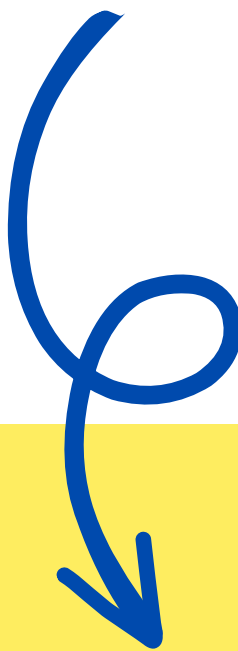


Complete Snow Day Bundle

- **Investigations**
- **Activities**
- **Readings**



SCROLL
to take a look inside!

Snow Day Science Bundle

DIGITAL Activities, Investigations, & Readings students can do at home

Grade 6-9



Winter Weather Adaptations

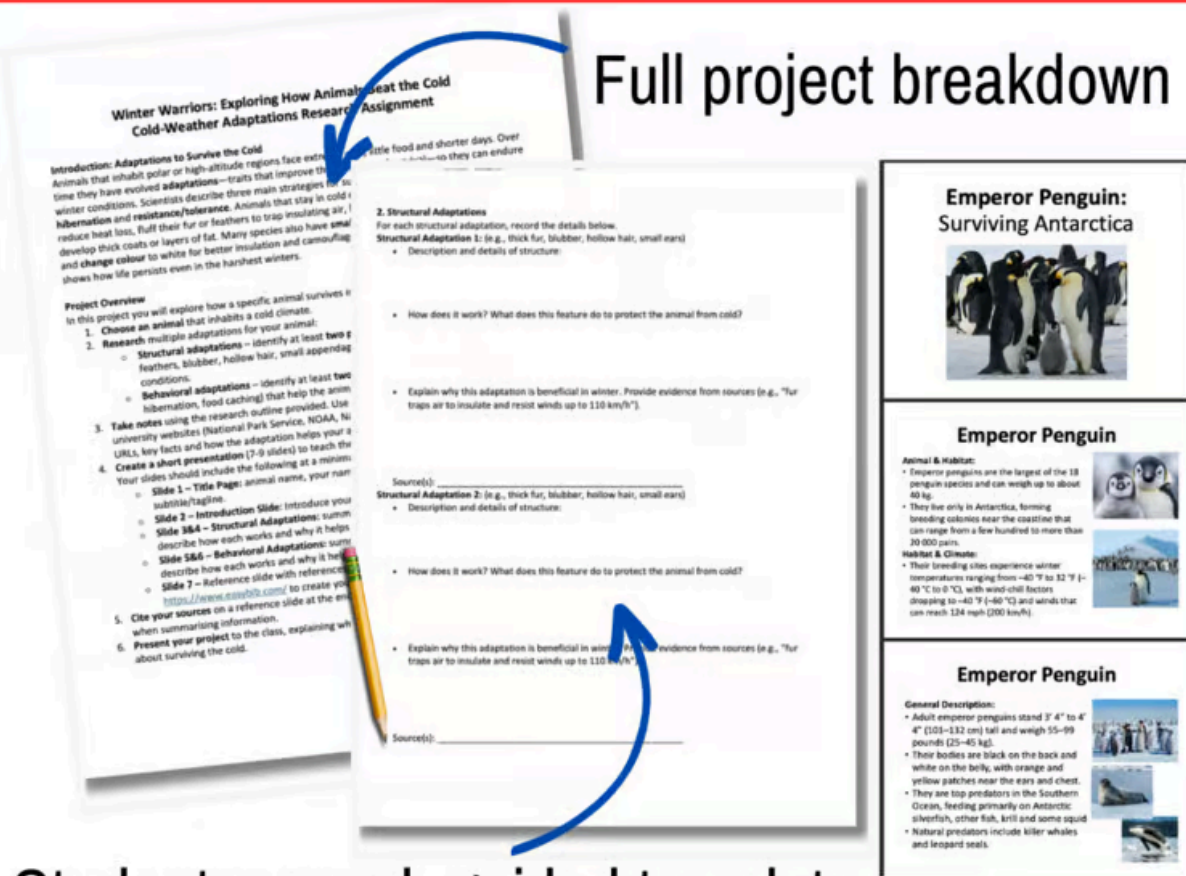
Ecology Research Project - Structural and Behavioral

