



### FROM THE PRINCIPAL'S DESK



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"The mind is not a vessel to be filled but a fire to be kindled." - Plutarch.

As most of the growth begins with a seed, all learning emanates from a thought. A single thought can be the source of an entire plethora of learning on a subject. Being able to broaden one's horizons and being aware of how little one knows may be the first step toward achieving knowledge.

We, at PIS attempt to kindle this mental spark in our students via the Qurio Mag every year. The theme on Poles - The Frozen Ends gives the students an opportunity to explore and delve deeply into the life and conditions in the North and South 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.

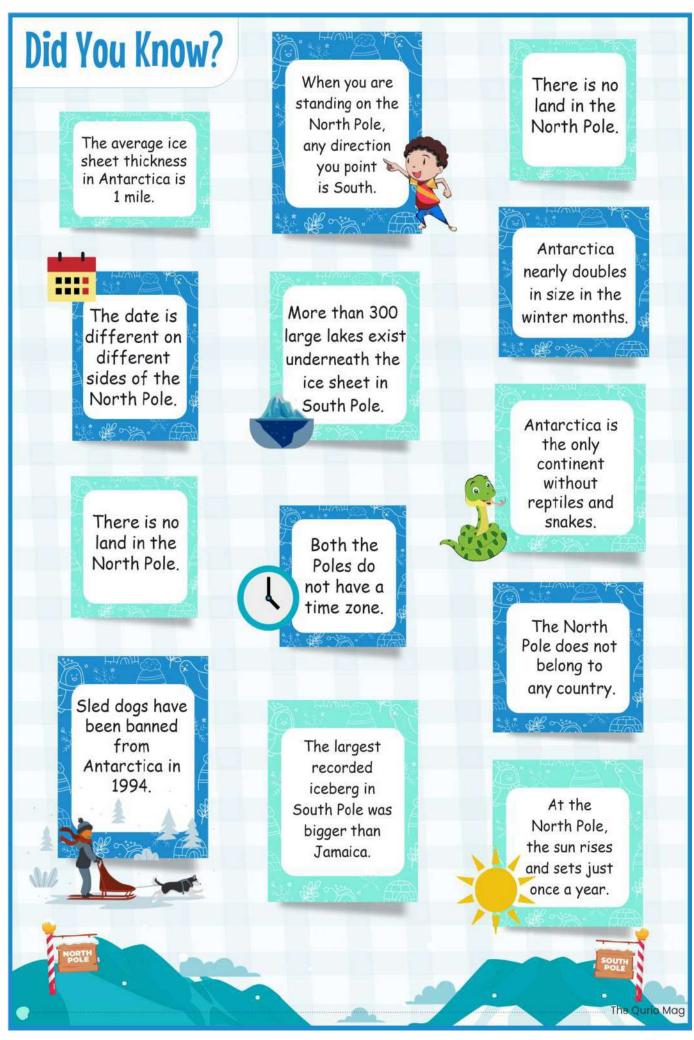
I congratulate the entire team for their hard work and dedication to making this magazine. I am sure that the positive attitude, hard work, sustained efforts and innovative ideas exhibited by our young children will surely stir the minds of the readers and take them to the fantastic world of unalloyed joy and pleasure.

Regards, **Principal** PIS Baramati

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### My Visit to Antarctica

One day, me and my three friends went to Veermata Jijabai Bhosale Udyan and zoo in Mumbai. There we saw some penguins walking and swimming. But we had no chance to touch them and know about their body that they are cold or warm. We also wanted to play with them. We think that they should be cold since they live in that region.

So, we all decided to visit Antartica. In a month, we went to Antartica and the next night we reached our hotel. We ate our dinner and slept early at night because the spot was very far away. The next day we got ready on time. We carried 5-6 water bottles, enough food for us to eat, jackets, gloves and caps in our bags. We travelled by car. When we reached our destination, we wore our caps and jackets as it was very cold there. We also carried our bags there.

First, we touched them but they were warm because they had a fur-like material



on their body. Then we wore our gloves and started playing with them. After some time, snowfall had started heavily. Then we asked our driver to drop us at the hotel but he said "The car is not able to move in the snow." So, we started discussing with the penguins about this. As we started discussing, the driver drove the car to his home. He had cheated us. We asked the penguins that what to do now, so they told, "We

can build an igloo and we can stay in it." So, we all started building an igloo. But the thing was that we needed to make it larger because we were three and other three penguins and it took much time. Fortunately, till we built the igloo, the snowfall had stopped. After building it, we all went inside it and took a rest. At night, we felt hungry so we took our bags and started eating it. We asked the penguins but they declined since they ate different food.

From the next day, we started searching for the vehicles which passed from there but no vehicle was coming there. At last, after one day a car passed from there. So, we asked the driver to drop us at the hotel and the driver agreed. We all thanked our new friends, the penguins for their kind help and we all went back. But we would never forget penguins for they helped us in such a situation.

Ishita Gite [Grade - 10A]



### **Hygiene and Care in Igloo**

You would be surprised to know that the Igloos are built to different configurations to suit the size of the family. Nobody wants it to be dripping inside, or for soot to build up, especially after a storm. The igloos are cleaned every day. It is recommended to smoothen the sleeping platform (also made of snow) with the feet on waking up. Igloos usually have two entrances-a block of ice serves as a window, and it has to be scraped frequently to keep it transparent, because it supplies light during the day. It is also necessary to clean the floor of accumulated dirt, soot and sometimes urine.



The old snow should be removed and replaced with clean snow. The bed at the rear of the igloo requires a lot of maintenance, because it is one of the places that gets the dirtiest. The Inuit are careful to keep their igloos clean and livable, just as they keep their houses. The worst chore is to clean the cracks in the floor. Once cleaned, the igloo is tidy and bright.

In the morning, the igloo is very cold, because it's not heated during the night. Everyone sleeps naked in the big bed, with their clothing piled on top to keep them warmer. By morning, the kamiks (boots) are frozen stiff, and they have to be forced on. Everyday, the children have to fetch water and take out the waste bucket even if it is very cold outside. The only source of heat and light in the igloo is the qulliq. Clothes were hung to dry above the qulliq. The quilliq is is the traditional oil lamp used by Arctic people.

The snow used to build an igloo must have enough structural strength to be cut and stacked appropriately. The best snow to use for this purpose is snow which has been blown by wind, which can serve to compact and interlock the ice crystals.

Ananya Dhumal [Grade - 9A]





### **Grand Daddy Santa Claus**

Grand Daddy Santa Claus We wish to sing with you!

We wish to have a ride in your sleigh Travel in the high clouds, enjoy all day!

While listening to this poem, I just
Thought if I would be living on near Santa's house
HOH OHO,
NORTH POLE.

#### Really!

If I would be living at north pole, I could meet santa everyday and I could play with snow everyday. I could go fishing everyday and could have fun everyday.

There will be so many snow sports.

But I could not get food easily.

There are seen polar bears in a day and arctic foxes in night.

I wish to go there for long time. I could play snow fight.

We could play ice hockey And make big snow men,

I could surf and play fetching with my dog.

I could feed penguins and send wishes to Santa earliest.

I can enjoy voyage in icebreaker.

I would experience long sleep because there are three months to sunrise.

Most pleasant twilight I would be enjoying on north pole.

Webst productive twinging a would be onjoying on north polo.

There will be no use of short and vests at always freezing temperature,

I have to wear polar jackets all the time.

Interesting fact that the ice of arctic contains

around percent of world's fresh water,

The giant, white frozen region reflects sunlight, helping keep the region cool.

It plays super important role in keeping our global climate stable.

But the truth is, we can't live on North pole in freezing temperature for long time without healthy food, we are not adapted for north pole. My country is the best where I can enjoy all weathers.

Raghav Bhagat [Grade -2C]



### My house made of ice

The snow is falling on ground
The polars are sleeping making round
White and white is matching ice
But the feeling is so awesome and nice

My house made of ice
I want make a garden of rice
I felt no cold
But there so much so snow!

In the dark-time I didn't have the torch
But for me there was the twilight
Scared of the beast, that is hiding behind the trees
It look like that they are always free

I also know the penguins , the black and white It seem like that both are day and night They slip over like they are going for trip For a long time on the cruise ship

Trisha Jadhav [Grade - 5B]







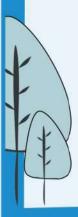
It would undoubtedly be an experience unlike any other to live in an igloo. The insulation that the ice walls offer is the most evident advantage of living in an igloo. In comparison to a wooden or brick house, an igloo would be substantially warmer in the cold. The substantial ice walls of the igloo would keep the interior cold and cosy during the summer.

Living in an igloo has the added benefit of being quite simple to build. The igloo's fundamental form is a dome composed of ice blocks. The igloo's dome-shaped design and spiral arrangement of bricks create an air pocket that traps warm air and acts as insulation. It is a straightforward and effective style that has been around for a very long time.

