

# Kansas Weather – Winter Wonderland

## Essential Question: Why is it important to understand weather patterns where you live?

It's beginning to feel a lot like winter! Join me to learn about the chilly season of winter. Winter topics will include winter weather, snowflakes, how to dress, and favorite activities of the season. Students will also start an engineering design project they can finish on their own!



- K-ESS2-1 Use and share observations of local weather conditions to describe patterns over time.
- K-PS3-1 Make observations to determine the effect of sunlight on Earth's surface.
- K-2ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.
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## You will need to provide the following materials for a classroom experiment:

- Construction Paper 2-3 pieces/student
- Masking Tape – arms length/student
- 1 small action figure/toy (you can ask children to bring from home, or anything you have for indoor recess would work)
- Students will also need pencils and scissors

## Teacher preparation prior to the lesson:

- Gather above materials
- Make copies of Engineering Design Process for each student (optional)

## Overview of Lesson:

Through discussions, videos, and cooperative learning students will learn about the season of winter. Students will then engineer a shelter from only paper and tape to protect their action figure/toy from winter weather.

## ***Program Connection Information***

***Please use an external microphone (conference style) rather than the integrated one in the computer for the audio for your class and locate it centrally in the room. It can be difficult for the Greenbush teacher to hear the students using the computer microphone and therefore it reduces the interactive nature of the lesson. It is fine to use the computer webcam for your video source.***

All classes will take place using Zoom desktop video. If your building is already set up to use a desktop video application with a computer, simply open a browser and enter <https://greenbush.zoom.us/j/2326746414> in the URL space. You may need to download Zoom launcher software (free download) if you don't already have it. This needs to be done in advance of the lesson.

If using a Polycom video conferencing unit (or any legacy type video conferencing unit) to connect to a ZOOM conference, make sure the unit is in "encrypted mode" then dial the following IP on the internet: 162.255.37.11 or 162.255.36.11 and once connected, they will ask for a MEETING ID: enter 232 674 6414 (for Lisa at Science Center).

It's always a good idea to touch base with your district technology facilitator prior to your program to make sure all systems/equipment are in place and operational and that there aren't any firewalls in place that might prevent you from connecting to Zoom.

Once you connect, you will enter a Zoom waiting room. Your Greenbush teacher will admit you into the final meeting room.

If you have questions, please call Lisa Little at Greenbush, 620-724-6281, or email at [lisa.little@greenbush.org](mailto:lisa.little@greenbush.org) (best method of contact)

# The Engineering Design Process