WINTER WEATHER ADAPTATIONS - ECOLOGY RESEARCH PROJECT



NO PREP

PRINT AND DIGITAL



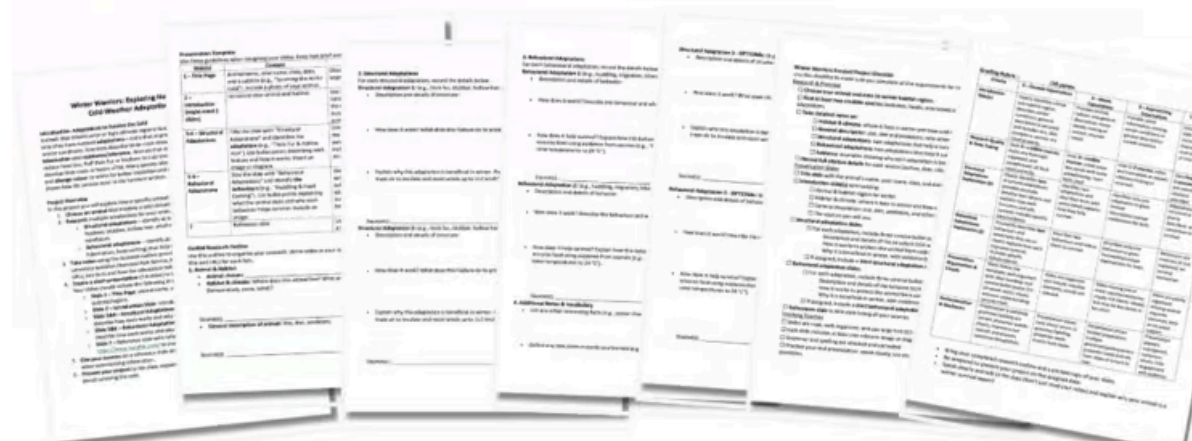
Full project breakdown

Student research guided template

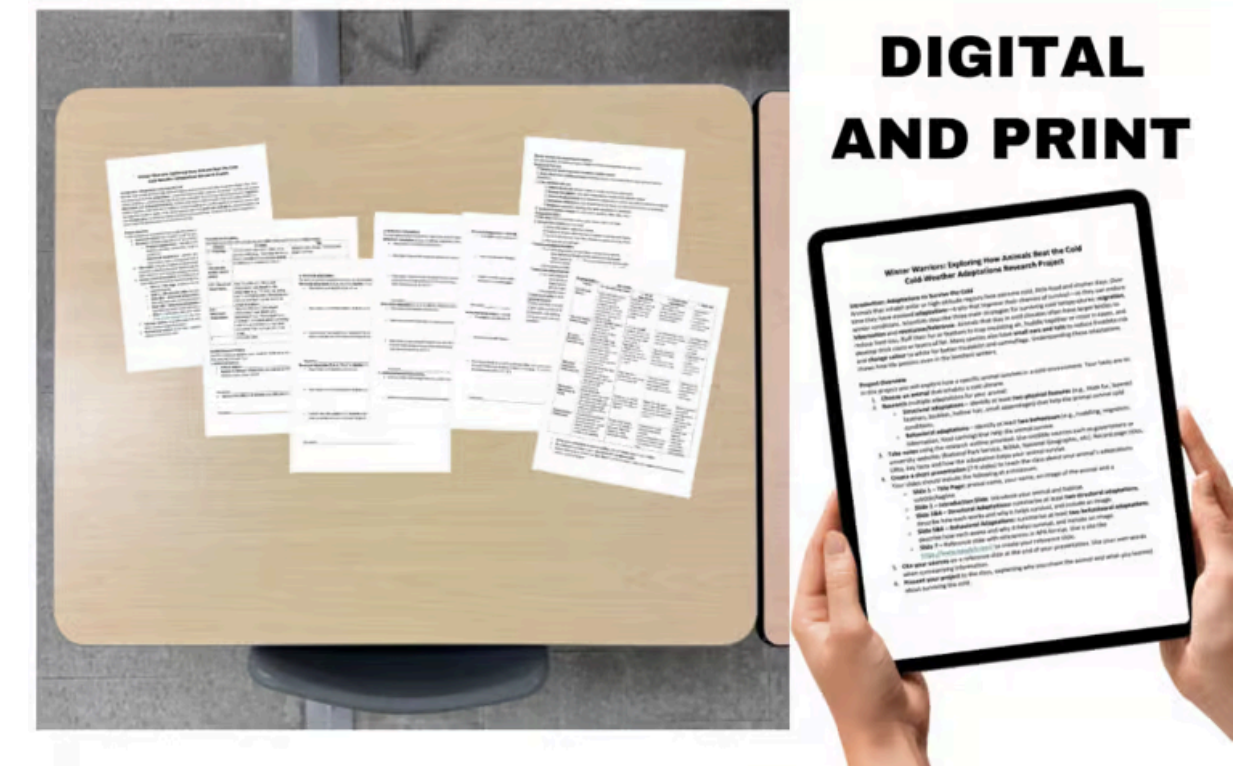
Exemplar presentation

WHAT YOU GET

- ✓ Full Project Overview
- ✓ Scaffolded student pages to help guide their research and provide differentiation
- ✓ Exemplar presentation so students can see what it expected
- ✓ Complete rubric for easy marking



**FULLY EDITABLE AND READY-
TO-GO ECOLOGY PROJECT**



**DIGITAL
AND PRINT**

**GREAT FOR TEACHING RESEARCH &
PRESENTATION SKILLS**

Winter Animal Survival Adaptations and Strategies Reading

WINTER ANIMAL SURVIVAL
ADAPTATIONS & STRATEGIES
6TH, 7TH, 8TH GRADE READING

Sub Plan

Science Applicability

Improve students'
literacy skills



READING COMPREHENSION
ARTICLE & QUESTIONS

Article with
Comprehension
Questions

6th, 7th, 8th Grade

Print & Digital

Comprehension Questions:

1. What is an adaptation?
2. What are the two main types of adaptations mentioned in the text?
3. How do Arctic foxes use insulation to survive winter?
4. How do black bears prepare for and survive hibernation?
5. What is the difference between hibernation and torpor?
6. Why do caribou migrate, and what physical traits help them do so?
7. Give an example of a behavioral adaptation in a winter animal and describe its job.
8. How do animals use their senses to survive in winter?
9. Why is it important for animals to have adaptations?
10. Summarize the article.

Extension Questions:

1. Research a winter animal and write a paragraph about its adaptations.
2. Why do you think some animals hibernate while others migrate?
3. How do you think animals adapt to their environment?
4. Find a winter animal and write a paragraph about its adaptations.
5. How do you think animals adapt to their environment?

Winter Animal Survival Adaptations and Strategies

Winter is one of the most challenging seasons for animals. In many parts of the world, it brings freezing temperatures, deep snow, limited food and short daylight hours. Animals that cannot cope with these conditions face injury, starvation or death. Over time, species have evolved special adaptations—traits that help them survive in particular environments. Adaptations can be physical, such as thick fur, fat layers or specialized body shapes that minimize heat loss, or behavioral, such as huddling together, altering daily activity, caching food or migrating to a new location. Winter survival often requires a combination of these strategies. Natural selection favored individuals that could stay warm, conserve energy and find food during the cold season, so modern species display a rich variety of winter strategies.