Living in an igloo presents certain difficulties because it needs a consistent supply of ice chunks. This means that if the igloo is constructed in an area where the climate is too warm, ice blocks would need to be periodically replenished. Igloos are not normally made to last for a long time, which presents another difficulty. The ice chunks will gradually melt over a few years, requiring the igloo to be rebuilt.

Living in an igloo would be an unusual experience and have many advantages. In the winter, it would offer a warm and cosy living environment, and in the summer, a cool and cosy one. It merely needs a constant supply of ice blocks and is also rather simple to build. Igloos, on the other hand, must be repaired every few years because they are not made to last for a very long time.

Anaya Jagtap [Grade - 6B]









The Elves Save the Day!

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 he workshop," Burt said o the elves. "It's time or us to clean up for the ay."

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

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.

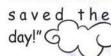
They flew all around the world until Bud spotted Santa's sleigh on a house rooftop delivering toys of the same of



"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







### Animals of the Arctic and Antarctic \*

### How to tell the Arctic Animals...

Padding over ice, Fluffy white hunter of death, Mother of life, it's a Polar bear.



Stealthily creeping, Eyes dark stars in the white night, Thick tail swishing lies, then it might be an arctic fox.



Hefty weight creaking, Hungry tusks nimbly dancing, Wrinkly flippers dry, Oh! It's a walrus.

Crowned with winter trees, Shadows with mane of white snow, Search through bright powder, Santa's rider it's a reindeer.



Horns smiling wide in, Dense dark fur, shy noses sniff, While heavy heads drop, then it's a muskox.



Bounding high off thin, Feet, dusty ears surrender, Ball of fur quivers, it's an arctic hare.



Aryan Barbade [Grade -10A]





### **Fauna of Arctic and Antarctic regions**

Arctic and Antarctic regions are home to various unique animals adapted to their extreme environments. In the Arctic, you can find the animals such as polar bear, Arctic foxes, walruses, seals and various species of whales like belugas and narwhals.

In the Antarctic, iconic animals include penguins (such as Emperor, Adelie and Gentoo), weddell seals, leopard seals, and various species of whales like humpback and killer whales.

Both regions host a diverse range of marine life, including krill, which serves as a crucial food source for many animals, including whales and penguins. These ecosystems are fragile and vulnarable to climate change, making conservation efforts essential to protect these unique species and their habitats.

Ishan Kothari [Grade - 6A]

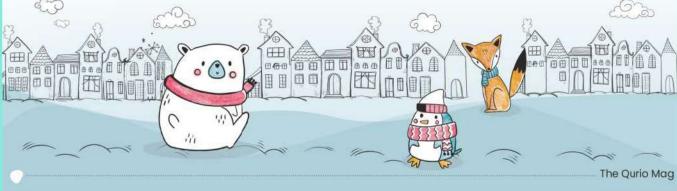
### **Penguins**

Penguins are seabirds in the family sphenicidae. They use their wings to swim under water, but they can not fly in the air. They eat fish and other seafood. Penguins lay their eggs and raise their babies on land.

Penguins live only in the southern hemisphere of the world: Antartica, Australia, New Zealand, South Africa and South America. The furthest north they get is the Galapogas Islands, where the cold Humboldt current flows past.



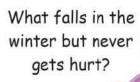
Chaitanya Pukale [Grade - 6C]



# Riddle Time!

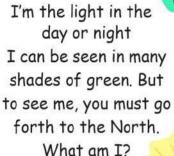
2.

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



4

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







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.

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





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

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





### **The Polar Bear**

The polar bear lay still,
Patience another skill.
Gigantic and beautiful he stands,
The magnificent king of snow blessed lands

Above all he towers in this white realm,
The beauty he beholds just overwhelms.
A pious wisdom in his words he holds,
From years of living in the overpowering colds.

A heart of purity the polar bear represents, The splendor of ice he lovingly presents. Air of humble power and joy of fair surround, No matter what, he stands to his faithful ground.

Reminds us mortals of how we are,
The past, present and future make us who we
are.

The polar bear makes us believe, In the coldest of places we can still succeed!

Shrijit Wabale [Grade - 8A]



The magnificent king of snow blessed lands. If I came across a polar bear

If I will be a polar bear,
I will be despair.
In colour in white,
So, I will be scared at night.

What should It eat?
Sweet and sour meat!
Later I will sleep,
In huge cave,
It helps me to be safe.

It is very quiet,
Never try to do fight,
And never goes on diet,
As it is very tired.

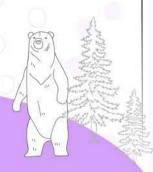
It is very cute,

Does it follow any route,

But human always try to shoot,

So, it has been very pollute.

Riddhi Jadhav [Grade - 6C]





"You touched a baby polar bear?" is the first question that I'm asked now. This is followed straight away by "didn't the mother take offence to that?" And by 'take offence' they mean that "didn't mother polar bear swipe her massive paws with blades for claws at you and gouge out your insides?" and so I describe a situation that is both sad and cute, irresponsible and corrective but above all else amazing.

This was my third time in Baffin Island and I had not yet seen a polar bear. I really wanted to see one. Safely, and from a distance, as all visitors to the Arctic wish. The Inuit too still get excited every time they see a nanok (polar bear in Inuktitut). So there we were at the start of our polar expedition attempting the first British traverse of the Penny Ice Cap, a distance of over 250 km, rising from sea level to 2000m and back down again through temperatures below -25C and with winds of up to 70 km/h. But first of all we had to get to our starting position.

Our starting point was actually some way away from the nearest Inuit community that we could get conventional transport to. That was because the communities are traditionally by the sea (or what is the sea once all the ice melts in the summer) and sea and Arctic coastal regions are stalking grounds for the polar bear. After not eating much for several winter months polar bears are quite hungry – not an ideal situation for us, as unprotected humans, to be in. Thus we started as far inland as we could, arriving there safely by having our Inuit outfitters drop us there by skidoo (snow mobile), a journey of about 8 hours. We had two skidoos, to manage not only taking the three of us and all our equipment, but also to give the Inuit drivers, Billy and Charlie, some equipment redundancy if one of the skidoos failed— crucial given that they could be potentially 8 hours away from their homes and shelter.

We started in the morning of a beautiful sunny still day, the temperature a balantic and we were looking forward to an easy ride out to our start point.

We travelled past massive icebergs, halted in their voyage south by the freezing seas. They towered storeys above us, dwarfing us in their majesty. We stopped in awe and the silence that followed was deafening. We passed seal holes, where, some way in the distance, a seal was sunbathing. Arctic hares raced past us, somehow managing to maintain the same speed whilst shooting up a 50 degree mountain snow slope.

Continued...



We saw the extraordinarily shapes created by pressure ice as the sea froze, forcing us to weave in and out, up and down, to find the easiest way through. Then we came across the tracks of a mother polar bear and two cubs. The tracks were fresh. I remember putting my hand inside the paw print of the mother polar bear and gulping a little uncomfortably as my hand was swallowed up. We followed the tracks and came across a seal den, where seal babies are nursed. We could see where the polar bears had waited patiently, hoping to catch a seal, and their tracks further away into the distance when they had given up.

We continued on our way to our starting position but after a further hour, Charlie shouted "NANOK!" over the roar of the engine, whilst pointing to something in the distance. My eyes followed his finger to see, in the distance, only one white speck amongst many others, against a white snow background...I could not see the polar bear.

I was driving at the time and he told me to stop. We quickly changed seats and he accelerated off. As we drew closer I suddenly made out the unmistakable form of the polar bear. Her fur had a yellow tint to it, making her stand out against the white background. She had two cubs with her, undoubtedly from this year's litter, and still very young. They trundled along beside her, playfully tumbling in and out of bear tracks. We moved closer still to get a better view and pictures. Too close!

Mother bear became startled by these two large, noisy machines hurtling towards her and in her fright took off away from us with her cubs following close behind. Her gait was quite comical to view from behind but her speed was incredible.

We followed but in our excitement to see these wonderful creatures nevertheless scared her. She increased her speed further, but one of her cubs could not keep up. He slowly fell further and further behind and then he panicked. He stopped turned and started running in a different direction, at almost 90 degrees to his mother's tracks.

The mother did not look back and was getting further away. We sped up, and tried to use the snowmobiles as a guide to force him back in the right direction. Our large unmaneuverable machines were insufficient to scare the small and agile bear in the right direction, but fortunately, eventually he crossed his mother's tracks and started to follow them. We stopped and watched.

Continued...



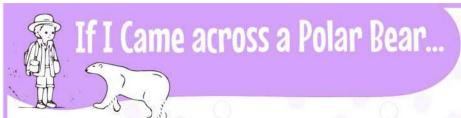
The baby bear was about the size of a midsize dog. In contrast to his mother his coat was a pure fluffy white, unblemished by life. He was probably only a few months old, born during the winter that had just passed. Female polar bears generally give birth to two or three bears per litter and twins are common. A pregnant bear creates a den inside the snow for the winter in order to rest and nurse her young. It is likely that they had only just emerged from their den and it was the young bears' first few days in the outside world.

