

Knowledge and Skills

Explain appropriate safety precautions during severe weather.

Benchmark Clarification:

- Appropriate safety precautions need to be taken during severe weather. Safety precautions include moving to safe locations, listening for sirens, and monitoring radio broadcasts for severe weather watches and warnings.

Students will:

- Explain safety precautions during severe weather such as thunderstorms, tornadoes, and blizzards
- Demonstrate safety precautions they should take during a thunderstorm, tornado, and blizzard.
- While tornadoes, thunderstorms, and blizzards are significant events and students need to know how to properly respond to these events. The frequency of these events, however, is less than days when the wind chill and heat index are high. Students need to know what type of precautions to take for these two events as well.

Resources

Coloma Resources:

Building policy drills

Other Resources:

- Weblibliography.
<http://mtn.merit.edu/mcf/SCI.V.3.E.1.html>
- Climate Effects on Human Health: long term effects of how temperature, humidity, wind, and pressure affect human health.
<http://www.ciesin.org/docs/001%2D338/001%2D338.html>
- Weather Topics: indexed weather topics in the easy to read format characteristic of USA Today.
<http://www.usatoday.com/weather/index/windex.htm>
- Weather Animations: USA Today archives a number of effective and quick loading animated gifs depicting weather phenomena relating to air masses, air pressure, El Nino, floods, hurricanes, lightning, optical effects, seasons, storms, winds, and more.
<http://www.usatoday.com/weather/wgraph0.htm>
- Artell, Mike. *Weather Whys: Questions, Facts & Riddles About Weather*. Goodyear Publishing, 1995.
- Cole, Joanna. *Magic School Bus- Inside A Hurricane*. Scholastic, 1996.
- Cole, Joanna. *Magic School Bus- Kicks Up A Storm: A Book About Weather*. Scholastic, 2000.
- Gibbons, Gail. *Weather Words & What They Mean*. Holiday House, 1990.
- White, Nancy. *Magic School Bus- Twister Trouble*. Scholastic, 2001.

Instruction	Assessment
<p>Benchmark Question: What are the relationships between human activities and the atmosphere?</p> <p>Focus Question: Where is a safe place in severe weather?</p> <p><u>The teacher will discuss fire and tornado drills along with precautions students should take during thunderstorms and blizzards.</u></p> <p>Teacher will lead practice drills periodically.</p>	<p>Students will demonstrate their understanding of safety precautions by participating in building drills.</p>

Teacher Notes:

Investigate and describe what makes up weather.

Beginning in the elementary years, observation of the weather is a common school event. In many classrooms, daily calendar activities include a description of the weather. Infrequently, air temperature, cloud cover, or severe weather is mentioned. For students to understand the importance of air to atmosphere and the weather, they must understand that air is a substance, it is matter, and it has mass and volume. This is a very difficult concept for young children because they cannot see air. Interestingly, middle grade students seem to have the most difficulty with this concept.

Patterns of the weather require that scientifically literate students understand air masses, front systems, and have general map reading skills. In the elementary grades, students should start to see the patterns of weather in different seasons. In this case, however, it is important to point out the colloquial use of different season terms. For instance, when the first snow flies, we typically say that winter has come whether it is December 21st or not. Paying attention to the differences between the weather and what we call each season is important. In general, we can predict that, in Michigan, it will snow in winter, less frequently in the spring and fall, and almost never in the summer. In the middle grades students can use weather maps and satellite weather images to see the patterns of weather.