



Virtual STEAM Night

Science, Art and Math

Skittles Challenge

Goal: I can learn what happens to the dye in skittles when I soak them in warm water.

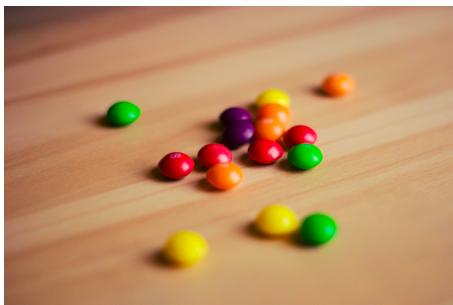
Science Indicator: SC.2.3.1 Gather, analyze, and communicate evidence of the structure, properties, and interactions of matter.

Art Indicator: FA 2.2.1.d Explore elements of art and principles of design to brainstorm visual possibilities. (e.g., use color and shape to create pattern)

Math Indicator: MA 0.1 NUMBER: Students will communicate number sense concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines

Materials:

- 50 - Skittles
- 1 - 10" Plate
- Warm water (not provided)



- Dissolve: a solid to become mixed with a liquid

Instructions:

1. Watch YouTube Video for background knowledge:
Skittle Diffusion
<https://youtu.be/XRSzbAPtmD0>



2. Use your recording sheet to design how you are going to lay out your skittles on the plate. Think about patterns you could do when making your design. Such as: ABCDABCD (Red, yellow, green, purple, red, yellow, green, purple)

Book Extension:

[Pattern by Henry Pluckrose](#)

Vocabulary/Pre-teach:

- Estimate: a guess
- Diffuse: spread out





3. Make an estimation of how many skittles you think it will take to make the circle on your plate.
4. Now, start placing your skittles in the circle around your plate according to your plan.
5. Count how many skittles you used. Was that number higher, lower or a great estimate?
6. Pour warm water onto the plate until all the skittles are completely covered.
7. Observe what happens to the skittles in the water.
8. What do you think is happening?
9. Why do you think it is happening?
10. Document the challenge using video, photos, drawings, etc.
11. Have fun!

Extension Activity:

- Use different temperatures of water, vinegar, and juice.
- Which liquid dispurses the color the quickest? What temperature works the best?

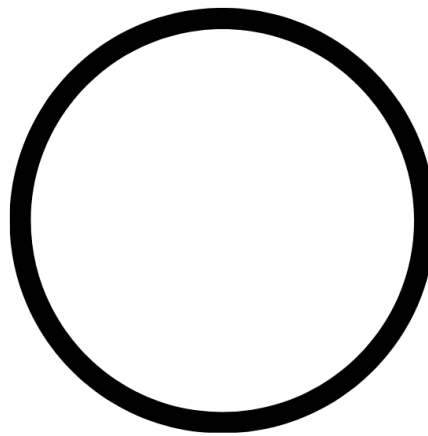
Social Emotional Connection:

- **SOCIAL AWARENESS:** The view that everyone deserves equal rights and opportunities. Notice the colors of the skittles each has their own unique qualities adding to the rainbow of life.





PLAN - THE PATTERN FOR YOUR SKITTLES



OBSERVE- DRAW WHAT HAPPEND TO THE SKITTLES
WHEN YOU POURED THE WARM WATER