Barking continuously, the baby bear followed his mother's tracks. But slowly and inconsistently. At one point he stopped and headed back towards us. His mother meanwhile had not slowed down and was well out of sight. After half an hour we were not sure whether he would find his way back to his mother, and he was too young to survive by himself. Billy, our Inuit outfitter explained "He is too young. He does not know what he is doing." Billy decided then that the best course of action was to catch him and take him back to his mother on the snowmobiles. Seeing what distress we had caused and having already attempted to let the situation resolve itself, it was the only course of action left and one that we all accepted. The chase began.

We used the two snowmobiles to create a pincer movement. We came in frembehind, overtaking the baby bear from the left and right before suddenly closing in, closing the pincer. Seeing his path cut off by the snowmobiles he stopped, barking ferociously, much like baby Simba's roar in Disney's Lion King, with his hot breath steaming out of his mouth. With him unsure what to do, we had time to try and grabhim.

Charlie jumped off the skidoo and grabbed his body. "Great!" we all exclaimed, and hoped for a quick end to this situation. But Charlie didn't know what to do next, and nor did we. If he tried to pick him up he would be subjected to those great claws and those big teeth – scarily large even though he was so small. Thus we lost the element of surprise, and when the bear realised what was happening he started struggling. Just one movement of his head made Charlie back off, in fear of being bitten. Realising he was free the bear jumped over the overlapped snowmobile tracks that had closed him in and ran off. Charlie gave a futile and comical attempt to chase him on foot – no chance.

Continued...



I jumped onto the driver's seat to catch up with Charlie, whilst Billy took control of the other snowmobile and we caught up with the bear to try again. And again. And again. Each time the bear escaped, becoming more confident and bold in his attempts to escape capture – he was certainly outwitting us. We were going to have to immobilise and blindfold him so that he could not see where to attack. Billie was travelling with a spare tent that served as an emergency shelter if their snowmobiles broke down far from their community, and we decided to use this sheet to capture the bear.

Once again, Billie and I in control of the snowmobiles executed what now became a perfect pincer movement. Charlie jumped out of the back of the snowmobile with the tent sheet and threw it over the bear. This allowed us to scoop him up without him fighting so much and place him in the sled at the back of the snowmobile. Charlie climbed in afterwards holding him down under the tent sheet. His barks became muffled.

I jumped back again onto the driving seat and we pushed the two snowmobiles to their limits to try and find the mother. The terrain was fairly flat, but with small undulations created by the sea ice, making the ride at full speed quite bumpy. I looked back at my precious load continuously afraid that the bumpy ride would hurt our bear or enable him to escape. Even though the mother bear was well out of sight, following her was quite easy once we had located her tracks. She had travelled a fair distance, covering over 10km in the hour or so since we had last seen her.

As we approached, the mother heard the machines, and started sprinting away as full speed. We swapped snowmobiles so that Billie could bring the snowmobile with the baby bear closer. I watched as they approached to within a few hundred metres of the mother, and quickly tried to release the baby bear.

He got caught up in the guide ropes and there was a tense moment as we watched the mother disappearing away and the baby bear unable to disentangle himself whilst being within easy biting distance of Charlie and Billie. After a frantic pulling of the guide ropes he became free and quickly ran away – in the wrong direction. Billy chased him trying to force him in the right direction.

Continued...



But two human legs once again failed against four bear legs and he could not keep up. We could only watch. After running away in a panic he saw his mother who was now halfway up a valley edge about 2km away and followed.

He moved towards her, his barks becoming fainter with the distance he got away from us. Though we were a few kilometres from the mother we decided to move further back to allow her to relax. Turning back to watch from a safe distance we saw the mother stop and hearing her cub's cries waited at her vantage point up the valley wall.

The baby bear, with his cute shuffle, caught up with his sibling and together they climbed the hill after their mother. We turned away as we saw the three of them crossing the slope together, the mother walking in front, and the two cubs not far behind.

It was a happy reunion and one which we sheepishly celebrated. It was a situation that we had created and one that would not have occurred had our desire to see these fantastic creatures been satisfied by seeing them from a distance. We, individuals and as a species, have a responsibility to wildlife and must recognise the effects of our actions.

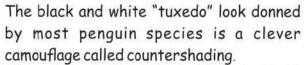
Even though I was thoroughly thrilled to have been so close to a wild polar bear I was sorry that this situation had emerged, and I hope that there were no long-lasting negative repercussions of the baby bear's proximity to us humans.

Samiksha Tekawade [Grade - 9A]





### **Interesting Facts About Penguins**



(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 Arcticl)

### 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.)





#### **Environmental and cultural changes**

Climate change has brought large changes to the landscape in northern Canada. With sea ice melting at an unprecedented rate, stress is placed on arctic biodiversity as a result of the changes in the sea-ice habitat. Equally, this has a significant effect on communities in polar-regions as availability, accessibility and quality of resources changes. These changes will not only disrupt physical wellbeing of indigenous people in the area but have the ability to create profound social and psychological disturbances.

Environmental and cultural changes as a result of climate change only worsen the problem. In a study by Durkalec et al. (2015), it was determined by interviewing individuals in Inuit communities that there is a link between the ability to travel and hunt over the sea ice and mental health. The social impacts affecting Inuit communities as a result of climate change, only worsen the psychological impacts.

Linguistically and culturally, the Inuits are more closely related to indigenous Mongolians of Fareast Asia then, say, Native Americans. Due to the harsh climate of their chosen land, the Inuit culture of the Arctic managed to evolve over thousands of years with very little influence from other indigenous tribes, like the Native Americans, retaining an authenticity and uniformity that's not usually found in other ancient cultures which also boast such a wide, if not numerous, distribution.

A change of climate on our planet and the broadening of wildlife roaming enticed the Inuits to scatter over the Arctic region, rapidly and extensively. Today, the Inuit is considered one of the most dispersed indigenous cultures in the world, with their inhabited area covering six million square kilometres, from the furthest reaches of Siberia in Russia, through to Greenland, Canada and Alaska.

Their numbers remain relatively low, however, certainly adding to their anthropological value. The greatest Inuit population is found in Canada (65,000) followed by Greenland (50,000) Alaska (16,000) and finally Russia, where less than 2000 Inuits remain.

#### **The Solstice**

Athang Wasnik [Grade - 7A]

Black and white.

Arctic Summers and winters are
not this simple they are a rainbow of light.

The blue haze of winter dark
streaked with sunset stains and dawn scars.

Cosy rooms of candle lit gold watch
nights bright with enchanted fairy rivers.

Summer arrives with turquoise ocean skies;
the white watchful sun always drifting
bouncing above the frosted edge.

Soft shadows play hide and seek;
cliffs of grey ice crumble dark blue sea eats up
the white statues.

The golden eye of night.

Shraddha Salunke [Grade - 9B]





Arctic northern lights and Antarctic southern lights are a beauty to behold. These are the pleasant words we hear on these magnificent lights from the Internet. It is believed that these lights most commonly seen in pale green and pink are seen in the Arctic sky when highly charged electrons from solar winds combine with various atmospheric elements in the region of the North Pole. They seem to occur once in 11 years during 'Sun's maximum'. These lights were seen in 2014 and 2 to 3 years before and after 2014 and

in winter from mid-November till the end of January in locations with high latitudes like Svalbard lying in between the Norwegian mainland and the North Pole in Norway. Reykjavik, the Capital of Iceland is another popular place for Aurora viewing. Aurora can also be viewed in North Canada at many places: Yukon, Northern Saskatchewan, Northwest Territories, Newfoundland, Nova Scotia, and British Columbia, and at the coast of Cathine way up in north Scotland. The magical lights are also seen in Finland, Sweden, Russia, Alaska, and Greenland. The Northern Lights are visible almost 200 days a year in the

northernmost region of Finland.

Southern Lights were seen by the crew of Expedition 30 on board the International Space Station on March 4, 2012, from 17:19:17 to 17:27:10 GMT, on a pass over the South Indian Ocean. The Aurora Australis is seen as the ISS passes over the South Indian Ocean, from northeast of the Kerugelen Islands to south of Australia. These "southern lights"- the aurora Australis-can generally be seen only in the Antarctic and the surrounding waters. They are seen in Tasmania and the southern part of New Zealand with frequency. Incidentally, the northern lights and "the southern lights" occur simultaneously and are almost mirror images of each other.

Auroras are found to extend between about 90 and 400 km, while some others estimated the northern lights were generally between 90 and 130 km above ground level in altitude. In my view, not many studies have been done to arrive at the exact range of heights that these lights most commonly occur. If we know the heights, an explanation can be made accordingly.

When large quantities of electrons approach the earth and interact with the atoms or molecules of Nitrogen and Oxygen present in the Atmosphere, lightis believed to have been caused. In my opinion, this explanation of the formation of colors by previous scientists may be by pure imagination and not by evidence.