Insulation

Many mammals and birds remain active throughout the winter by insulating themselves against the cold. The Arctic fox is a classic example. This small predator lives on the tundra where temperatures plunge well below freezing. Its fur becomes thicker and turns white in winter, trapping air close to the body and reducing heat loss while camouflaging the fox in snow. During storms, it digs down in snowbanks or earth to shield itself from wind and conserve warmth. The fox curls up and wraps its fluffy tail around its nose to protect sensitive skin from frostbite.

Other tundra animals, such as musk oxen and polar bears, also rely on long fur and layers of blubber to trap heat. Musk oxen are active and huddle together to conserve heat.

Hibernation

Some animals, like bears, enter a state of hibernation during winter. Hibernation is a state of inactivity and metabolic depression. Hibernating animals lower their body temperature, heart rate and breathing rate to conserve energy. They can survive for months without eating or drinking. Hibernation is a survival strategy that allows animals to survive the winter without food and water.

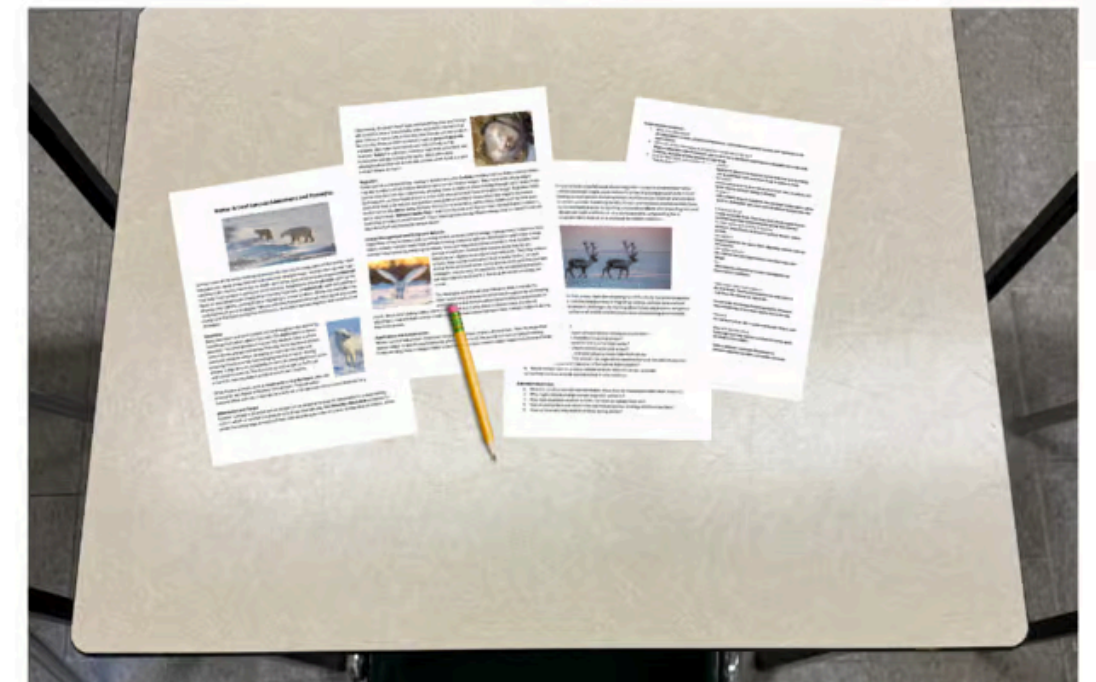
Google Access

PDF

DOC

NO-PREP - PRINT/UPLOAD

- Questions and Answer Key
- **No Prep, Ready-to-Use:** Print or assign digitally with Google Docs, Microsoft Word, and PDF formats for flexible classroom use
- **Includes Varied Question Types:** Knowledge, thinking, connecting, application, and open-ended questions.



