

# Halving the group

**Purpose:** *To assist students in being able to visualize halving familiar collections*

**Discussion:**

Ask the class to explain what a half is. Draw a square and a circle on the board and ask a student to draw a line through these shapes to show you what half is. Ask students what items can be halved. Ask students why we might want to halve things. One answer might be so that something can be shared equally. Now draw all the students in the class on the board. Ask the students how they think they might halve the class. Discuss the ideas they come up with. If a student suggests doing it by separating one student into a group at a time, ask if they can think of a more efficient (quicker) way of doing this -suggest separating students into two groups then counting and adjusting. Ask how many students are in the class altogether and write this number on the board. If there are an odd number of students, ask one to be your helper, so there is an even number of students to split.

**Activity:**

**Say to students:**

Now we are going to split the class in half. What was the most efficient (quickest) way we thought we could do this? Now, I want half the class over this side, and half the class over that side.

**Discussion:**

When the students are happy that the class has been split in half, ask one student from each group to count the total students in each group.

Draw the students on the board in their groups. Write the total number of students under the picture. Ask the students how they would know if the class had been halved equally? The number of students in each group should be the same. Ask the students to sit down together again.

Take two students out of the group and ask the students to split into halves again. Repeat the discussion activity above.

### **Extension:**

#### **You will need:**

- Paper for each student
- Greylead/coloured pencils
- Enough **People for sharing** sheet for each student to represent the class

Give each student a piece of paper, a **people for sharing** sheet, and a greylead or coloured pencils.

#### **Say to the students:**

How many people are in this class altogether? I want you to cut that many people off your sheet and halve them in two piles in front of you. Then I want you to stick half on one side of your paper and half on the other.

If there are an odd number of students, ask one student to help you with the groups.

Walk around to each student or group to make sure they understand what they have to do. Ask the students to write a number sentence at the top to explain the picture. For example:

**There are 26 students in our class today. Half of our class is 13 students.**

Display the posters around the class.

Extension:

**You will need:**

- Enough counters for 30 per pair of students

Explain to the students that they are going to use counters now to represent people in the class. Begin with the number of students that are in the class today and ask them to count out that many counters then halve the group. Once they are able to do this, say that yesterday there were less/more students in the class. Tell them a number and ask how many students would make up half the class yesterday. Students can use the counters to figure out the answer. Discuss the answers as a whole class and discuss how they know they have halved the class correctly. Try this activity using different even numbers up to 30.