First, there should be enough evidence to show that atoms or molecules of Nitrogen and Oxygenare present in the Atmosphere there which was not done by previous researchers.(Extracted from Google)

Harshal Chavan [Grade - 8B]



#### **Formation of Glaciers**



When a considerable amount of snow piles up at one place and less melting takes place, those piled-up snow compacts to form glaciers.

Various parts of glaciers move at different speeds. Maximum glaciers move very slowly, but few glaciers can move 50 metres per day.

Further, glaciers are of two types. One is an alpine glacier, and the other one is an ice sheet glacier. Alpine glaciers form near mountainsides and move through valleys.

But ice sheets are not limited to mountainsides. They can spread all over the mountains, valleys, and even planes.

Arnav Cheke [Grade - 8A]

### **Location Of Glaciers Throughout the World:**

Total glaciers present all over the world are about 198,000 to 200,000. We can find glaciers on nearly every continent.

But the highest number of glaciers are found in Antarctica and Greenland. Antarctica has approximately 91 percent glaciers, and Greenland has 8 percent glaciers.

Then why the melting of glaciers occurs, and why should we stop their melting? Why is the impact of climate change on glaciers a matter of concern? And lots of such questions come to our mind after listening to the topic.

Thus, here below, we will explore the significant effects of climate change on our white deposits. Let's have a closer view.









What is the link between climate change and glaciers? Well, the chain between climate and glaciers is the temperature rise. In other words, we can use global warming to describe the consequences.

Climate change has strongly affected Antarctica. The temperature rise in Antarctica is approximately six times the world's average.

This unusual temperature rise is mainly due to the long-lived greenhouse gases like carbon dioxide, methane, nitrogen oxides, etc. Carbon dioxide is the primary greenhouse gas that contributes to about 9-26% of the greenhouse effect.

Instead of carbon dioxide, Methane, nitrogen oxide, water vapour, and ozone like greenhouse gases are responsible for 4-9%, 3-6%, 36-70%, and 3-7%, respectively.

However, these greenhouse gas emissions are either natural or anthropogenic. Naturally, the synthesis of such GHGs occurs by the nitrification and denitrification of nitrogen and the decomposition of organic matters.

As we have discussed, this unusual temperature rise is a result of human activities. Burning of biomasses and fossil fuels, logging activities, livestock, and paddy rice farming, also usage of fertilisers and pesticides, are some examples of anthropogenic activities.

Besides these human activities, increased use of cooling systems such as air conditioners and refrigerators are also responsible for climate change.

Yes, those harmful greenhouse gases also include hydrofluorocarbons, perfluorocarbons, and chlorofluorocarbons. And refrigerating systems are the causes of such emission.





### Significant Effects of Temperature Rise on Glaciers:

Due to the rise in the air temperature, ice shelf collapse has increased in the last few decades. Around 87% of glaciers in the Antarctica peninsula are shrinking.

According to recent research, twelve glaciers around Antarctica showed near frontal surface lowering since the 1960s.

Due to the thinning of glaciers, the acceleration of glaciers has increased. Because thin glaciers float faster, thus we can conclude that rapid warming has resulted in glaciological changes.

According to a report of a study by NASA and the European Space Agency, from 1992 to 2018, about 3.8 trillion tons of ice have melted from the green land's ice sheets. If this continues, about 3 to 5-inch sea level rise will cause natural disasters like floods till 2100.

Rajveer Jagtap [Grade - 9A]

### **Are Glaciers Growing or Shrinking?**

To check whether a glacier is developing or contracting, Glaciologists check the state and condition of snow and ice at different areas on the glacier towards the summer season.

The researchers check snow level against stakes they have embedded in the glacier, dive snow pits in the surface to inspect the arrangement of seasonal layers and insert long poles into the glaciers to test snow and ice characteristics.

Due to glacial melting, Lake formation has increased by about 50 percent all over the world in the last 30 years. But there is no global assessment of the increased number of glacial lakes till now.





#### **Benefits of Glaciers**



Glaciers are very helpful to humanity. There are three significant bits of the help of glaciers. Those are providing drinking water, irrigating crops, and glaciers help to generate hydroelectric power.

People living near mountainsides depend on glaciers for their drinking purpose. Glaciers melt and flow through the valley, which is collected by those communities to drink.

Besides this, the demand for glacier water has increased all over the world. Some beverage companies are selling bottled glacial water and glacial ice cubes.

In glaciological areas, the communities melt the glaciers and use that water to rrigate their crops. Traditionally for thousands of years, they are following the same process and earning their livelihood.

Researchers and engineers in Norway, central Europe, Canada, New Zealand, and South America have worked together to collect or gather the glacial resources and benefit from that.

They melt those glaciers and use that melted water to generate electricity, which is called hydroelectric power.

Besides this significant help, glaciers also provide water to the ecosystem as this is the reservoir of water.

Many aquatic animals need cold water to survive. Some major aquatic insects, which are essential parts of the ecosystem, entirely depend on this melted water to survive.

Glaciers also provide useful information about the eventual changes in the climate over several decades.







### Harmful Effects of Glacier Melting.

Due to the rapid melting of glaciers, the melted water covers the land portions, and the sea level is rising.

A rise in sea level increases soil erosion in coastal areas. It rises storms and floods as warming air, and sea temperature starts more frequent and exceptional seaside storms like burgicanes and typhoons.

The melting rate is rapid; if this rapid melting rate continues, then many lands will be covered by water in the future. If all the ice in Greenland will melt one day, then the ocean level will rise to 20 feet globally. This will disrupt the typical pattern of ocean circulation, and we have to face more storms.

This will directly affect the aquatic animals, and the businesses related to the sea will face a significant loss. Then the economy is also going to be involved.

Aadhya Deshmukh [Grade - 5A]

#### Impact of Climate Change on Glaciers Conclusion.

Glacier melting has impacted society directly by affecting landscapes. This is a sign to us to improve the climate.

But if we ignore the warning, then we have to face the consequences.

As the temperature is increasing, there is no other way to reduce this rapid melting rate.

The only way is to control the temperature and take strict actions against this.

Poulastya Roy [Grade - 5A]







#### **Glaciers and Climatic Change**

Glaciers are sensitive indicators of modern climate change because they respond to both temperature and precipitation:

• Precipitation: At its highest elevations, a glacier gains new snow each year in its accumulation zone. Over time, this snow becomes glacier ice.

Temperature: In its lower reaches, a glacier loses mass as all of the winter snow and some of the glacier ice itself melts in the ablation zone.

Between a glacier's accumulation zone and its ablation zone is a thin area where only the amount of mass gained as snow melts away each year. This is known as the equilibrium line. Scientists often assess changes in the altitude of a glacier's equilibrium line to understand its health.

Whether it is advancing or retreating, every glacier flows downslope, moving ice from its accumulation zone to its ablation zone:

- If more mass is added as new snow in a glacier's accumulation zone than is lost in its ablation zone, the glacier will advance.
- If more mass is melted from a glacier's ablation zone than is added as new snow in its accumulation zone, the glacier will retreat.

Avishkar Ghanwat [Grade - 5A]

#### How many glaciers currently exist in Alaska?

Based on the most recent comprehensive survey in 2011, there were about 27,000 glaciers in Alaska.

However, the number of glaciers is a misleading statistic. Scientists are more interested in total glacial land coverage as a measure.

The number of glaciers is less important since large ones can split up into several as they retreat. The amount of area glaciers occupy in Alaska is trending

downward.

Rudrajeet Gadade [Grade - 2A]





### Why is glacier ice blue?

Glacier ice is blue because the red (long wavelengths) part of white light is absorbed by ice and the blue (short wavelengths) light is transmitted and scattered. The longer the path light travels in ice, the more blue it appears.

Trushna Malve [Grade - 3C]

### The difference between global warming and climate change.

Although people tend to use these terms interchangeably, global warming is just one aspect of climate change. "Global warming" refers to the rise in global temperatures due mainly to the increasing concentrations of greenhouse gases in the atmosphere. "Climate change" refers to the increasing changes in the measures of climate over a long period of time – including precipitation, temperature, and wind patterns.

Om Doshi [Grade - 3C]

#### Glaciers and Climate Change.

The Intergovernmental Panel on Climate Change (IPCC) reports that glaciers worldwide have lost approximately 9000 billion metric tons of ice since the early 20th century.

This has contributed significantly to the observed rise in sea levels which have increased by an average of 15-20 centimeters. Glaciers, sculpted over millennia, hold valuable information about past climates and offer insights into our planet's future.

However, rising temperatures are rapidly melting these icy giants, impacting water resources, sea-level rise, and ecological balance.



