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## Be A Weather Forecaster

*(Pre-visit lesson plan)*

### Core Connection

**Core Connection:** Fourth Grade *Science* Standard 2

Students will understand that the elements of weather can be observed, measured, and recorded to make predictions and determine simple weather patterns.

Fourth Grade *Writing* Standard 2

Students will write informative/explanatory texts to examine a topic and convey ideas and information clearly.

**Museum Exhibit Connection:**

Water Content, Resort Snowfall, Snowflake Science

**Summary:** Students will observe and record their local weather for a week and write a predictive forecast for the day of their Field Trip to the Alf Engen Ski Museum.

**Lesson Learning Objectives:**

1. Students will learn to use appropriate instruments to measure temperature and barometric pressure daily.
2. Student will record observations and data on a chart.
3. Students will use the data on their charts to make a weather prediction.

**Materials:**

1. Weather instruments worksheet (provided)
2. Daily weather chart (provided)

**Approximate Time:** 5 – 15 minutes daily; 30 extra minutes for Writing component.

**Instructions:**

1. Introduce and discuss the various types of weather instruments. Explain that students will use these instruments to record their daily weather and make a prediction for the day of the field trip.
2. Instruct students to observe the weather for one week and record relevant data on the weather chart.
3. Review the data recorded from the week and ask students to make weather predictions for the field trip day. Ask students to support their predictions with data from their charts.
4. For Writing component, instruct students to write a brief weather forecast, as if it were being read on the news or radio. *A short clip of a weather forecast would be a helpful model.*
5. After the field trip, compare forecasts with the actual weather on that day. Instruct students to write a paragraph describing the similarities and differences between their predications and the actual weather.

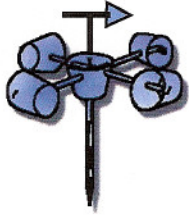
**Extension Ideas:**

- Instruct students to create visual aids (maps, graphics, signs, etc.) to accompany their own TV weather forecast which can be recorded or presented live to the class.

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## Weather Instruments

Below are four weather instruments that are used to gather information for weather forecasters. These are just a few of the instruments that forecasters use in their work.



**Anemometer:** A device used for measuring how fast the wind is blowing. This instrument can tell you the direction from which the wind is blowing.



**Barometer:** An instrument for measuring the pressure of the air in the atmosphere. High pressure means great weather, while low pressure is a sign of rain. Very low pressure indicates an approaching storm.



**Rain Gauge:** A tool used for catching and measuring rain or snow. A rain gauge like this one is usually placed in the ground outside, in an open area where it can easily catch rain.



**Thermometer:** An instrument used for measuring the temperature of the air. There are two scales for measuring air temperature - they are Celsius and Fahrenheit. Air temperature is affected by wind and the amount of sun shining.



																									
																									
																									
																									
																									
																									
																									
																									
																									
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