter on extended winter hunting trips, not as a permanent Inuit home.

One of the most traditional ways for the Inuit to travel across the frozen ice of the Arctic is via the sledge or qamutik, pulled by Aummig - the Inuit name for dog. Another mode of transport is Kayak which means hunters boat."

Their lifestyle today bears little resemblance to that of their grandparents. their Kayaks have been replaced by motor boats.

They live in wooden houses instead of igloos made of snow they use guns instead of harpoons and travel on snow scooters instead of dog sleds.



Tanya N R  
Grade - I A





# The Inuit

## The Inuit the native people of Arctic

The term Inuit refers broadly to the Arctic indigenous population of Alaska, Canada and Greenland. Inuit means "people" and the language they speak is called Inuktitut though there are regional dialects, that are known by slightly different names. Today, the Inuit Communities of Canada live in the Inuit Communities of Nunavut - 1 loosely defined as "Inuit homeland" - which is divided into four regions.

The Inuit people Sea mammals such as survived primarily on fish and sea mammals such as seals, whales, Caribou and walrus. The typical Inuit diet is high in protein and -Very high in Fat. In their traditional diets, Inuit consumed an average of 75% of their daily Energy intake fat.

While it is not possible to cultivate plants for Food in Arctic, the Inuit have traditionally gathered those that naturally available. Grasses, tubers, roots, plant, stems, berries and seaweed were collected and preserved depending on the season and the location. There is a vast array of different hunting technologies that the Inuit used to gather their food.

Inuit Art Carving, print making textiles, and Inuit throat singing, are very popular, not only in Canada but globally, and Inuit Artists are widely known Canada has adopted some of the Inuit Culture as national symbols. Using Inuit Cultural Icons like the Inuksuk in unlikely, places, such as its use as a symbol at the 2010 Winter Olympics in Vancouver. Respected art galleries display. Inuit Art, the largest collection of which is at Winnipeg Art Gallery. Their Traditional New Year is called "Qulliqutik".

During 19th Century, the Western Arctic suffered a population decline of close to 90%, resulting from exposure to new diseases, including tuberculosis, measles, influenza and Small pox, Autopsies in Greenland reveal that, more small commonly pneumonia, kidney diseases, trichinosis, malnutrition degenerative disorders may have contributed do mass deaths among different Inuit Tribes. The Inuit believed that the cause of the disease were of a spiritual origin.

The harshness and unpredictability of life in the Arctic ensured that Inuit lived with concern for the uncontrollable, where a streak of bad luck could destroy an entire community. To Offend a Spirit was to risk its interference with an already marginal existence. The Inuit understood that they had to work in harmony with supernatural powers to provide the necessities of day to day life.



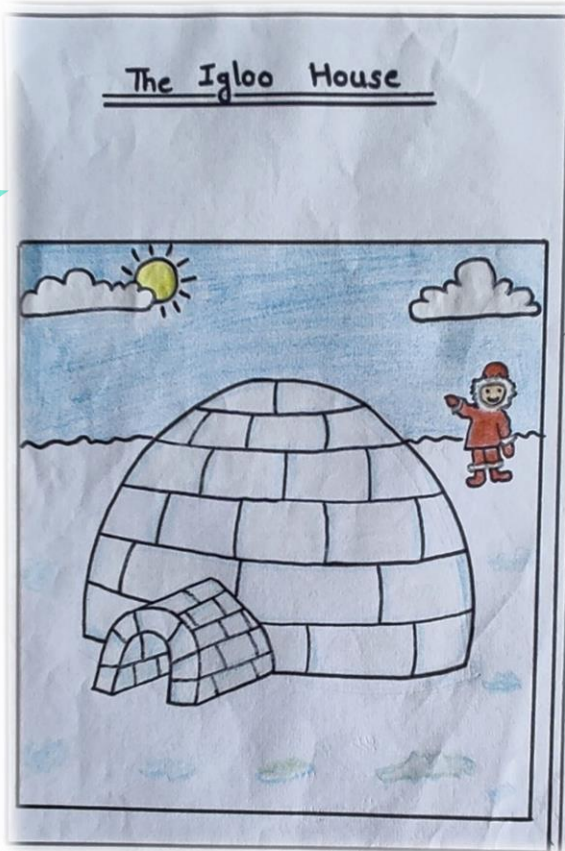
**B. Prahallad Nayak**  
Grade – IB



# Art from the Poles



Shylon Dsouza  
Grade – IB



My Igloo house :-



If I Lived in an Igloo

If I lived in an igloo, it would be very cold! First, I would like to wear warm clothes. Next, I would make a fire to stay warm. Then I eat hot soup. I don't go out often, I stay in the igloo.

