Weather to Farm Video

TEACHER GUIDE (Grade 5)

GOALS:

- Students will identify and define components of weather.
- Students will describe how weather conditions affect farming and the production of the food they eat.

BACKGROUND INFORMATION:

Follow the

Farmers

Weather impacts our food security because weather can positively or negatively impact the growing of crops and raising of animals for food.

One of the biggest risks that farmers must deal with is the weather, something they have no control over.

But farmers do have control over how they adapt to and prepare for bad weather. For example:

- Although the drought on the Prairies in the 1980s was worse than the 1930s no one talks about the 'dirty eighties' because farmers changed farming practices to include zerotill, herbicide weed control instead of tillage, and cover crops to protect soil, capture snow, and hold moisture.
- Farmers plant tree shelterbelts to minimize wind erosion of soil, moderate the absorption and release of moisture, and provide shade for livestock.
- Farmers use new crop varieties that mature more quickly and require fewer frost-free days.

CURRICULUM CONNECTIONS

OUR MANITOBA FARMER!

Korey Peters and his family run a third generation farm, Herbsigill Farms in partnership with his father, uncle, brother and cousin.

They grow crops including wheat, barley, canola, sunflowers, and soybeans and raise hogs near Randolf, Manitoba.

• Farmers can buy crop insurance against disastrous weather like severe flooding or hail.

While we often hear in the media when weather has created disastrous consequences for food production and farmers, weather usually creates reasonable conditions for growing crops and raising animals, thus ensuring that farmers produce enough food to feed us all.

Climate change is creating more unpredictable weather. Farmers today, and in the future, will have the difficult task of adapting to even more unpredictable weather. Innovation, technology, and new best management practices are being developed today to help farmers adapt.

Grade 5 Science - Weather Unit	
5-4-01	Use appropriate vocabulary related to their investigations of weather. Include: weather; properties; volume; pressure; air masses; fronts; weather instrument; severe weather; forecast; accuracy; water cycle; climate; terms related to public weather reports, and cloud formations
5-4-02	Describe how weather conditions may affect the activities of humans and other animals. Examples: heavy rainfall may cause roads to wash out; stormy conditions may prevent a space shuttle launching; in excessive heat, cattle may produce less milk
5-4-07	Identify and describe components of public weather reports from a variety of sources. Include: temperature; relative humidity; wind speed and direction; wind chill; barometric pressure; humidex; cloud cover; ultraviolet index; warm and cold fronts; amount, types, and probability of precipitation





Materials Needed:

- Follow the Farmers Weather to Farm video
 - o Option 1 video only (5:20)
 - Option 2 <u>Livestream event recording with video and</u> <u>Q&A with Korey Peters</u> (51:21)

Lesson Plan

Activate

BEFORE THE VIDEO

- As a class, have students identify all the components of weather that they know. Record the students' answers.
- Ask students why they think a farmer would want to have a weather station on their farm?

📫 Acquire

DURING THE VIDEO

• Have students watch for all the weather components that Korey measures on his farm.

AFTER THE VIDEO

- Revisit your class's list of weather components. Check off all the weather components on your list that Korey uses on his farm and add any missing weather components.
- Have a class discussion about why farmers would want to have a weather station on their farm and why it is important for farmers to keep track of the weather.

Extend your students' learning about how weather effects farmers and the production of food with this fun <u>Weather to</u> Farm game.

Assess

Assessment ideas:

- 1. Have students journal about how weather affects farmers and the growing of the food we all eat.
- 2. Look at weather reports on or from different days of the year and have students discuss or write about how that weather might affect a farmer and his/her ability to grow food.
- 3. Have the students keep a 'Farm Diary' for a week, in which they record the weather each day and how it affected what they, the farmer, did and/or how it affected their crops or livestock.

Example Diary entry:

Weather - May 15, 2021

Temperature: high of 15°C, low of 4°C Precipitation: rain, 25 mm Wind: NW 20km/h Relative Humidity: 95%

Today, I had to postpone shearing the sheep due to the steady rain, so I worked in the workshop changing the oil in the tractor. It needed an oil change because of all the field work we have been doing planting seed.

The rain is welcome though as it will help my newly planted canola to sprout and grow.

RECOMMENDED COMPANION RESOURCE

In this <u>Weather to Farm game</u>, a farmer's lack of control of the weather is simulated by having students randomly select weather cards to discover the effects of that weather on their crops, animals, and bottom line. Students will also have the option of buying crop insurance to cover the costs of planting a crop that gets destroyed by severe weather.

