



Ted Alejandro, County Superintendent

San Bernardino County
Superintendent of Schools
Transforming lives through education



Tuesday, June 16
12:00pm

Nature, "Snowbound: Animals of Winter"
4th – 8th grades.

Travel across the snow globe with wildlife cameraman Gordon Buchanan to meet animal survivors of winter, from the penguins of Antarctica to the Arctic fox and the bison of Yellowstone. Snow looks magical, but it's a harsh reality to these animals.

After watching this episode, choose from the following questions and/or tasks to extend your learning

Question Box 1

- Who is Gordon Buchanan? Describe his job?
- This show starts with Gordon showing the fine hair and the long outer hair of a wolf. What is the purpose of each type of hair?
- Where are the two "coldest and snowiest places" on Earth?
- Why are the animals that live in Antarctica and the Arctic called "snow survivors"?
- Explain this statement, "the snow looks magical, but it is a harsh reality".
- What is hibernation? Which animals hibernate? And what happens to an animal's body during hibernation?
- What does Justina Ray, senior scientist and executive director of the Wildlife Conservation Society say is the reindeer's unique adaptations to life in the cold?
- Reindeer traditionally pull sleighs and have a popular reputation for red, glowing noses, what is the surprising truth behind this folklore?
- What is the alarming news about the reindeer's future in the Great White North?
- Why are the reindeer's noses full of blood vessels and how do scientists prove this fact?
- The arctic fox uses a special pouncing technique known as 'moussing'. Describe this technique.
- How does an arctic fox find the right spot to find their prey?
- Explain how some animals use their vision as a way to survive?

Question Box 2

- If you were a wildlife photographer, how would you prepare for your journey to the coldest places on Earth? Make a list of things you would need to pack.
- Would you want to live in the Great White North? Why or why not?

Box 3 (Tasks)

- Make a list of animals seen in this show. Sort them into 2 columns showing which animals live in the Arctic and the Antarctica.

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- Describe some of the strategies and tactics these animals use to stay alive. (ELD)
Make a T chart listing each animal on the left side and the tactics/strategies on the right side.
- Describe how animals from the North and South Poles are similar and different. (ELD)
Write a short paragraph using this language to compare: similar to, alike, resemble. To contrast: instead of, on the contrary, on the other hand.
- Size Comparison Activity: Using 5 basic measurements of your body compare your size to the size of the animal in the Nature episode. If you are watching multiple episodes this week, create a table to record all of your discoveries. Use the following measurements: height, weight, arm length, waist circumference, foot length. Some animals may not have the same features. Adjust as necessary. Extension: Using the length of the animal you are exploring; can you find something in your home, or that you are familiar with to make a comparison? *For example: A blue whale can be 80-110 feet long, that is more than two big yellow school buses. (ELD) use these words: more than, less than, equal to.*

Box 4 (Enrichment)

- Make a journal of animals in this episode. One page per animal. Describe the animal's characteristics, their special way of surviving a frozen wonderland, and any special adaptations.
- Learn more about taking wildlife photographs at <https://www.natgeokids.com/uk/kids-club/cool-kids/general-kids-club/wildlife-photography-tips/> and <https://www.youtube.com/watch?v=vOtPKI7q9ZQ>. Head outside with a camera and apply your new knowledge.

Box 5 (Extend/Real-Life)

- Research the job of a wildlife photographer.
- How do you become a wildlife photographer? (ELD) *Orally name the steps to become a wildlife photographer. Use these words: First, Then, Next, Last.*
- How much does a wildlife photographer earn?
- Which famous photographer inspires you and why?
- How has the job of wildlife photography changed over time?
- Develop your photography skills completing a digital 'photo-bet'.
- Look for objects and shapes that resemble letters but are not actual letters.
- Capture the "letters" as-is. Do not stage your photos or retouch your findings.
- The letters do not have to be captured in order. However, keep track of which letters you've captured as you go.
- When finished, create a sentence or series of phrases that use all of the letters in a single composition.