



## Grade 7 Sample Lesson Plan: Extreme Cold

### **Description**

Please see attached handout for a lesson submitted by a Virginia teacher

### **Handout**

The next page includes a handout for the lesson.

# Extreme Cold

7.1.f Describe ways to prevent weather- or climate-related physical conditions such as allergies, asthma, sunburn, dehydration, heat stroke, heat exhaustion, and hypothermia.

7.1.n Identify personal safety issues related to being home alone, caring for others, being in the neighborhood and community, and being online.

	Link
 <p>What is extreme cold and what are the dangers of extreme cold?</p>	<p>You want to walk to school with friends or ride your bike to soccer practice but you check the weather and it is 60 degrees with a wind chill factor of 55 degrees. What does that mean? Do you think it is too cold to ride your bike or walk? Why or Why not?</p> <div data-bbox="386 730 1435 793" style="border: 1px solid black; height: 30px;"></div>
<p>What steps can I take to prepare myself for extreme cold?</p>	<p>If this is the prediction for the weather and you are going outside for physical education, what would you wear? Are shorts and a tee shirt okay? These are the questions that you may need to plan for as you</p>
<p>What steps can I take to help prepare my home for dealing with extreme cold conditions?</p>	<p>make more decisions about what clothes to wear to school or for outdoor activities and have more responsibility for being prepared for changing weather conditions. In this lesson, you will learn about many weather - related terms used during cold weather seasons and how to prepare and plan for extreme cold.</p>

	Explore
	<p>In this lesson you will be using <a href="https://www.cdc.gov/disasters/winter/index.html">https://www.cdc.gov/disasters/winter/index.html</a> to answer questions and create an information page on extreme cold. Before jumping into the lesson it will be important to familiarize yourself with some vocabulary related to extreme cold. Use the website, <a href="https://www.ready.gov/winter-weather">https://www.ready.gov/winter-weather</a>, to complete the key terms below. If you click the dropdown menu at the top of the page: "Expand all sections" you will be able to read through and identify these key terms. To enter the missing term below, double click the box, then click on the box (in google draw) to type your word and select save and close in the top right corner.</p>

- **Frostbite** is a serious condition that's caused by [ ] to extremely [ ].

- **Hypothermia**, or abnormally [ ], is a dangerous condition that can occur when a person is exposed to extremely cold temperatures.

- **Freezing Rain** - Rain that [ ] when it hits the ground, creating a [ ] of ice on roads, walkways, trees and power lines.

- **Sleet** - Rain that turns to [ ] before reaching the ground. Sleet also causes [ ] on roads to freeze and become slippery.

- **Wind Chill** - Windchill is the [ ] it "feels like" when you are outside. The NWS provides a [ ] chart to show the difference between air temperature and the perceived temperature and the amount of time until [ ] occurs. For more information, visit:

<http://www.nws.noaa.gov/om/winter/windchill-images/windchillchart3.pdf>

- **Winter Weather Advisory** - Winter weather conditions are expected to cause significant inconveniences and may be [ ]. When caution is used, these situations should not be life threatening. The NWS issues a winter weather advisory when conditions are expected to cause significant [ ] that may be hazardous. If caution is used, these situations should not be life-threatening.

- **Winter Storm Watch** - A winter storm is possible in your area. Tune in to NOAA Weather Radio, commercial radio, or television for more information. The NWS issues a winter storm watch when severe [ ], such as heavy snow and/or ice, may affect your area but the location and timing are still uncertain. A winter storm watch is issued [ ] hours in advance of a potential severe storm. Tune in to NOAA Weather Radio, local radio, TV, or other news sources for more information. Monitor alerts, check your emergency supplies, and gather any items you may need if you

	<div style="border: 1px solid black; width: 100px; height: 15px; margin-bottom: 10px;"></div> <ul style="list-style-type: none"> <li>· <b>Winter Storm Warning</b> - A winter storm is <div style="border: 1px solid black; width: 100px; height: 15px; display: inline-block;"></div> or will soon occur in your area.</li>   <li>· <b>Blizzard Warning</b> - Sustained winds or frequent gusts to <div style="border: 1px solid black; width: 100px; height: 15px; display: inline-block;"></div> miles per hour or greater and considerable amounts of falling or <div style="border: 1px solid black; width: 100px; height: 15px; display: inline-block;"></div> (reducing visibility to less than a quarter mile) are expected to prevail for a period of three hours or longer.</li>   <li>· <b>Frost/Freeze Warning</b> - Below freezing <div style="border: 1px solid black; width: 100px; height: 15px; display: inline-block;"></div> are expected.</li> </ul>
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	<h2 style="margin: 0;">Explain</h2>
	<p>Using the information from the website <a href="https://www.ready.gov/winter-weather">https://www.ready.gov/winter-weather</a>, respond to the following scenario and explain your reasoning:</p> <p>Your family vehicle breaks down on the side of the road during a snowstorm. You have a cell phone but there is also a gas station one mile away. You and your family have warm jackets and hats. What is the <b>best</b> decision to make in this scenario. Explain your answer referencing information from the website.</p> <div style="border: 1px solid black; height: 30px; margin-top: 10px;"></div>

	<h2 style="margin: 0;">Apply</h2>
	<p>Now that you have obtained the important key terms for extreme cold, use these two websites to create a one page fact sheet or infographic. Double click the youtube video below to learn what an infographic is and how it can be used.</p>



Address two of the topics below within your fact sheet.

<https://www.ready.gov/winter-weather>

<https://www.cdc.gov/disasters/winter/index.html>

- Preparing your home for cold
- Vehicle preparation/protection for your parent/guardian?
- Carbon monoxide dangers in relation to winter weather
- Appropriate clothing for winter weather
- Before/During a storm safety preparations

## Reflect



Answer the reflection question below:

What are the three most important things to remember about protecting yourself during extreme cold?

1.

2.

3.