POLYMER PLAY: GUMMIES

ULYSSES PHILOMATHIC LIBRARY SCIENCE AT HOME

THE STEP BY STEP

1 - Set out two cups

2 - Fill one cup with tap water, and fill the other cup with salt water (no exact amount of salt is required, but saltier water will create a more noticeable change)

3 - Put a few gummy candies in each cup and set the cups aside for at least 24 hours

4 - Check the cup after 24 hours and record any changes that have happened with your gummies!

5- The gummies will eventually dissolve if left in the liquid. Remove the gummies from the cups carefully (they might fall apart otherwise) and observe what happens as they dry.

ADDITIONAL QUESTIONS

What is a polymer? What is Osmosis?

What happened to the gummy candies in the plain water?

What happened to the gummy candies in the salty water?

Why did the gummy candies change?

What do you think will happen once the gummies dry out again?

ADDITIONAL RESOURCES

Firm Chemistry of Gelatin
https://www.cnet.com/news/appliance-science-the-firm-chemistry-of-gelatin/

Gummy Bear Osmosis Lab
https://ny24000063.schoolwires.net/cms/lib/NY24000063/Centricity/Domain/208/GummyBearOsmosisLab.pdf

Osmosis and Water Potential
https://www.youtube.com/watch?v=L-osEc07vMs

Scientific American: Gelatin and Jell-o
https://www.scientificamerican.com/article/what-is-jell-o-how-does-i/