The Science of Snow Reading

THE SCIENCE OF SNOW,
SNOWFLAKES, AND FROST
6TH, 7TH, 8TH GRADE READING

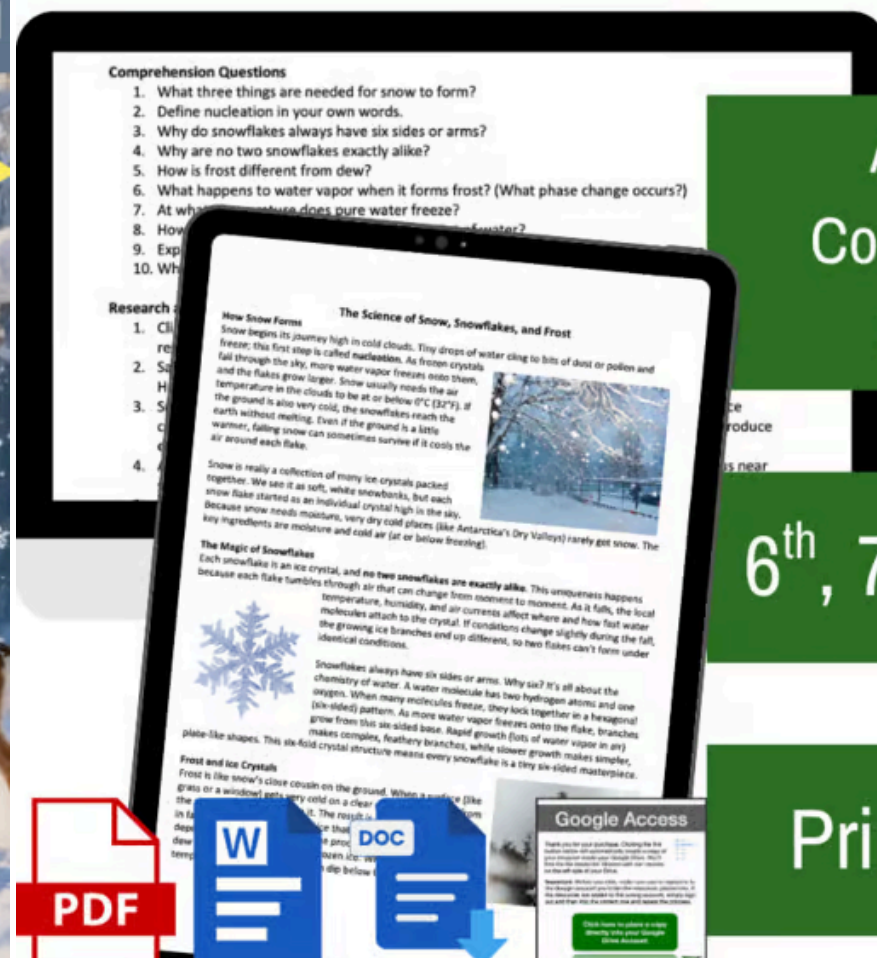
Sub Plan

Science Applicability

Improve students'
literacy skills



READING COMPREHENSION
ARTICLE & QUESTIONS



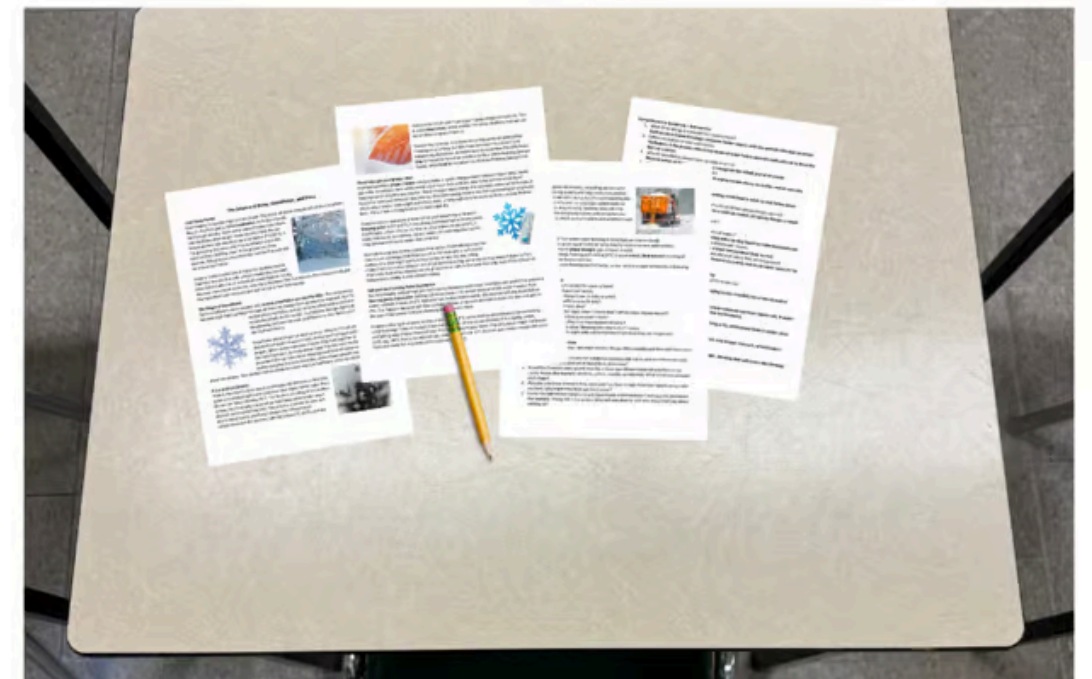
Article with
Comprehension
Questions

6th, 7th, 8th Grade

Print & Digital

NO-PREP - PRINT/UPLOAD

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TWO Investigations

Snow vs Ice Activity - Which Melts Faster

Snow Density and Volume Investigation

Snow Density and Volume Investigation

Activity Overview

Snow may look fluffy and large, but it is mostly made of air. When snow melts, it turns into liquid water that takes up much less space. This investigation explores the relationship between **volume**, **mass**, and **density** by comparing snow before and after it melts. Students will discover why snow has a low density even though it is made of frozen water.

Task Overview

In this investigation, you will collect a measured volume of snow and allow it to melt. You will then measure the volume of the melted water and compare it to the original snow volume. Using your observations, you will describe which had a smaller volume and what this tells you about snow's density.

Materials

- 1 clear measuring cup (for snow)
- Snow (collected outside or from a freezer)
- Bowl or tray
- Spoon or scoop
- Timer or clock
- Pencil or pen

Hypothesis

Write your hypothesis below:

What do you think will happen to the volume of snow after it melts?
Why do you think this will happen?

Data Collection

1. Fill a measuring cup with **loose snow** (do not pack it down).