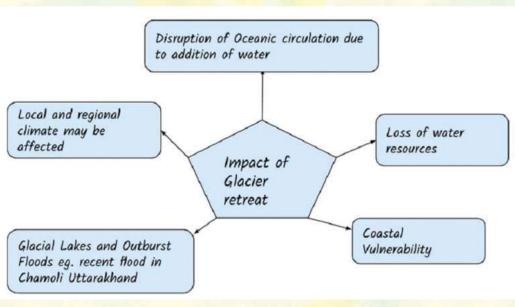




- Activities: Glacier tourism involves activities like hiking, mountaineering, and skiing in glacier-covered regions.
- Consequences:
  - High visitor numbers and infrastructure development can have detrimental effects on fragile glacial ecosystems, causing habitat disruption and pollution.
  - Climate change impacts, such as glacier retreat, pose a threat to the future of glacier tourism.
    - Example: The Swiss Alps, known for their scenic glaciers, attract millions of tourists each year, contributing to the local economy but also exerting pressure on the environment.

Urvil Dave [Grade - 5C]

### Climate Change and its Impact on Glaciers.











Strategies: Strategies may include:

- Water conservation, diversification of livelihoods, improving water storage and management, promoting sustainable practices.
- Engaging local communities in decision-making and providing them with necessary resources and support is also crucial.

Example: In the Peruvian Andes, communities are implementing water storage systems, terracing for agriculture, and sustainable tourism initiatives to adapt to glacial retreat.

Aaradhya Panicker [Grade - 5C]

## Policy measures for mitigating climate change and preserving glaciers

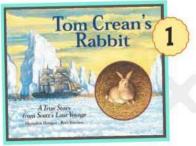
Policymakers need to prioritise climate change mitigation by :

- Reducing greenhouse gas emissions and transitioning to renewable energy sources.
- Implementing policies: to protect and preserve glacier ecosystems, including establishing protected areas and regulating tourism activities.
- Investing in research, technology, and infrastructure to promote sustainable practices and resilience in glacier-dependent regions.
- Example: The Swiss government has implemented strict regulations on tourism, waste management, and emissions to protect its glaciers and mitigate climate change.





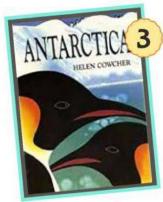
# Book Recommendations



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



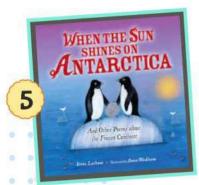
The Mystery in Icy Antarctica By Carole Marsh



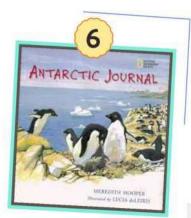
**Antarctica**By Helen Cowcher



Ice Wreck
By Lucille Recht Penner



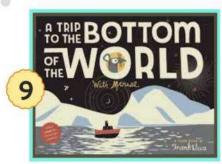
When the Sun Shines on Antarctica By Irene Latham



Antarctic Journal
By Meridith Hooper

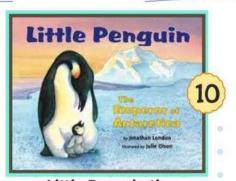


**Lost and Found**By Oliver Jeffers



A Trip to the Bottom of the World with Mouse

By Frank Viva



Little Penguin the Emperor of the Antarctic

By Jonathan London



Title of the Movie/Book:

#### **The Greatest Polar Expedition**

Movie/Book Summary:

This marvelous book brings us aboard a unique 21st-century Arctic expedition - science-driven, multi-national, unprecedented - as it sails into the epicenter of the worsening climate crisis. For anyone concerned about global warming - and that should be all of us - this book is essential reading. A contemporary classic!"

Movie/Book Reviewed By:

Shruti Gandhi [Grade - 8B]

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:

Ice - Age

Movie/Book Summary:

Values in this movie that parents may wish to reinforce with their children include: **Self sacrifice, cooperation and compassion:**On a number of occasions Manny displayed self sacrifice by both putting the need of other above his own and by placing his own safety and life at risk to save others.

Cooperation: It was by cooperating that Manny, Diego and Sid were able to overcome a variety of obstacle throughout their journey and succeed in their mission

Movie/Book Reviewed By:

Arnav Chavan [Grade - 5B]

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: Lifestyle

The Inuit are a group of indigenous peoples inhabiting areas in Greenland, Alaska, Siberia and especially in the northern regions of Canada. This group is one of the largest groups that still occupies on a hunter-gatherer lifestyle in present day (Freeman, 2010). Thus, the Inuit rely heavily on their environment not only to sustain themselves but it has become largely intertwined with their traditions and cultural practices.

About 4.2% of the Aboriginal population in Canada identify as Inuit (Freeman, 2010). Despite this, the Inuit represent an important part of Canadian history and culture. Once referred to as Eskimo's, which is now considered an offensive term, the ancestors of the current day Inuit arrived in Northern Canada about 1050 CE (Freeman, 2010). Over the course of history, they have been subject to influence from the Norse, explorers, missionaries, scientists and the Canadian government. As a result, the Inuit culture is dynamic and still is still changing to this day.

The Inuit have been able to preserve their cultural identity through many ways including through the practice of cultural song and dance. Women perform 'the katajjait'(throat singing) by they stand facing each other in pairs (Nattiez, 2006). Singers tell stories through these songs, often using words that have since lost their meaning and/or mimicking sounds from nature. The katajjaitmight be performed on special occasion, like during the summer solstice, or when men are away hunting.

Aditi Lagad [Grade - 10A]

#### How do the Inuit place themselves in nature?

The Inuit could be considered to have a 'deep ecology', seeing themselves as a component of the natural world. In this philosophy, humans are regarded as a component of nature that is equal to the rest. The land and its resources are not here for humans to develop and extract as they wish. The Inuit believe the environment and all its components are sacred, given by a creator (Mead, 2002). Equally, human beings are not regarded the most important, and should act in accordance with this belief. This is interestingly compared to the western belief that human are the 'supreme being' and that we are entitled to take what we wish from our environment.

Indigenous Inuit communities function with the relatedness of themselves and their environment in mind. There is a strong belief among the Inuit that individuals, the land, and natural objects or beings are connected (Mead, 2002). Thus, if we have any respect for ourselves or our community, we must also have respect for the land where it lies and





#### **SOCIAL IMPACTS**



The Inuit occupy a hunter-gatherer lifestyle, relying heavily on terrestrial and marine life for sustenance. As a result of the environmental changes caused by global warming, species important to the Inuit lifestyle might shift range and become distributed differently than before (Prowse et al., 2009). This has the ability to further food insecurity which is already prevalent in Canadian Inuit communities. Although larger Inuit communities would have the convenience of buying groceries at a supermarket, the food prices are extremely due to shipping costs and this goes against Inuit traditions surrounding food.

#### 2. Isolation

Changes to sea ice thickness and distribution limits the ability for the Inuit to use traditional techniques to predict safe conditions (Ogden & Johnson, 2002). These techniques are important in guiding hunters and without their reliability, travel becomes dangerous. Transporting goods to northern communities would be equally difficult, isolating Inuit communities from each other and from the rest of the country.

#### 3. Tradition

Due to the reciprocity between the Inuit and the natural world, disturbances to the Arctic landscape have the potential to cause significant disturbances to cultural practices. The Inuit use the arctic environment to feed their community, build tools, clothe themselves, heat their homes and create instruments to accompany culture song and dance. Due to its implication in their livelihood, the Inuit hold the natural environment in high regard. Its deterioration only contributes to the vulnerability of Inuit tradition and preservation of their culture.

This statistic is especially alarming as it is these young people that are responsible for carrying on the traditions, language and cultural practices that belong to their community. This might be because of lack of social services, inadequate infrastructure and low cultural identity among Inuit youth.

Intergenerational trauma, as a result of forced attendance in residential schools, is also a major mental health concern.





#### **Inuit innovations of the ancient past**

The Inuit are an indigenous Arctic people who speak the languages of the Eskaleutian family and who reside in four countries surrounding the North Pole: Greenland, Canada, the United States, and Russia. Though most Inuit have fully modernized, their ancestors are responsible for many innovations we take for granted today.

### **Traditional cold-weather Inuit clothing**

One of the most longstanding pieces of Inuit clothing is the parka, which enabled past Inuit populations to survive in some of the coldest environments on Earth. In addition to keeping the wearer warm, the Inuit parka also has thread patterns that communicate information about who the Inuit are. Inuit pants, mittens, and footwear were made from caribou or sealskin that had numerous layers depending on the season.

### The Inuit origins of the paleo diet

Some Inuit still have a diet consisting of fish and some land animals, with very little fruit or vegetables. In particular, reindeer, musk ox, Arctic hare, walrus, polar bear, seal, whale, ptarmigan, geese, ducks, and other birds are the typical diet of Inuit.

