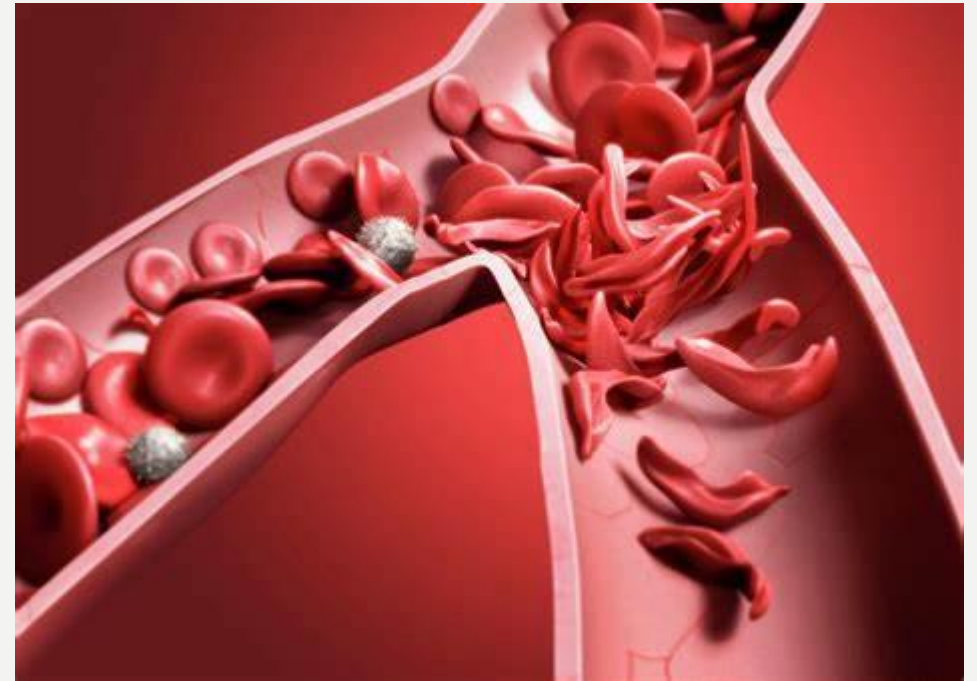


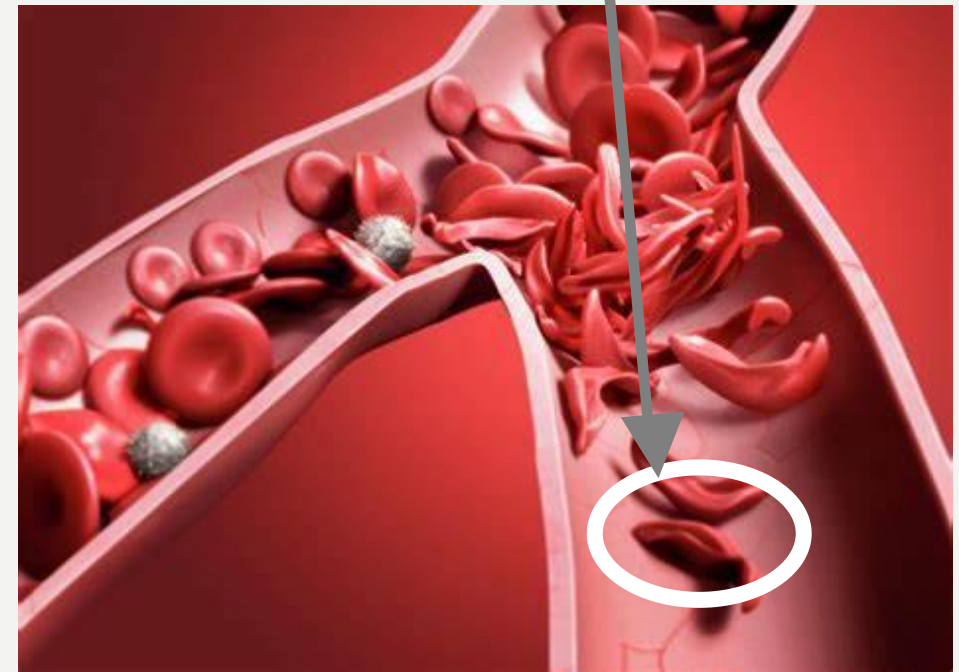
**SMITHSONIAN NATIONAL MUSEUM**

**———NORTH AMERICAN ANIMALS AND  
THEIR INTERACTION WITH HUMAN**

- **Evolutionary rule:** The fittest survives. Animals have different ways to adapt to their environments.



- **Sickle cell anaemia**



Is sickle-shaped red blood cell good?



- Malaria: Plasmodium go into the blood to do harm to our bodies.
- Many suffer from malaria in Africa.
- Sick cells can starve the plasmodium to death, so more people in Africa have this trait.
- Some things may not seem good, but they are not always bad.





Smithsonian  
National Museum of Natural History

ground | first | second

Mammal Hall: North  
America 1

Ocean Terrace Café

FossilLab

David H. Koch  
Hall of Fossils  
Deep Time

loading...

Mammal Hall: North America 2



- Loren Ybarrondo





## North America The Frozen North

Mammals of the Far North face long, freezing winters and habitats covered with snow. How do they manage to survive?



Before the Arctic Mammal Hall: North America

### Snow Specialists

Which disappears?

Who copes best with the cold?



[https://naturalhistory2.si.edu/vt3/NMNH/z\\_tour-022.html](https://naturalhistory2.si.edu/vt3/NMNH/z_tour-022.html)

