

Virtual STEAM

Science

Cookie Lab Challenge

Goal: I can study and measure a given sample and record the data and observations.

Science Indicator: SC.5.3.1.C Make observations and measurements to identify materials based on their properties.

Math Indicator: MA 5.3.1 Characteristics: Students will identify and describe geometric characteristics and create two-and three-dimensional shapes.

Materials:

- 1 - Sheet of Paper
- 1 - Metric Ruler
- 1 - Magnifying Glass
- 4 - Different Individually Packaged Cookies (Some different Shapes)
- Pencil and coloring tools (e.g. crayons, colored pencils) (Not included)



Instructions:

1. Watch the introductory video
https://drive.google.com/file/d/IKupwDheDWPM_PHonqfx6IVFdKINaBLxq/view?usp=sharing for background and lesson instruction:
2. Create four entries on the sheet of paper, one for each individual cookie sample.
3. Take out the first cookie sample from the package. Using your sense of sight and touch, describe the texture (e.g. smooth, rough), shape, and color of the cookie on the entry.
4. If the cookie is square or rectangular shaped, measure the length, width, and thickness of the cookie in centimeters to the nearest tenth. If the cookie is round, measure the diameter of the cookie from one end to the other while making sure the ruler passes over the center of the cookie, then measure the thickness



in centimeters to the nearest tenth.

Write down these measurements in that entry.

5. Draw a sketch of the cookie. Write down the type of cookie if you can identify it (or use the package label).
6. Repeat these steps for the other three cookie samples.
7. Eat the cookie samples when you are done or save some for later.
8. Have fun!

Extension:

- How many cookie characteristics (shape, size, color) did you use? What are some other characteristics you could use?
- Which cookie tastes the best? Why?
- Which cookie smelled the best? Why?
- Was there a cookie that you initially thought would taste best that disappointed you? Why?

SPARKPositivity Connection:

- **Social Justice/Diversity** - The view that everyone deserves equal rights and opportunities. Each cookie today has its own unique characteristics, adding to the diversity of taste buds that everyone has.

