

Accessing Prior Knowledge About Snow and Salt

Introduce the unit by accessing student prior knowledge about snow and salt.

Discussion:

Key Idea: Snow interferes with daily life, so humans use salt to limit its interference.

Question: What are your experiences with snow in NYC?

Answer: The snow piles up, over time becomes dark and dirty, and stays like that until it melts away down storm drains.

Question: What does the City look like during a snowstorm? After a snowstorm?

Answer: The City is covered with snow. It is very hard to get around. Slowly life gets back to normal.

Question: How do people deal with snowy and icy roads or how do people help life get back to “normal”?

Answer: The streets are plowed, sidewalks shoveled, and sand and salt is put on roads and sidewalk.

Question: Why is salt used on roads?

Answer: Salt helps to melt the snow because it lowers the freezing point of water (see the Teacher Tip on colligative properties for more information).

Teacher Tip

Salt is used to clear roadways of ice and snow because it lowers the melting point of ice. This way even if it is cold outside, the snow/ice will still melt.

For a lab on colligative properties go to: <http://formontana.net/icewater.html>