[https://artsandculture.google.com/streetview/smithsonian-national-museum-of-natural-history/2QFvs7CNpx\\_Xgg?sv\\_lng=-77.0267452099051&sv\\_lat=38.89106385636837&sv\\_h=259.69904394432564&sv\\_p=-19.62634137430686&sv\\_pid=k2FzC7NKlPlwPY-ELIUTAQ&sv\\_z=0.2761423840306686](https://artsandculture.google.com/streetview/smithsonian-national-museum-of-natural-history/2QFvs7CNpx_Xgg?sv_lng=-77.0267452099051&sv_lat=38.89106385636837&sv_h=259.69904394432564&sv_p=-19.62634137430686&sv_pid=k2FzC7NKlPlwPY-ELIUTAQ&sv_z=0.2761423840306686)



# TWO KINDS OF FORESTS



Q1:What is the difference between these two types of leaves?

Q2:Which place is colder? Why?



# CONIFEROUS FOREST



Cold-tolerant.

The needle-like leaves  
enable them to withstand  
harsh environments, like dry,  
wind, and cold.

# DECIDUOUS FOREST



Moderate and pluvius during winter; hot and dry during summer (the leaves have certain adaptations to dryness).



# Bears



Q1: What are the two types of bear?

Q2: What is the difference in appearance of these two bears?



# The difference between black bear and grizzly bear



- Face: Black bear looks like a dog, with a straight and long face.
- Back: Grizzly bear has heaves like that of a camel's.
- Claws: Black bear's claws are aligned into a curve, while that of grizzly bear are more straightly aligned.

# Black bear



- Good at climbing trees.
- Omnivores.
- Black bears are not necessarily black! Their furs can be brown or light grey.