It'd be fun to live in an igloo. I can have a lot of fun.

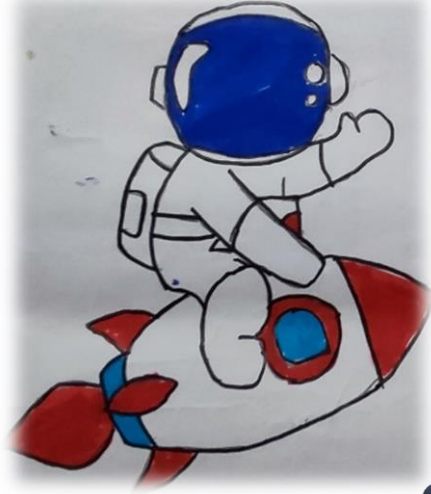


Ramya Sonewane  
Grade – IB





# Art from the Poles



**Varun Jain**  
Grade – III A



**Shrihan**  
Grade – IV A



**Parnavi Upadhyai Das**  
Grade – I A



**Nathaniel John Benette**  
Grade – IV A

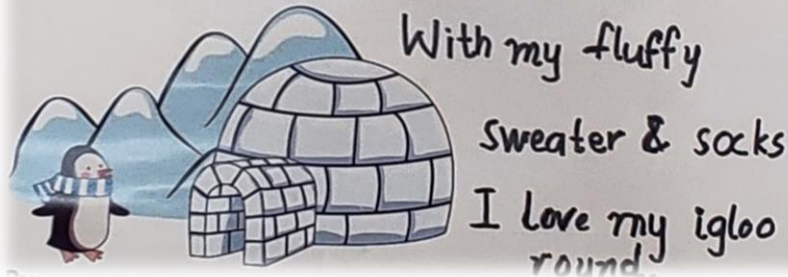
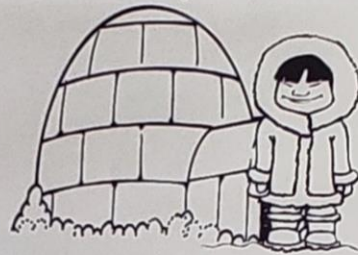
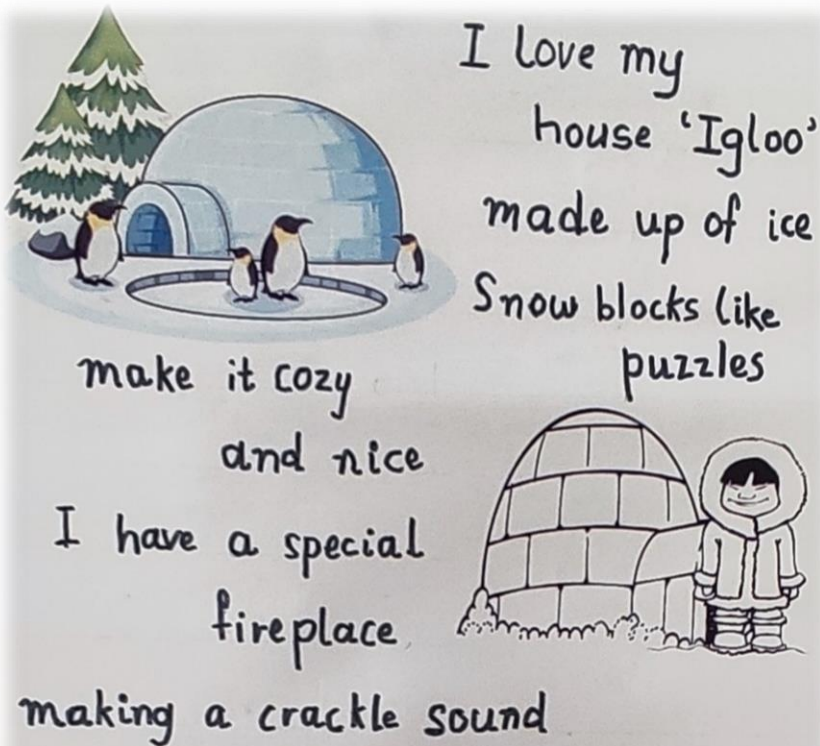




