



Dear Parent,

Your student is beginning a unit called *Weather, Climate, and Natural Hazards*, created at the Battle Creek Area Mathematics and Science Center. This unit was designed to promote inquiry-focused science that provokes questions, ideas, and reasoning to inform and solve problems. During the next twelve weeks, your child will be actively engaged with the unit. *Weather, Climate and Natural Hazards* is geared for third-grade students and focuses on the following learning expectations:

- Analyze weather data over time to create a graphical display to reveal patterns and relationships.
- Devise an argument using data from scientific explanations about the world to create a solution to a weather-related problem.
- Obtain information from books and reliable media to explain how cause-and-effect relationships are used to describe weather-related phenomena.
- Use climatic features to describe the weather conditions typical for an area.
- Investigate how human activities can reduce the effects of natural hazards.

During this unit of study, your child will collect and analyze weather data related to different regions and climates. The class will use this new information to create graphical displays to describe weather conditions for specific areas. They will collect data on temperature, wind speed, wind direction, and precipitation. Students will recognize patterns in the data to make predictions and determine climates.

The unit of study includes hazardous weather conditions that occur in different climates. Students describe the various hazards due to weather and create a design solution that reduces the impact of weather-related hazards. They will develop and critique design solutions created by their peers to reduce the impact of severe storms.

Suggestions for activities to do at home are included in this letter. These activities will reinforce the concepts taught during this unit of instruction.

We hope you enjoy discussing the concepts involved in *Weather, Climate and Natural Hazards* with your child. Let us know if we may be of assistance.

The Outreach Staff

Battle Creek Area Mathematics and Science Center

(269) 213-3904 or (269) 213-3905

ACTIVITIES TO DO AT HOME

Activities to Do at Home

Weather Observations and Reports:

1. Work with your student to develop an at-home weather station. Have your student record temperature, wind direction, wind speed, and barometric pressure in the morning and afternoon. Compare your at-home weather data with the local weather station.
2. Discuss precautions and steps your family can take to decrease the impact of severe weather (lightning, flood, strong winds, tornadoes, freezing rain, blizzards).
3. If your family has a relative or friend in a city far away, have your child communicate with them and compare weather data between the two locations. Discuss why there is a difference in weather patterns and if the distant location experiences a different climate.
4. Watch the morning and/or evening weather forecasts together. Make a list and discuss the different terms the meteorologist uses in the forecast. Then have your student research the meaning of the terms.
5. Share memories of severe storms from your childhood or those of a grandparent. Discuss how warning systems, forecasts, and safety precautions have changed.

Take your child to the library or bookstore to find magazines and books about weather and climate.

Example books:

On the Same Day in March: A Tour of the World's Weather by Marilyn Singer

Why Does It Rain? by Judith Jango-Cohen

Oh Say Can You Say What's the Weather Today? by Tish Rabe

Weather by Seymour Simon

Weather Forecasting by Gail Gibbons

What is Climate? by Bobbie Kalman

Weather Clues in the Sky: Clouds by Belinda Jensen