# Grizzly bear



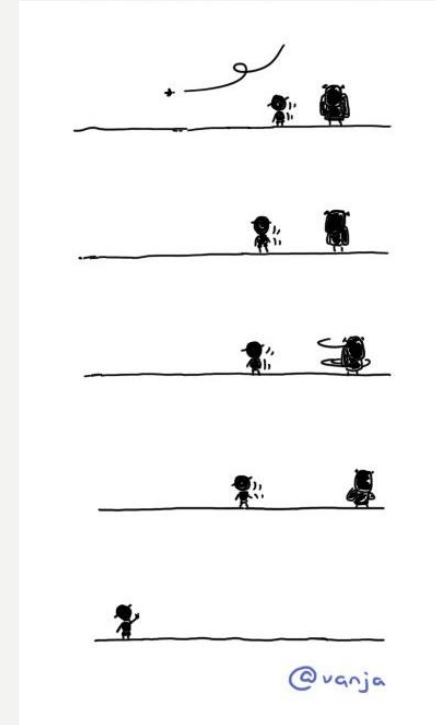
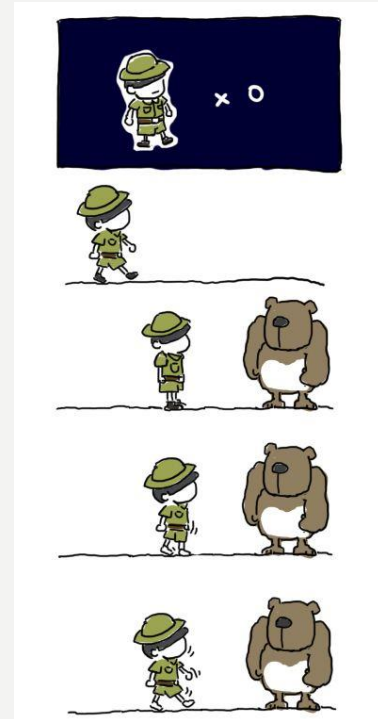
- Larger in size.
- Has a faster speed.
- Very fierce.
- Grizzly bears can also be cream or dark brown colored.





**What shall we do if we meet bears in the wild?**

# What shall we do if we meet bears in the wild?

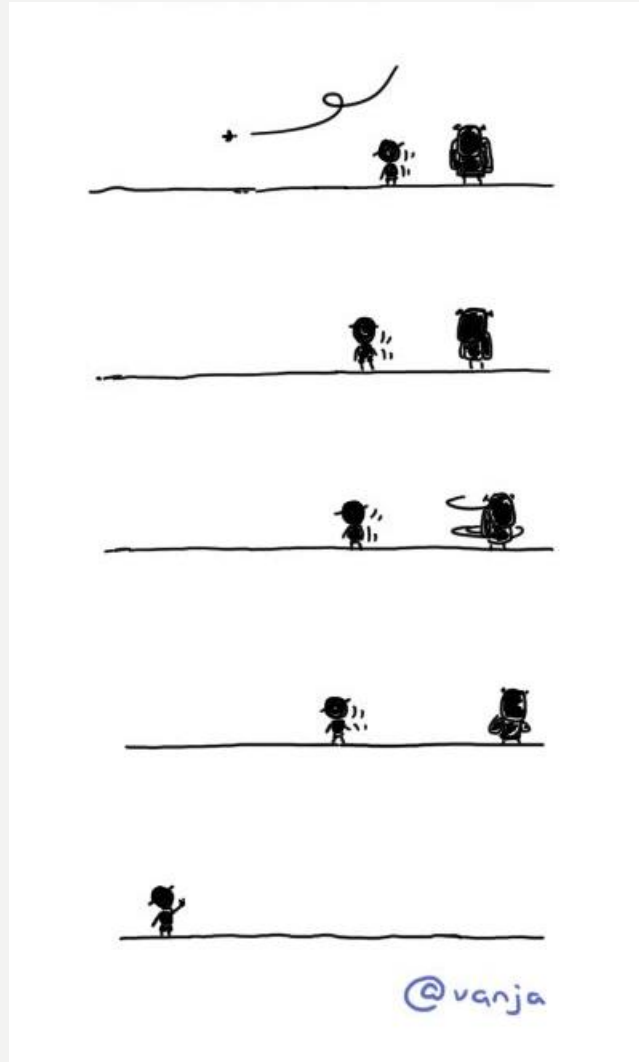


Q1: In the picture in the right, which one is the bear, and which one is the human?

Q2: Has the person left the bear safely?