#### **Inuit turf huts and summer tents**

Turf huts, or Earth huts, were a common form of Inuit dwelling. They were robust and insulated enough to live in permanently. A typical Inuit hut was low, with walls made of large stones and a roof supported by beams of driftwood. The dwellings were always located near the sea so that the Inuit could easily get to their kayaks when hunting for seals. During the summer months, Inuit families left the turf huts and gathered berries, hunted reindeer, and caught fish, enabling them to stockpile enough provisions to carry them through the cold and dark winter months. To avoid sleeping in the open, Inuit traveled with tents made of sealskin that were easy to carry and could be set up anywhere food was found. The tents were supported by a wooden frame made out of driftwood, with an outer sealskin cover.

#### The Inuit hunter's kayak

Another key part of Inuit life was the kayak, which means "hunters boat." In addition to its use for hunting, the Inuit kayak also served as a means of transportation. It was propelled by a double-bladed paddle and was usually made of driftwood or whalebone to ensure a light frame.





### A journey to the poles



### **Daily life**

- It's a place, like no other in the world. At the center of the Antarctica continent, the south pole is a barren desert of snow. It boasts some of the lowest temperatures in the world, and the Amundsen - Scott south pole station is an oasis of life surrounded by miles of ice.

Although the conditions may be harsh and unwelcoming, the daily life of someone at the south pole station is exciting and interesting. During construction, ice cube personnel were sent to the station each year, and here is a little taste of what their experience was like.

#### Traveling to the pole

- Before you are allowed to depart for the south pole, you have to undergo a physical examination to make sure you are healthy enough to travel and handle the conditions. There are doctors at the pole, but because of the time it takes to fly in and out, treating serious medical conditions can be difficult.

Getting to the South pole requires a lot of time in the air. Travel from the Northern Hemisphere typically takes 72 hours or more. Your first flight would be on a commercial airline into Auckland, New Zealand, From Auckland you fly to Cristcurch. New Zealand where you would be Fitted for extreme cold weather gear. Everyone headed to Antarctica is issued special clothing to protect against the cold, including a parka, mittens, boots and more.

After you pick up your gear, your flight out of Christ church is on a military transport plane, a Boeing C- 17- to McMurdo , a US station on the Antarctica coast . McMurdo station could be considered a large city in the Antarctica terms, whereas the South pole is more of a small town. You stay at McMurdo until you can catch a flight to the South pole on a Ski Equipped Lockheed LC - BO Hercules.

No matter how many times someone has traveled to the South Pole, getting off the plane is always exciting. Usually, it's very bright. All that snow and sun make for some intense light. Once your eyes adjust, you'll see a group of people waiting to welcome the flight, and beyond that , the South Pole station.

#### The South Pole Station

- The South Pole Station houses approximately 200 people. It has an industrial kitchen, dining room, gym, greenhouse and more.





# Unity of Culture and Language



As Inuit divide themselves into two closely related groups based on language, environmental factors and certain cultural features. The first is the Yupik who occupy coastal southwestern Alaska, Nunivak and St. Lawrence islands and a small sector of the southeastern Chukchi Peninsula. There are approximately 25,000 Yupik living in Alaska and 1,300 in Russia. Although the Yupik language has the same origin as theirs, it is not understood by Inuit. Besides language there are many other cultural features that distinguish Yupik from Inupiat and Inuit.

The second group includes the Inupiat of north Alaska and eastern Russia, the Inuit of Canada, and the Inuit of Greenland. Of these 152,000 Inuit, 2,000 live in Russia, 50,000 in Alaska, 45,000 in Canada and 55,000 in Greenland. Although certain differences in culture and language should be expected over such a vast expanse of Arctic territory, one of the truly amazing aspects of their culture is the extent of similarity from one group to another as you travel from the eastern shore of Greenland west across what is now Canada and Alaska to the shores of Siberia.

In the 1920's, for example, Knud Rasmussen, an Inuk ethnographer from Greenland, traveled by dog team from Greenland, west across Canada to the north coast of Alaska. As he did so, he was able to collect a vast quantity of information that they as Inuit can now use to help us understand their history and their cultural traditions. During his epic trip, Knud Rasmussen was able to understand without great difficulty, all of the dialects he encountered along the way. In addition to language, Inuit from Siberia to Greenland share a similar cultural history at least up to the time of contact with the outside world; they share many of the same values, stories, traditions and technology; and of course, Inuit everywhere take pride in being able to make our life comfortable and sustainable in what is so often described by outsiders as a hostile, even unlivable environment.

Today some Inuit still travel by dog sledge while others prefer the snowmobile, all terrain vehicles, or powerful boats. But the places they go at different seasons of the year and the reason they go to these places have remained almost unchanged since the first groups of Inuit established a network of living sites and travel routes connecting them to their seasonal land and marine hunting areas. For the most part, different Inuit groups across the Arctic established their own patterns of living sites, travel routes and land use. These areas, however, overlapped so that a network of travel routes extended from the shores of Labrador to the shores of the Bering Sea.





### **Europeans Discovered** the Land and Culture



When the first schools were established in their communities they were taught that the Arctic lands remained undiscovered until the Europeans arrived and drew their own maps and created a new cultural landscape defined by English place names. At the beginning, the exploration was only at the margins and the rest was Terra Incognita meaning the unknown land. Now, they are beginning to know better. In their own schools they are providing history that begins at the real beginning, not at the one having its start some 4,500 years later. Not only are they replacing the European calendar of historical events with one of their own, they are also starting to replace the gazetteer of the north by getting Inuktitut names on the official maps of Canada.

For most of the schools in other places, however, the history and geography of the Arctic still begins with the European voyages of "discovery." One of the projects ITK hopes to initiate in the near future is to work with southern schools to help supply students with the types of materials needed to expand their understanding of the role Inuit and other indigenous peoples have played in the history of Canada. Their concern about history does not mean that Inuit history stops when the Europeans arrive .As Inuit they are interested in these voyages of exploration in part because their encounters with Inuit and with the Arctic environment are part of their own history. More important, however, Arctic exploration set the stage for a process of contact between Inuit and Europeans that would eventually have a devastating impact on their way of life.

Encounters between their ancestors and Europeans began in the late 1500's when the first explorers sailed into the icy waters of Davis Strait, Hudson Strait, and Hudson Bay. Although these first encounters were limited in their number and duration, as well as being geographically dispersed, they did set the stage for an eventual transition to what they can call the period of contact. Between the arrival of Martin Frobisher in 1576 and the famous disappearance of Franklin in 1848, about 22 explorers entered their territory. Not all of these had any direct impact

on the course of their recent history. Nevertheless, with each trip, the map of the Arctic became more European and then theirland itself started to be claimed by outsiders. Now some 400 years later, the land and resources along with their rights to control them within the framework of the Canadian constitution, are being returned to the Inuit. It was a process officially recognized on April 1 1999 with the establishment of Nunavut





### **Inuit Today**



it is impossible to discuss their future as part of the larger Canadian fabric without giving serious consideration to the role they will play in the next phase of economic and political development throughout the Canadian North. They cannot, however, assume that this new role will be developed at the expense of more traditional activities which characterize their mixed subsistence based economies that are so vital for the long term economic and social health of their communities. They cannot pursue avenues leading to new economic development if they ignore or impact upon their continuing ability to hunt or to earn an income from the application of traditional skills.

Family members continue to contribute to household incomes that are derived from several different sectors of the new economy. In this way they are able to balance the emerging opportunities with their stable and sustainable traditional hunting and social activities. As part of their new political position they are able to support and strengthen their sustainable attachment to the territorial and resource base of their culture through direct participation in newly established management boards or through co-management programs.

During earlier phases of economic development, the approach most often taken was one that emphasized small scale projects organized at the community level. While not all projects were successful, the commercial and artistic success of Inuit carving and print making are concrete evidence of the value of this approach. The development of marketing cooperatives reflected new ways of taking more effective control over economic activity. Educational and training programs are providing both younger and older Inuit with an opportunity to reshape traditional skills and acquire modern technical skills that help support economic initiatives. One of the most promising economic development areas is in the tourist sector, especially for ecological and cultural tourism.

While Inuit communities were experimenting with economic development programs at the local level, industry and governments in Canada began paying greater attention to large\_scale development projects especially those linked to the





### **Inuit Today**



exploitation of hydrocarbon reserves, mineral deposits and hydroelectric potential. Their cautious interest in larger scale development, reshaped by land claims, has now opened a new chapter of northern development.

Not only have land claim agreements provided a legal and administrative framework vital to their orderly economic development, but the negotiating process has also served as a training ground for the rapid growth of Inuit expertise.

Perhaps most importantly, the land claim agreements have provided significant working capital that their regional organizations can use for initiating a wide range of economic development projects that reflect local as well as regionwide ideas from an Inuit perspective.

Today there is a new sense of optimism fueling economic planning at local, regional, and national levels. There is also a great desire to achieve economic self sufficiency in the north in away that incorporates their cultural values into the many new businesses which will form the backbone of the emerging economy.

The Inuit regional organizations have their own economic development aims and joint ventures between regions are beginning to take shape. Throughout all of this activity there is a continuing effort to emphasize and follow the principles of sustainable development and formal processes have been created to ensure that all major projects are subject to environmental and social impact assessments.