2. Record the **volume of snow** using the measuring cup.
3. Place the snow in a bowl and allow it to fully melt at room temperature.
4. Record the volume of the melted water using measuring cup.

Data Table

Measurement	Volume
Snow (before melting)	_____ mL
Water (after melting)	_____ mL

Snow vs. Ice: What Melts Faster?

Overview

Snow and ice are both made of frozen water, but they are not the same. Snow is made of tiny ice crystals with lots of air trapped between them, while solid ice is tightly packed. These differences affect how quickly snow and ice melt. In this activity, you will investigate how **surface area** and **states of matter** influence melting time.

Task Overview

In this investigation, you will compare how long it takes **equal volumes** of snow and solid ice to melt at room temperature. You will measure melting time, observe differences, and explain why snow often melts faster—even though it may feel colder.

Materials

- 2 identical cups or containers
- 1 of the cups filled with **snow** (loosely packed)
- 1 of the cups filled with **solid ice** (ice cubes packed tightly)
- Timer, stopwatch, or clock
- Paper towels or tray (to catch water)
- Pencil or pen
- *(Optional)* phone or tablet for time-lapse video

Hypothesis

Write your hypothesis below:

Which will melt faster—snow or ice?
Why do you think this will happen?

Data Collection

1. Place both cups in the **same location** at room temperature.
2. Start your timer as soon as both cups are set down.
3. Observe the cups without touching them.
4. Record the time when each cup has completely melted.

Data Table

Sample	Starting Volume	Time to Fully Melt (s)
Snow	1 cup	_____
Ice	1 cup	_____