# Art from the Poles



Reyansh Vivek Shenoy  
Grade – II A







Spandan Dash  
Grade – II A



# Art from the Poles



<p>If I lived in an Igloo</p> <p>I would live with mom and dad.</p> 	<p>Tanvi 1A</p> <p>I shall go fishing with dad and catch a fish before the Seal could.</p> 
<p>I would go to school in a Sledge.</p> 	<p>We would sit together and enjoy the Northern Lights.</p> 



Tanvi Sujir  
Grade – I A



Arya Pai  
Grade – II A





# Spotlight @ PIS

## INTERNATIONAL YOGA DAY



## INVESTITURE CEREMONY



## SCHOOL COUNCIL ELECTION



## WORLD ENVIRONMENT DAY



## FIRE EVACUATION MOCK DRILL





State Level Monsoon Lawn Tennis Tournament held at District Indoor Stadium, Ajjarakad, Udipi



Advith Kotiyān of Grade 2  
Runner up in U-12



State Level Monsoon Lawn Tennis Tournament held at District Indoor Stadium, Ajjarakad, Udipi



Kempegowda of Grade 6  
Winner of U-12  
Runner up in U-16



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KARNATAKA STATE JUNIOR ATHLETIC MEET - 2023



UNDER - 14 BOYS  
**HIGH JUMP**  
SILVER MEDAL

**MIHIR M K**





# Spotlight @ PIS

## CO-CURRICULAR ACTIVITIES



## THEMATIC ACTIVITIES

## CLUB ACTIVITIES





# CULMINATING EVENTS

## TECH-O-MANIA



## BIZ-KIDS BAZAAR





# Spotlight @ PIS

## BEST PRACTICES OF THE SCHOOL

### BEST CLASS OF THE WEEK

This programme is set to bring the discipline among the students by following the School Behaviour Policy and being best in the campus.



### CAMPUS LANGUAGE

This programme is conducted to bring passion and positive awareness among the students and to improve the fluency, pronunciation, accuracy and conversation skills among the students and teachers in English.



### JOYFUL TEACHER

To have a positive impact, among all the teachers to achieve their career goals as well as professional growth. The Committee is framed to identify the best teacher among all and appreciate her/his work as per the criteria.



Presenting a special greeting card to the joyful teacher to motivate and to create awareness among all the staff to imbibe their dedication. This award will be given once in a month.

### ANGER FREE ZONE

Breathing exercises shall be conducted under this programme for teachers and students to promote the peaceful environment.

In this concept everyone has to manage 'anger' and this not only includes students but also the teachers, parents and other instructors. The elders set examples for the little ones. So they are able to manage suppressed emotions. There are several ways to promote smiling genuinely and responding by greetings to each other. Breathing exercises and talking calmly can be encouraged.



## BEST STUDENT COUNCIL MEMBER OF THE WEEK

This programme is aimed to improve the discipline and to develop the leadership qualities and responsibilities among the council members.



## HOUSE VISIT OF GRADE 10TH STUDENTS



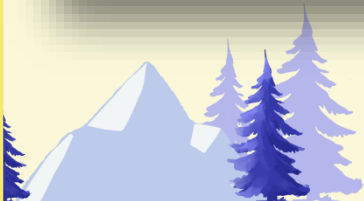
Principal and coordinators will visit the houses of grade 10th students to know their time schedule after the school hours. During this visit principal motivates the students to utilize time for studies and also guides the parents to keep positive environment around the students and keep them doing hard work.

## TEACHER WELFARE COMMITTEE

**Podar Parisara Snehigalu:** Giving saplings to the teachers on their birthday, teachers do plant the saplings in the school premises or in their home and next year the same plant photo has to display on their birthday.



## Team of PIS, Udupi





# Brain Play

## MAZE PUZZLE

Welcome home!



Let's find our way to the Igloo.

### Fun Fact

A polar bear's skin is actually black, its fur is also translucent, and only appears white because it reflects visible light.

