

STAYING WARM

Your job is to find out how clothing helps keep the body warm in cold weather.

Hands-On Activity Steps

Wrap a cup of warm water with different materials (fabric, paper, foil).

Leave one cup uncovered.

Feel the outside of each cup after a few minutes.

Compare which cup stayed warm the longest.

Discuss how clothing helps people stay warm in winter.

Student Questions

Which material felt warmest?

Which cup cooled down the fastest?

How do clothes help your body in winter?

What happens when heat escapes?



Journal Prompts

Draw a winter outfit that keeps you warm.

Write: "Clothing keeps us warm by ____."

NGSS Guiding Questions

What is the phenomenon?

- Some materials slow down heat loss.

What data or evidence do I observe?

- Covered cups stay warmer longer than uncovered ones.

What can I conclude or explain?

- Insulation helps keep heat from escaping.

Teacher Note

This activity connects directly to everyday winter clothing choices. Emphasize that insulation slows heat loss rather than creating heat.

Staying Warm Observations

Use this worksheet to process and evaluate your observations.



How does the outside of each cup feel to your hand?

Which cup feels the warmest after a few minutes?

Which cup feels the coolest?

What do you notice about the cups wrapped in different materials?

Can you tell which material keeps the warmth in the longest?

How is the uncovered cup different from the wrapped cups?

Which material worked best to keep the cup warm?
