mixing in MATH

Team Up

Goal: Divide into teams or groups of equal size

Grades: K–6+

Minimum number of participants: 4

Suggested grouping:

Easy. Total group size up to 10
Medium. Total group size up to 20
Hard. Total group size more than 20

Time: 10 minutes or less

Math: dividing

Materials:

none

Prerequisites: none

Books about dividing and sharing:

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

The Blast Off Kid. Driscoll, Laura. (Kane Press, 2003).

1 Announce the goal

Announce the size or number of teams, and then pose a question, such as:

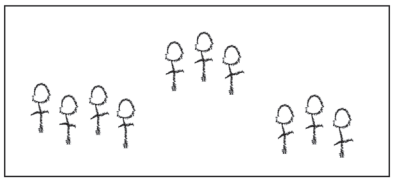
Can everyone have a partner, or is someone left over?

We need three groups for choice time. Can we make groups with the same number of kids in each?

Talk About...

2 Figure out how many

Children can form groups, count off, or draw pictures.



3 Show how you know

Share solution strategies and decide what to do if you can't make even groups.

Variations

Two teams (easier). Children decide how to break into two groups of equal or almost equal size. How many in each group? Is anyone left over?

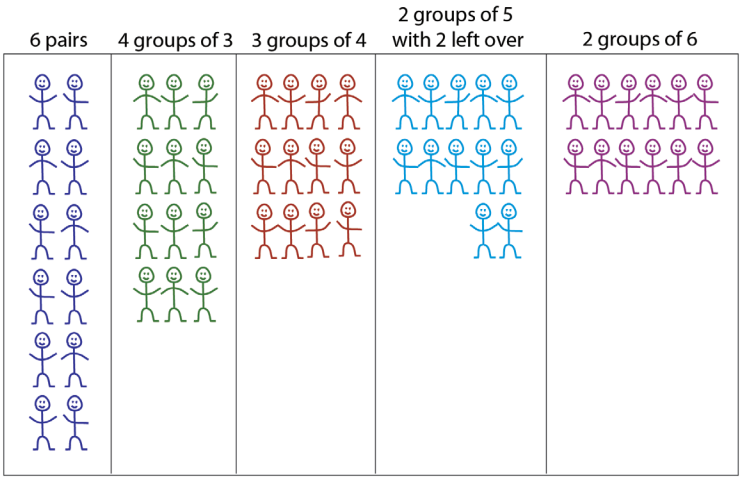
How many different teams? (harder) Ask children to find all the ways they can break into equal size teams:

How many ways can the 12 of us break into teams with the same number in each? What size teams make the most sense for a relay race?

Spotlight

Division: forming groups

Dividing into teams is a way of acting out division. Twelve people can form groups of two, three, four, or six with no one left over. When 12 people form groups of five, two are left over.



Connections

Assigning people to equal-size groups

Children often get into groups or teams for projects, field trips, and for using limited resources such as computers.

Wedding and party planners also work with equal-sized groups. They grapple with questions such as: 100 people are coming to a wedding, how many tables seating eight are needed.

On a larger scale, school administrators and politicians also divide people into equal groups. For instance, a school has 217 children in third grade. If there are 6 third grade classrooms, how many children in each? What if there are 7 third grade classrooms?