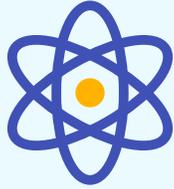




# STEAM Activity Chart for Boiling



## Science

Place two pots (same size) of room temperature water on the stove. Add 1 teaspoon of salt to one of the pots of water (experiment). Do not add salt to the other pot (control). Turn the stove on. What do you notice about the time it takes for each pot to come to a rolling boil? Are there any differences?



## Technology

Use the data that you have collected in the math activity to create a digital presentation of your findings. You may develop a PowerPoint presentation or video presentation. Ask a grown up to help you.



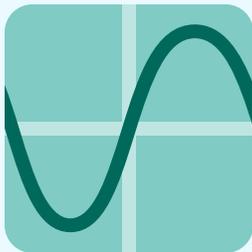
## Engineering

Scientists believe that the temperature of the earth is slowly rising. One way they can collect data on this phenomenon is by measuring the temperature of ocean water. Investigate ways in which climate engineers measure the temperature of ocean water. What challenges might they encounter?



## Art

Place cold water, room temperature water, and hot water in three different glass jars or bowls. Add 2-3 drops of your favorite color food coloring. What do you notice about how the colors dissolve in the water, why do you think this happens? Use the colored water to paint a picture on a piece of watercolor paper. What do you notice?



## Mathematics

Use a thermometer to record the temperature of boiling water at these four stages; slow simmer, simmer, rapid simmer, and rolling boil. Calculate the difference in degrees (Celsius or Fahrenheit) between each stage of boiling. How many degrees does it take to reach each stage?



## Fun Facts!

The boiling temperature of water varies according to the outside pressure and altitude.

Germs in a liquid (for example, water) can be killed by boiling the liquid.