

Candy Diffusion



Did you know that when you put Skittles on a plate with water, something cool happens? It's called diffusion! Diffusion is when colors spread out and mix together. When the Skittles touch the water, the colors on their shells start to dissolve and spread. It's like a colorful race! The water carries the colors away from the Skittles, making a beautiful pattern on the plate.

Materials

- Skittles candies (different colors)
- White plate
- 1/2 cup of water

Science Behind the Experiment

The candy diffusion experiment with Skittles explores the process of diffusion, which is the movement of molecules from an area of high concentration to an area of low concentration. In this experiment, water acts as a solvent that dissolves the colored dyes on the Skittles' outer shell. As the water comes into contact with the candies, the dyes begin to dissolve and spread out into the surrounding water, creating a colorful display. Through this experiment, we can observe how molecules move and mix to create vibrant patterns, providing a fun and interactive way to learn about diffusion in action!

Step 1: Set up

Place the Skittles in a circle on the plate, leaving some space between them. Have fun choosing different colors to create different patterns!

Step 2: Add water + food coloring

Pour 1/2 cup of water slowly into the center of the plate.

Step 3: Add baking soda + vinegar

Watch what happens to the Skittles as time passes. Observe any changes in color or patterns.

Step 4: Make Compost

Take pictures or draw what you see! If you wish, repeat the experiment with different patterns.