

Ice Melt

Summary

In this activity, we will be looking at physical changes of matter by melting ice. A change in size, shape, or state (solid, liquid, or gas) is a physical change. It is still composed of the same matter. If you freeze water, melt it down, or heat it up, you have water in its different forms. Temperature often plays a big role in matter changing form.

Materials

The materials marked with a () are optional and allow you to play with a game board of different actions rather than just using salt.*

- Glasses or sunglasses (*eye protection*)
- Ice cube(s)
 - *Normal ice cubes are fine, or you can freeze a water balloon overnight.*
- Salt
 - *You can use a saltshaker or a spoon.*
- Tray or cookie sheet for easy cleanup
- *Game board
 - <https://www.teacherspayteachers.com/Product/Distance-Learning-Explore-the-3-States-of-Matter-5340380> (This also contains a more detailed lesson.)
- *2 cups of water (for use with game board only)
 - *One cold and one hot (Caution: not too hot!)*
 - *You can add a drop of food coloring to differentiate the two cups.*
- *Dice (for use with game board only)

Steps to Follow *(All activities must be done with adult supervision)*

1. Put the ice cube on the tray and have the other materials ready to use.
 - a. *This is a good time to review your states of matter.*
2. If you are not using the game board, observe the results of adding salt to the ice cube.
 - a. *What do you think the ice will do? Salt lowers the melting point of ice. Therefore, we use to salt to melt ice on the roads.*
3. If you are using the game board, this is a good time to use the scientific method.
 - a. *What do you think will happen? Some actions will be more effective than others in causing a physical change to occur.*
 - b. Roll the dice and complete the action
 - i. *What do you observe, or which was the most effective?*
 - c. Roll the dice again, complete the action, and review the questions above until the ice cube is gone.

Ohio Early Learning and Development Standards

Cognition and General Knowledge/Mathematics/Number Sense/Number Sense and Counting

Cognition and General Knowledge/Science/Science Inquiry/Inquiry

Cognition and General Knowledge/Science/Physical Science/Explorations of Energy

Ohio Learning Standards

K.CC.4, 3.PS.2

Next Generation Standards

2-PS-1