Complete the word search

Q	E	F	I	C	I	F	I	O	O	C	P	I	L	N	I
B	E	L	N	H	Z	Q	F	O	O	O	V	H	O	W	P
R	E	A	Z	C	V	B	L	L	L	Z	O	R	P	K	H
A	G	R	N	G	D	G	D	A	M	S	T	V	H	K	V
B	Y	C	L	Z	I	X	R	D	E	H	K	X	V	C	W
B	J	T	S	Y	I	B	J	Q	P	N	K	H	T	H	F
I	G	I	K	C	E	C	X	O	O	Y	A	A	A	F	H
T	M	C	E	A	Z	Z	L	D	A	R	K	N	E	S	S
O	C	F	R	Q	I	E	Y	N	U	A	W	Z	O	E	T
S	L	O	E	S	W	F	C	I	T	C	R	A	T	N	A
N	T	X	V	G	L	L	U	K	C	I	T	C	R	A	O
S	E	A	L	S	U	Y	K	F	S	E	C	F	Z	O	J
M	P	V	M	E	Q	N	V	C	B	Y	Z	H	D	H	S
W	X	R	P	N	I	U	G	N	E	P	L	E	R	H	D
A	O	R	B	O	U	P	F	J	L	P	G	A	E	L	T
M	X	G	M	A	P	X	X	X	D	N	F	L	Z	R	L
C	S	M	I	X	O	M	I	K	S	E	H	T	B	K	F

Note: The words could be horizontal, vertical, diagonal or backwards.

Polar Bear  
Ice  
Darkness  
Antarctic  
Rabbit

Freeze  
Arctic  
Arctic Fox  
Igloo  
Penguin

Seals  
North Pole  
Eskimo

# Crossword

## - Animal -



1. POLARBEAR, 2. PENGUIN  
 1. PINKGULL, 2. SEAL, 3. ARCTICFOX, 4. BIGHORNSHEEP, 5. ARCTICCHARE, 6. WALRUS

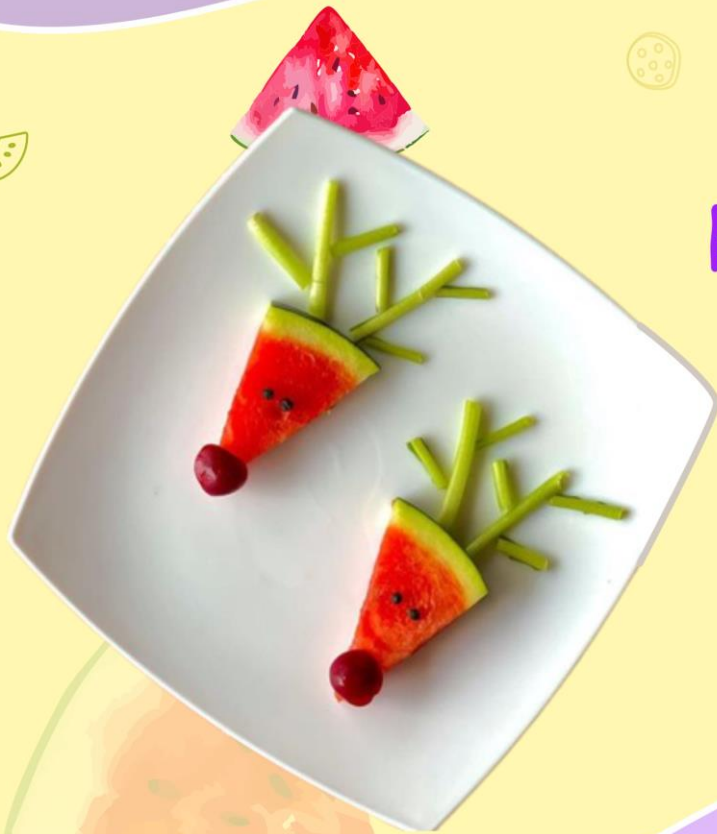


## Find the difference





# Bites & More



## Healthy Fruit Reindeer

### Ingredients

1. Watermelon
2. Cherry/Black grapes

mmm!

## Yummy Oreo Penguins

### Ingredients

1. Oreo Biscuits
2. M&M / Gems



# Snack it with easy Bread Polar Bear

## Ingredients

1. Bread
2. Butter / Cream cheese
3. Banana
4. Black Grapes



mmm!

a. Melt it..



b. Dip it..



c. Freeze n decorate!!



## Delicious chocolate dip Polar Bear

### Ingredients

1. Oreo Biscuits
2. White candy melts
3. M&M / Gems



