



# Mixer

**Math Concepts:** Small quantities  
**Materials:** None  
**Players:** Whole class

**Set up:** Get all your students in a big open space that is easy to move around in.

**Play:** Call out a number. The challenge for the students is to get into groups of that size as quickly as possible. Most likely there will be one group that is smaller than that size, but only allow that to happen for at most one group. For example, if there are 25 students and you call out 7, you should see 3 groups of 7 and 1 group of 4.

Once the groups have been formed, use these groups as an opportunity to exchange names or other types of information that you might set in advance. After however much time is needed for those discussions, call out a new number and have them create new groups.

**Goal:** Experiencing small quantities, moving around, and mixing the students into new discussion groups.

## – DISCUSSION AND TIPS –

This activity is fun as a mixer or as a way to explore how numbers divide up. It is also good for getting up and moving around after being still for a while.

For older students, use this activity to explore the numbers a bit. For example, if you called out 7 and had 4 left over, and you called out 9 and had 7 left over, ask the students to figure out that there must be 25 students. You can also ask them why if the group sizes are too big (relative to the size of the whole group), then it is impossible to form new groups with entirely new people (see the first variation below).

## – VARIATIONS –

**Require Completely New Groups:** If your group numbers are small enough, add an extra degree of difficulty by saying that the students in the new group cannot have been together in the previous group. So, if you have 25 students, if you call out 3 after previously calling out 7, everyone should be able to pair up with someone new. However, if you called out 5 instead of 3, this would be impossible (for a group of size 25).

**Silly Sizes:** Sometimes call out 1 or the size of the whole group. They are easy enough to do, but there is a fun moment when you see the students realize something different is happening.