

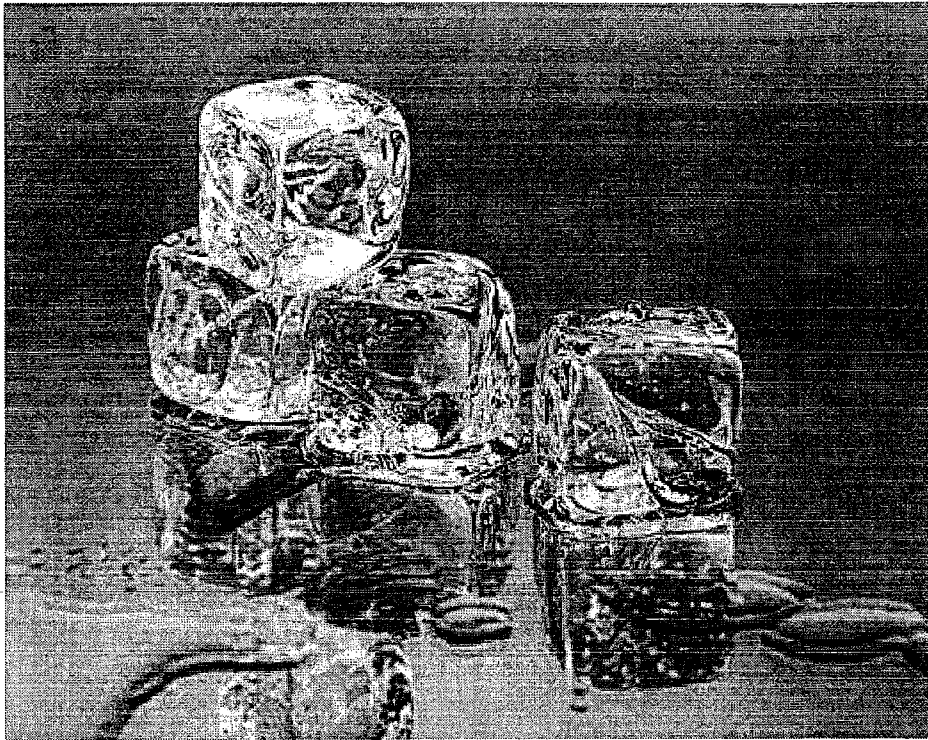
Ice Storms

by ReadWorks



photograph of road after storm

Have you ever been stuck in the middle of an ice storm? If you have been stuck in an ice storm, then you would know that it is a good idea to stay inside. Weather conditions during an ice storm are not pleasant. Ice storms are cold, wet, and windy. Sometimes snow falls from the sky during an ice storm. Sometimes freezing rain or sleet falls from the sky instead.



photograph of melting ice

Freezing rain is especially dangerous. If it is 32 degrees Fahrenheit or below, rain can freeze when it hits the ground. This causes a layer of ice to form. The ice can be difficult to see, and people often slip on it. Cars that drive over the layer of ice can also lose control.

People often use rock salt to get rid of the ice. Rock salt is larger than the table salt used for flavoring food.



Photo Credit: Thomas Brueckner, CC-BY 2.0

photograph of road salt being put on an icy road

Why is rock salt used on icy streets and roads? It makes it harder for water to freeze! Water normally freezes at 32 degrees Fahrenheit. Salt makes it so that water freezes at a lower temperature. When people put salt on ice, the ice will melt. The rock salt only works if you put the salt down after the ice has formed. But rock salt does not prevent the ice from forming.

There are some steps that people can take to prepare for an ice storm. One step is to cover the ground with magnesium chloride. This is a chemical mixture that makes it harder for snow and ice to stick to the ground. People like to use magnesium chloride because it is safer for the environment. Rock salt can pollute drinking water. It can also hurt plants, trees, and soil. Magnesium chloride does not hurt the environment like rock salt does. It is, however, more expensive than rock salt.

If an ice storm were coming to your town, would you buy rock salt or magnesium chloride?

Name: _____ Date: _____

1. When can snow, freezing rain, or sleet fall from the sky?

- A. when people slip on ice
- B. when water freezes
- C. during an ice storm
- D. before magnesium chloride is used

2. Rain can freeze when it hits the ground. What is the effect of the rain freezing?

- A. The ground becomes 32 degrees Fahrenheit or below.
- B. People cover the ground with magnesium chloride.
- C. Water freezes at a lower temperature.
- D. A layer of ice forms on the ground.

3. Read these sentences from the text.

Why is rock salt used on icy streets and roads? It makes it harder for water to freeze! . . . People do not put salt down before the ice forms. It is done during or after the storm.

There are some steps that people can take to prepare for an ice storm . One step is to cover the ground with magnesium chloride. . . People like to use magnesium chloride because it is safer for the environment. Rock salt can pollute drinking water. It can also hurt plants, trees, and soil. Magnesium chloride does not hurt the environment like rock salt does. It is, however, more expensive than rock salt.

What conclusion can you make about using rock salt or magnesium chloride?

- A. There are only bad points about using rock salt.
- B. There are only bad points about using magnesium chloride.
- C. There are good points and bad points about using either rock salt or magnesium chloride.
- D. There is no good point or bad point about using either rock salt or magnesium chloride.

4. Read these sentences from the text.

Salt makes it so that water freezes at a lower temperature. When people put salt on ice, the ice will melt. . . .

There are some steps that people can take to prepare for an ice storm. One step is to cover the ground with magnesium chloride.

What can you infer from the text about the effects of rock salt or magnesium chloride on water and ice?

- A. Only rock salt changes the characteristics of water and ice.
- B. Only magnesium chloride changes the characteristics of water and ice.
- C. Rock salt and magnesium chloride change how water and ice usually act.
- D. Rock salt and magnesium chloride do not do anything to water and ice.

5. What is the main idea of this text?

- A. Although ice storms and freezing rain can be dangerous, rock salt or magnesium chloride can be used to make it harder for ice to form or stick to the ground.
- B. Sometimes snow, freezing rain, or sleet falls from the sky during ice storms, which are cold, wet, windy, and not pleasant.
- C. Magnesium chloride makes it hard for ice to stick to the ground, but is more expensive than rock salt is.
- D. Water normally freezes at 32 degrees Fahrenheit, but salt makes it so that water freezes at a lower temperature.

Name: _____

Date: _____

Olaf

10x3	7x3	4x6	7x4	5x6	3x10	3x7	2x2	3x9	3x2	3x7	3x8	8x3	7x3	4x6	3x9	3x9	6x4	3x10
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3x9	8x3	9x3	5x6	8x2			6x0	0x10	6x0			2x7	3x7	5x6	3x7	4x6	4x6	3x10
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5x5	3x10	8x3	8x3	9x3	2x10						2x8	5x5	8x3	1x3	3x7	5x5	6x5	6x4
6x4	9x3	3x8	10x3	4x4				7x2				3x5	7x4	5x6	3x9	5x6	6x4	5x6

Key:

0	Orange
1-10	Brown
11-20	Black
21-30	Blue

*Blank squares are white