



# BREWING UP SOME STEAM COUNTING CRACKERS!

## Materials You Will Need:

- a baggie of crackers in three different shapes (round, square, and triangle shaped)
- recording sheet
- pencil

Explore how to make fractions of a set with tasty crackers.

## DIRECTIONS

**See the instructional video on the:  
York Public Library YouTube Channel**

1. Pull 10 crackers out of your baggie. Lay them out to make a design.

2. Figure out how many out of ten are round, how many out of ten are square, and how many out of ten are triangular.

Record your numbers as a fraction out of 10.

3) Put your ten crackers back in the baggie and mix them up. Pull out 15 crackers this time and make a different design. Figure out how many out of fifteen are square, round, and triangular.

Record your numbers as a fraction out of 15.



## How to take this further?

This activity combines two different math ideas.

First is the idea of a set of objects. You created a set of ten crackers and then you created a set of fifteen crackers.

The second math idea here is that fractions are about part to whole relationships. The "whole" changed from 10 crackers to 15 crackers.

### Try:

- Making a set of 10 or 15 LEGOs or toy cars or stuffed animals.  
Figure out what fraction of the set are green or red or yellow.
- Looking at 10 cars in a parking lot. Think about:
  - Colors: what fraction out of 10 are black? red? blue?
  - Number of doors: what fraction out of 10 have two doors? four doors? more than four doors?
  - Type of vehicle: what fraction out of 10 are vans? trucks? SUVs? sports cars?

### Parent Connection

Fractions of sets can be a tricky concept for many kids. Getting them familiar with how fractions and sets work will strengthen their understanding of part-whole relationships. The set becomes the "whole" in these fractional relationships. When the set changes, it changes how the fraction is written. Seeing this strengthens your child's understanding of how fractions work and what they mean.

