STEM @ HOME

in collaboration with DailySTEM

STEM time Snack time : Crackers, Cookies, & Chips

Snacks aren't just yummy, they're great for STEM learning. Why?

Crackers, cookies, and chips are made in all shapes and sizes. This challenge involves finding some of the values related to those shapes, and also thinking about the shapes and sizes of snacks and how that affects production or packaging.

You'll need:

- Assorted Crackers, Chips, or Cookies
- Ruler or Tape Measure
- Pencil
- Paper
- Calculator
- *optional*: Device with camera & stop-motion software
(iMotion Free Version on iOS used in example)

Concepts:

- Area and Perimeter
- Angles
- Tiling
- Critical Thinking

How-to:

STEP 1: Gather your snacks – find some crackers, chips, or cookies.

STEP 2: Use your ruler to find the length, width, base, height, diameter, radius, or other important measurements.

STEP 3: Use area and perimeter formulas to calculate the values for each snack shape.

STEP 4: Place 3 or more of the same cracker/chip in front of you to see if they tile (fit together without any gaps).

Bonus: Extension/Discussion Points

a) How can you find the area of a snack shape if you don't know the formula?

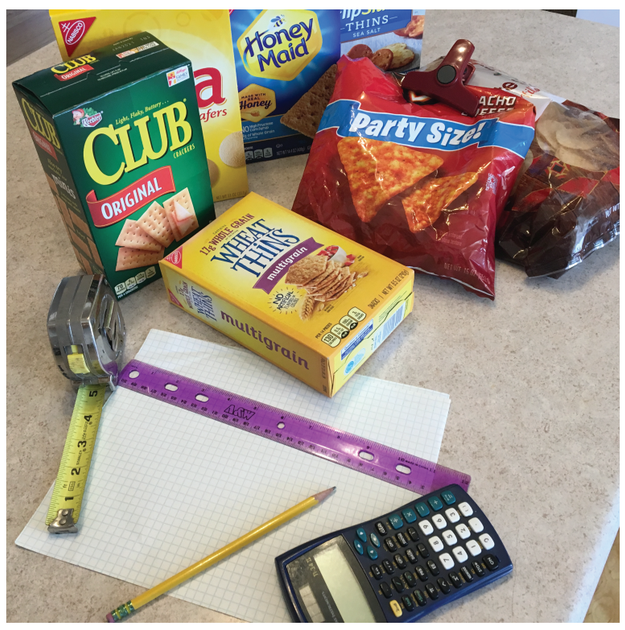
b) How do you think different shape snacks are made?

c) Why do some shapes fit together without any gaps in between?

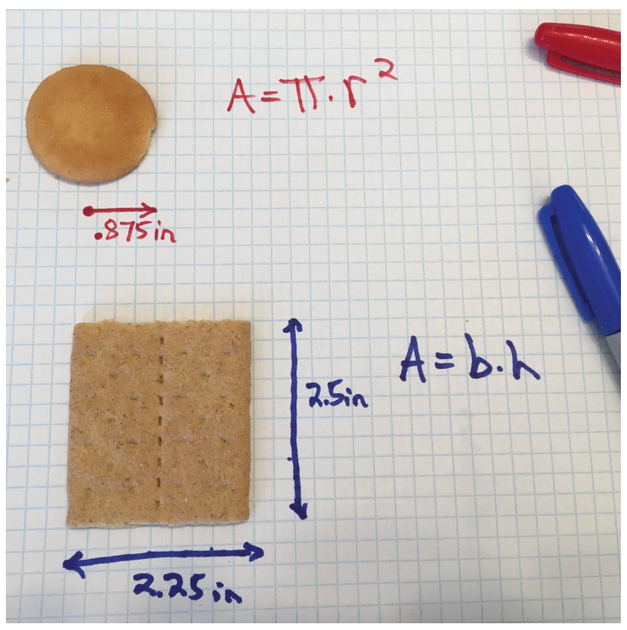
d) How does the nutrition information relate to the area of the snack?

e) Does the shape affect its ability to prevent crumbling inside the package?

f) Can you turn the snacks into a stop-motion video?









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