Q3: What did the person do?

# What shall we do if we meet bears in the wild?



- Do not run away!
- Do not face the bear with your back!
- You must stand face to face with the bear to make yourself look taller. Then, you can step back slowly.



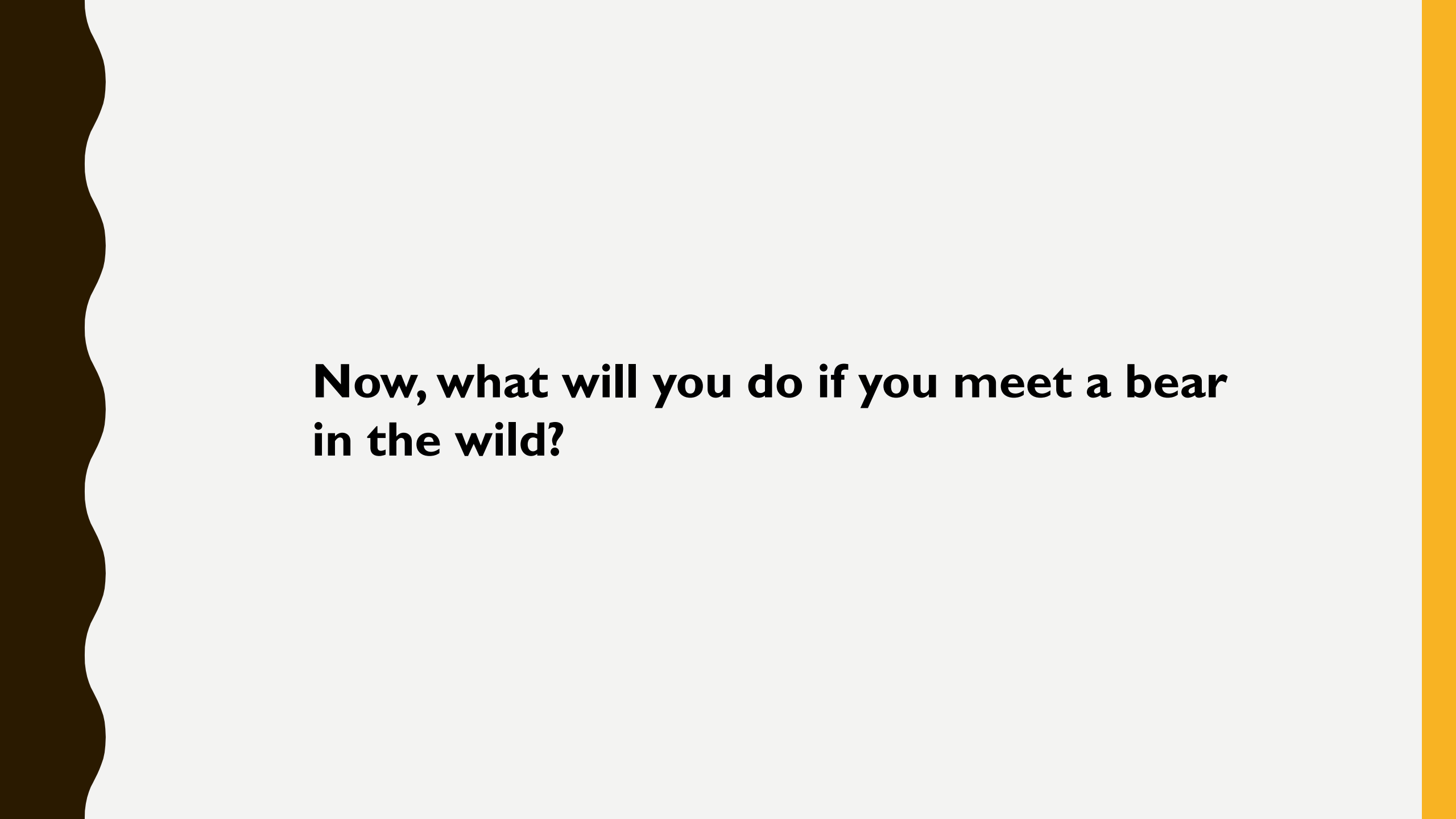
# What shall we do if we meet bears in the wild?