Already there are new and interesting economic programs under way. Airlines, offshore and high seas fisheries, ecological and cultural tourism, Arctic foods, marine transportation, hunting and fishing for non-Inuit and real estate.

These, and other businesses are helping to create economic momentum which in turn helps spawn yet another level of economic spin off and, through the creation of support companies, additional employment opportunities in all sectors of the economy.





### **The Inuit Regions**



#### Inuvialuit region:

The Inuvialuit region is located in the northwestern part of the Northwest Territories. The Inuit population is 000 living in the mainland communities of Inuvik, Aklavik, Tuktoyaktuk, and Paulatuk and the two island communities of Sachs Harbour (Banks Island) and Ulukhaktok (Victoria Island). Inuvik is the administrative centre for the region and has a total population of 3,00. The mainland communities are the only Inuit communities in Canada that have connecting roads to the south. The communities of Sachs Harbour and Holman continue to rely solely upon air and marine connections for transportation and supplies however.

Locally elected community councils oversee the administration and delivery of a wide variety of services to the hamlet residents.

The Inuvialuit region is poised for major economic development as extensive oil and gas activities begin to move into the production stage. Accompanying this rapid burst of economic development are concerns that the social and cultural lives of the Inuvialuit will be disrupted.

Hassi Bogawat [Grade - 10B]

### **Display of Emotions**

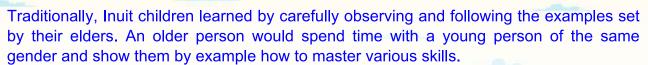
Inuit tend not to display strong emotions publicly as this is considered immature and may place others in the potentially awkward position of being forced to react to a situation they consider to be a very private matter. So a stranger may see a smiling and attentive lnuk but their underlying emotions may be quite different.

Emotions are expressed more freely in small, more intimate groups. If the person feels he must express himself emotionally, it is felt that this expression should involve only those that he feels are responsible for his emotional state. Inuit often express their emotions very subtly, in the tone of voice or the lifting of eyebrows. While appearing to be almost imperceptible to the stranger, Inuit are adept at picking up the slight intonations and facial expressions from each other that reflect emotional states. Inuit perceived by friends and family to be depressed or lonely may be treated with particular attention by others, although it would be considered ill-mannered to make a specific reference to the emotional state of another person. Although the values of Inuit culture emphasize the importance of the individual and the right to run one's life without interference, the Inuit are a very socially oriented people. Someone who withdraws from the social world will likely be considered anxious or troubled and will be the object of concern. The ideal adult behavior is considered to be maintaining one's individuality and independence while being a fully responsible and participating member of society.

Ishaan Jirage [Grade - 10A]



### **Education**



As soon as the child gained a basic skill, his 'teacher' would encourage him to innovate and try to make things on his own. There was no particular time set aside for this education to take place. Teaching occurred when it was convenient and lasted as long as the child's interest held or until other business demanded the attention of the adult. The focus of Inuit education was learning by individual effort and observation rather than by instruction.

Inuit children continue to learn all traditional skills by the attentive observation of an older, more experienced person. Nowadays, there are so many distractions for young people in modern communities that there is concern among adult. Inuit that younger people are not learning enough about their traditional Inuit ways. Attendance in modern schools is mandatory for all Inuit children. In the past these schools used a very structured curriculum transplanted from the south. Problems arose from this system however.

The values taught by the schools were found to conflict with traditional values the children learned at home. For example, Inuit children are taught at home to be non-competitive and not to ask people direct questions. The modern school system however, emphasized competition and encouraged children to question their teachers and each other.

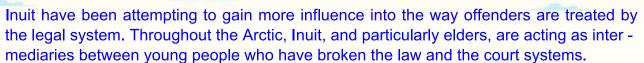
As well, there was a time when Inuit children were punished for speaking their own language at school. While this no longer occurs, many Inuit have expressed the need to have more influence on what is taught to their children and how this material is taught.

They feel more emphasis should be placed upon Inuit culture and language throughout the educational system from day care to post-secondary institutions. Over the past decade, there have been substantial changes in the education system. Increasing numbers of Inuit are now becoming teachers and the curricula have largely been adapted to better reflect Inuit culture, language and values.





# Community Involvement with Offenders



They feel that it is more important to treat the offender rather than the offence and that details surrounding the offence should strongly influence the penalty imposed upon the offender. Innovative programs have been undertaken to reflect this position. In the Inuvialuit region, for example, the Young Offenders' Act allows members of the community to intervene on behalf of young people who have committed minor offences. Rather than appearing before a judge for sentencing,

certain offenders may stay in the community and be counseled by local people who review the issues and develop a means to deal with the problem without making the situation worse.

Recommendations often include alternative measures to encourage the offender to change offending behaviour. For example, if the offender is male, community intervention may allow him to go out on the land with an experienced hunter to give him time to think about his problems and to re-establish his bonds with Inuit culture.

By keeping the offender within the community, traditional means of social control can be used effectively to ensure that the behaviour will not be repeated.

Divyanka Shinde [Grade - 10A]

## Community Involvement with Offenders

Physical contact among Inuit differs from that found among many others. It closely reflects the social attachment among the people involved. For example, within certain intimate groups, be it a family at their fishing/hunting camp or a group of young men spending the night together, sleeping arrangements may be communal, with everyone sleeping together under an assortment of coverings.

Families may also sleep together in settlements if the housing conditions limit other possibilities. Traditionally, this communal sleeping was an essential sharing of warmth in frigid conditions and a human need for emotional and physical comfort from others. Public expression of affection is reserved primarily for children.

Younger people generally follow the examples set by the adults in the community but are more likely to show affection openly than their parents.





### Who are the Inuits?

The Inuit, or Eskimo, are an aboriginal people who make their home in the Arctic and sub-Arctic regions of Siberia and North America. The word "Eskimo" was bestowed upon these hardy, resourceful hunters by their neighbours, the Algonquin Indians of eastern Canada. It means "eaters of raw meat." Recently, it has begun to be replaced by the Eskimos' own name for themselves. "Inuit" which means the statement of th



replaced by the Eskimos' own name for themselves, "Inuit," which means, "real people."

The Inuit are descended from whale hunters who migrated from Alaska to Greenland and the Canadian Arctic around 1000 AD. Major changes in Inuit life and culture occurred during the Little Ice Age (1600–1850), when the climate in their homelands became even colder. European whalers who arrived in the latter part of the nineteenth century had a strong impact on the Inuit. The Westerners introduced Christianity. They also brought with them infectious diseases that substantially reduced the Inuit population in some areas. When the whaling industry collapsed early in the twentieth century, many Inuit turned to trapping.

Wherever they live, the Inuit today are much involved in the modern world. They have wholeheartedly adopted much of its technology, as well as its food, clothing, and housing customs. Their economic, religious, and government institutions have also been heavily influenced by mainstream culture.

Vibha Jamale [Grade - 6C]

### **LOCATION OF INUIT**

The Inuit live primarily along the far northern sea coasts of Russia, the United States, Canada, and Greenland. All told, there are more than 100,000 Inuit, most of whom live south of the Arctic Circle.

The majority, about 46,000, live in Greenland. There are approximately 30,000 on the Aleutian Islands and in Alaska, 25,000 in Canada, and 1,500 in Siberia.

The Inuit homeland is one of the regions of the world least hospitable to human habitation. Most of the land is flat, barren tundra where only the top few inches of the frozen earth thaw out during the summer months. The majority of Inuit have always lived near the sea, hunting aquatic mammals such as seals, walrus, and whales.





### THE LANGUAGE OF INUIT

The Inuit language is divided into two major dialect groups: Inupik and Yupik. Inupik speakers are in the majority and reside in an area stretching from Greenland to western Alaska. Speakers of Yupik inhabit a region consisting of southwestern Alaska and Siberia.

Mahi Cheke [Grade - 1B]

### **FOLKLORE**

According to a traditional folktale told by the Tikigaq Inuit of north Alaska, the raven (a traditional trickster figure in Inuit folklore) was originally white. It turned black in the course of a deal it made with the loon. The two birds agreed to tattoo each other but ended up in a soot-flinging match that turned the loon gray and the raven black.

Vansika Gawade [Grade - 4B]

### **MAJOR RELIGION OF INUIT**

Christianity, first introduced by missionaries, has largely replaced traditional Inuit religious practices. However, many of native religious beliefs still linger.

Many traditional Inuit religious customs were intended to make peace with the souls of hunted animals, such as polar bears, whales, walrus, and seals.

Kartik Pawar [Grade - 3B]

### **MAJOR HOLIDAYS**

Today the Inuit observe the holidays of the Christian calendar. Traditionally, a feast called a potlatch was held whenever a new totem pole was raised. The Inuit who held the potlatch would often give away his most valuable possessions at the ceremony.





