

## Goal: Predict and then find the size of equal shares

Grades: K-6+

Minimum number of participants: 2

Suggested grouping: individual

**Time:** 10 minutes or less **Math:** counting; division

**Materials:** 

up to 25 countable food items, such

as crackers or baby carrots

serving supplies (plates, napkins, etc.)

**Prerequisites:** none **Books about sharing:** 

Bean Thirteen. McElligott, Matthew. (Putnam Juvenile, 2007).

A Remainder of One. Pinczes, Elinor J. (Houghton Mifflin, 2002).

1 Look at the food to be shared and predict

If we deal these out, could everyone get one pieces, two pieces, or more? Why do you think so?



2 Divide up the total

Keep any extras aside.

**③** Compare predictions with results

Did you get more than you predicted? the same amount?



4 Decide what to do with the extras (optional)



If there will be any left over, discuss what to do with them.

## **Variations**

**Sharing resources (easier).** Try this activity with pom-poms, pennies, or another material that children can move around and touch as they make and check their predictions.

**One left over (harder).** Children find a way to divide up the food so that there is one item left over (for an adult or in case anyone needs an extra).

**Equal time (harder).** Children split up a block of time, so that everyone gets the same amount of time on the computer, or with some other resource.





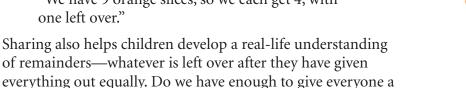
## **Division: Sharing**

Children learn about division when they distribute objects equally.

Early elementary grades: Young children share by giving things out one at a time. "One for you, one for me, another for you...."

Middle elementary grades: As children gain skills in counting by different numbers, they become more efficient. "Two for me, two for you, another two for me..."

*Upper elementary grades*: Older children use their knowledge of addition and number facts. "We have 9 orange slices, so we each get 4, with one left over."





second piece? If not, how many are left over?

## **Distributing limited resources**

Sharing plays a large role in children's lives. They need to figure out how to distribute treats or take turns with favorite toys in a fair way. Sometimes everyone gets an equal amount. Other times, individual needs are part of the decision process. For instance, a child who isn't hungry may not want an equal share of food.

In the wider world, resources are almost always limited and need to be divided up fairly. Teachers need to distribute supplies fairly or help children share. Shelter workers need to divide up food and blankets so that everyone has what they need.