

## Core Skills Analysis

### Mathematics

- The student can practice counting and basic arithmetic by sorting the Skittles by color and then adding or subtracting the quantities.
- They can study fractions by comparing the ratios of different colored Skittles in the pack.
- Probability concepts can be explored by predicting the likelihood of drawing specific colors from a random selection of Skittles.
- Graphing skills can be improved by creating bar graphs or pie charts to represent the color distribution of the Skittles.

### Science

- The activity provides a hands-on opportunity to study the concept of density by observing how the differently colored Skittles sink or float in liquids of varying densities.
- Chemical reactions can be introduced by discussing how the colors on the Skittles shells are made and how they dissolve in water, vinegar, or other solvents.
- The process of osmosis can be demonstrated by placing Skittles in water and observing the color dissolving and spreading.
- Color mixing and chromatography can be explored by placing Skittles on a wet paper towel and observing how the colors separate.

### Tips

To further enhance learning through the Skittles activity, encourage the student to create math problems based on Skittle quantities or probabilities. They could also conduct experiments with different liquids to observe how Skittles react, or even try using Skittles in an art project to explore color theory and mixing. Lastly, incorporating Skittles into baking or cooking can introduce concepts of measurements and ratios in a delicious way!

### Book Recommendations

- [Candy Experiments](#) by Lorelee Leavitt: This book offers fun and educational experiments using various candies, including Skittles, to explore scientific principles in a playful way.
- [Math Munchies](#) by Kelsey Peach: A math activity book that includes colorful candy-themed exercises like those involving Skittles to make learning math engaging and tasty.
- [The Science of Candy](#) by Jodi Wheeler-Toppen: Delve into the science behind how candies like Skittles are made and explore the chemistry and physics involved in these sweet treats.