If the bear makes an attack:

You can use bear sprays

- Do not play dead with a black bear!  
Fight it with all your might.
- Squat and protect your head with your hands. Let the bear scratch the bag until it stops attacking.



**Now, what will you do if you meet a bear  
in the wild?**

# TUNDRA



- Lichen, herbs, and small shrubs that resist the cold.
- Cold and long winters with short and cool summers.
- Permafrost below the soil.



# REINDEER

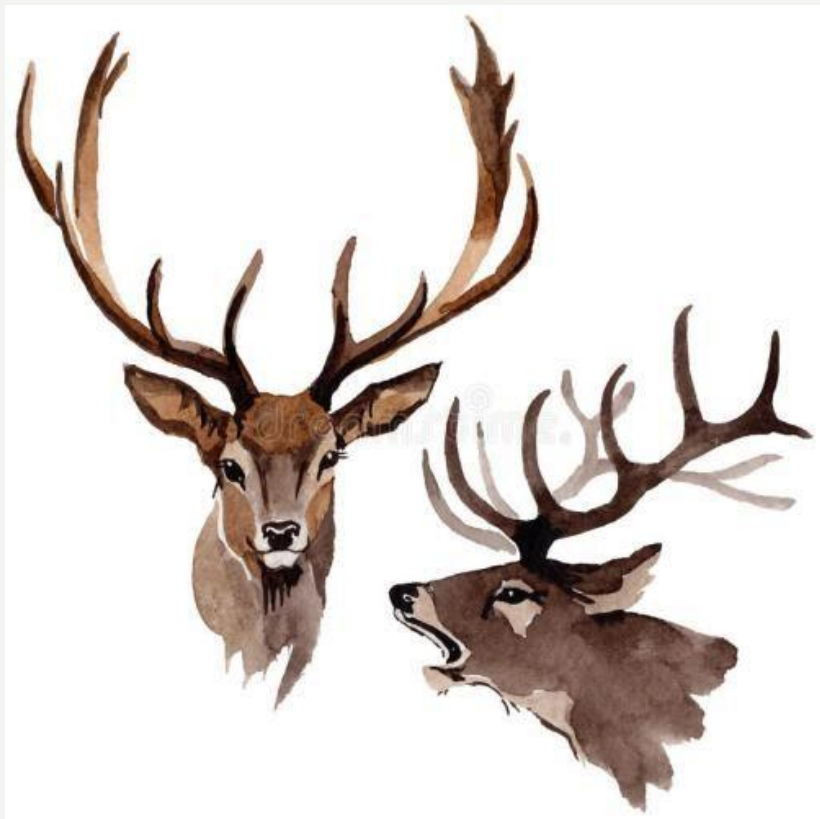


Q1: Where is the picture on the left taken? Coniferous forest or deciduous forest? Why?

Q2: What type of climate is the reindeer on the right living in?



# REINDEER



Q1: What is the reindeer doing in the picture on the right?

Q2: What other values do reindeer have in the perspective of a human?

# REINDEER



- Reindeer and human: uses for meat, dairy products, and transportation.
- Ancient human civilizations and some tribes nowadays hunt reindeers. They preserve amulet, artworks, and bones.

# REINDEER



- Gather reindeers together to avoid separation.
- Stay away from dangerous environments, like predators and risky landscapes.
- Adjust the speed and direction of migration according to the new camp.



# TASKS

- 1. Snap a screenshot of videos about reindeers and share what you have seen.
- 2. Find a book, movie, or documentary about animals. Post its cover and poster into the group chat, and prepare to share it in the next activity.

A decorative wavy line in yellow and white, resembling a stylized lightning bolt or a ribbon, curves along the left edge of the slide.

谢谢大家！