# THE LIVING CONDITIONS OF INUIT

The Inuit had several different forms of traditional housing. In Greenland, they often lived in permanent stone houses. Along the shores of Siberia, they lived in villages made up of houses built from driftwood and earth. Summer housing for many Inuit was a skin tent, while in the winter the igloo, or house made of snow, was common.



Today many Inuit live in single-story, prefabricated wooden houses with a combined kitchen and living room area and one or two bedrooms. Most are heated with oil-burning stoves. However, since the Inuit are spread across such a vast area, their housing styles vary.

In recent years, dog sleds have been replaced by snowmobiles as the main mode of transportation for many Inuit.

Avani Katedeshmukh [Grade - 7A]

### **FAMILY LIFE OF INUIT**

Family ties—both nuclear and extended—have always been of great importance to the Inuit. Having a large family was always considered desirable.

Traditionally, women have often assumed a secondary role in Inuit society. At mealtime, an Inuit woman was required to serve her husband and any visitors before she herself was permitted to eat. But at the same time, a common Inuit saying extolled women in this way:

"A hunter is what his wife makes him." The women were the ones who gathered firewood, butchered the animals, and erected tents in summer and igloos in winter.



Mayuresh Sumant [Grade - 7A]





### **CLOTHING OF INUIT**

Traditional Inuit clothing was perhaps the most important single factor in ensuring survival in the harsh Arctic environment. Its ability to keep the wearer alive in sub-zero temperatures was of prime importance.

The Inuit made all their clothing from various animal skins and hides. In winter they wore two layers of caribou skin clothing. The outer layer had the fur facing out, while the fur of the inner layer faced in. The outer garment was a hooded parka.

Today a variety of shops sell modern Western-style clothing to the Inuit. Like their counterparts in cultures throughout the world, young people favour jeans, sneakers, and brightly coloured sportswear. However, both old and young still rely on traditional Inuit gear when confronting the elements in any extended outdoor activity.

Sarvesh Bhunje [Grade - 7A]



### **EDUCATION OF INUIT**

Most Inuit children ski or ride snowmobiles to get to and from school. They are taught standard subjects, including maths, history, spelling, reading, and the use of computers.

However, Inuit teachers are also concerned that the students learn something about their culture and traditions.





### **FOOD HABITS OF INUIT**

The traditional Inuit dietary staples were seal, whale, caribou, walrus, polar bear, arctic hare, fish, birds, and berries. Because they ate raw food, and every part of the animal, the Inuit did not lack vitamins, even though they had almost no vegetables to eat.

With the introduction of modern Western-style food, including fast food, over the past two to three decades, the Inuit diet has changed, and not for the better. The consumption of foods rich in sugar and carbohydrates has resulted in tooth decay and other diet-related medical problems.

A traditional bread, bannock, was made while trapping or living in camps. The dough could be wrapped around a stick and cooked over an open fire. A recipe for bannock that can be prepared in an oven accompanies this article.



Prachi Kumbhar [Grade - 7A]

### **Recipe-Bannock**

#### Ingredients:

- 4 cups flour
- ½ teaspoon salt
- 5 teaspoons baking powder
- 1½ cups water

#### **Directions:**

- 1. Mix ingredients together to form a stiff dough.
- 2. Sprinkle flour on a clean work surface. With very clean hands, knead the dough. Dust hands and dough with flour if the dough is sticky.
- 3. Form in a round loaf about 1 inch high. Bake on a greased baking sheet at 350° F for 30 minutes.
- 4. Serve warm with butter and jam or honey.







### **CULTURAL HERITAGE**

Considering that the Inuit inhabit an area covering more than 5,000 miles (8,000 kilometres), their culture is amazingly unified. From Siberia to Greenland, Inuit economic, social, and religious systems are much the same.

In addition to the prints and carvings for which the Inuit have become famous, dancing, singing, poetry, and storytelling play important roles in their native culture.

Aditya Kale [Grade - 7C]





### **EMPLOYMENT OF INUIT**

Today most Inuit live a settled existence in villages and towns. They obtain wage employment or receive some form of social assistance. Major employers include the government, the oil and gas industry, and the arts and crafts industry. In addition, many Inuit are still involved in subsistence hunting and fishing at some level.

Shivtej Zadbuke [Grade - 7C]



# The Inuit

### **SPORTS OF INUIT**

The Inuit enjoy games that enable them to display their physical strength, such as weightlifting, wrestling, and jumping contests. They also play a ball game that is similar in many ways to American football. Ice hockey is popular as well.

Shripal Gawade [Grade - 7C]





### **RECREATION OF INUIT**

At traditional Inuit gatherings, drumming and dancing provide the chief form of entertainment. Quiet evenings at home are spent carving ivory or bone, or playing string games like cat's cradle.

A traditional Inuit game similar to dice is played on a board, using pieces in the shape of miniature people and animals. The Inuit also enjoy typical modern forms of recreation such as watching television and videos.

Sifa Inamdar [Grade - 7C]





# CRAFTS AND HOBBIES OF THE INUIT

Traditional Inuit arts and crafts mostly involve etching decorations on ivory harpoon heads, needle cases, and other tools.

Over the past decades, the Inuit have became famous for their soapstone, bone, and ivory carvings, as well as their prints and pictures.

Another artistic tradition is the creation of elaborate wooden masks.

Inukshuk, towers of stone in the form of a human, were built as landmarks or as decoys for herds of caribou.

Gayatri Waghmode [Grade - 9B]







# Art from the Poles











Abhimanyu Gore [Grade -1A]



Adhyaan Banerjee [Grade - 2C]



Adhyaan Banerjee [Grade - 2C]



Advait Karde [Grade - 4C]



Anvit Ghadge [Grade -1A]



Arnav Pawar [Grade - 6C]



Harsh Bhagat [Grade - 2C]



Hridan Rathi [Grade - 2A]



Ishaan Kothari [Grade - 6A]



# Art from the Poles











Shanaya Chaudhary [Grade -1A]



Shreeyash Pawar [Grade - 2C]



Shubhra Chopade [Grade -1C]



Vidhisha Jadhav [Grade - 5B]



Yashashree Gaikwad [Grade - 5C]



Yuvraj Gore [Grade - 4B]



Ishwari Jadhav [Grade -5A]



Manasvi Zagade [Grade -1A]



Sanvi Nagare [Grade - 2A]



# Spotlight@PIS

'First Day' of the School &
'TECH-IT-UP Jump Start' Event Celebration (06.04.23)











**Jyotiba Phule Jayanti Celebration (11.04.23)** 







Dr. B.R. Ambedkar Jayanti Celebration (13.04.23)















## Sports Inaguration under the G20 Janbhagidari Event

























# Felicitation of winners of Science Olympiad Foundation





















## World Earth Day Celebration (21.04.23)



















### **World Environment Day Celebration (08.06.23)**









### **Boys and Girls Welfare (14.06.23)**











# Magazine Making Competition under the G20 Event (15.06.23)













## Rangoli Making Activity under the G20 Event (14.06.023)









## **International Day of Yoga Celebration (21.06.23)**



















## **Tech-O-Mania Culminating Event (30.06.23)**





















## Guru Pournima Celebration (03.07.23)









# 'Young Entrepreneurs' Jump Start Event Celebration (03.07.23)





















# Culminating Event for Grade I & II 'Celebrating Me' (08.07.23)







# 'Investiture Ceremony of the Student Council' (10.07.23)













### Orientaion Program for Grade 9th & 10th (10.07.23)











# Felicitation of Homi Bhabha Competition Winners (21.07.23)

















### Best Principal & Best Teacher Award in Pune District Felicitation (SOF) 2023-24





### **Inter-House Quiz Competition (05.08.23)**

















### **Independence Day Celebration (15.08.23)**































### 'Talk Show' on World Entrepreneurs Day (21.08.23)







### **Young Entrepreneurs House-wise Competition** 'PITCH-IT' (26.08.23)





















# Culminating Event for Grade I & II 'Welcome to Our Town' (02.09.23)

















## **Teachers Day Celebration (05.09.23)**









## Gokulashtami Celebration (06.09.23)















# Felicitation of Cube Competition Winners (12.04.23)









### **Hindi Diwas Celebration (14.09.23)**



















# The Future Business Leaders at BIZKIDS BAZAAR Event (23.09.23)



























# **Brain Play**



### **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

Q F I C I I 0 0 C I N I B E N H Z Q F 0 0 0 H 0 W L E C ٧ В Z R A Z L L 0 R K H G R N G D G D A M S T H K V C C B Z I X R E X W D J T Y J P F S I B N K H T H Q I C G I K E C X 0 F H 0 y A Т C Z M E A Z D A R K N E S S 0 C F R Q I E y Z 0 E T N U A W 5 C S 0 E W I т C R A T N A N T X G U K C I T C R A 0 S S U K 5 E C Z 0 J A ٧ E Q V В У Z H H S M D R N Ι G E E R H D R 0 U J 0 B L A E T G X X Z R X M X D N L L S F M I X 0 I 5 E T B K

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







