



**(Start with groups of 4-5 students.)**

(1) How many handshakes will there be if each person in your group shakes the hand of every person once?

Tell who was in your group.

How did you get your answer?

Try to show your solution on paper.

(2) How many handshakes will there be if 1 more person joins your group?

What if 2 more people join your group? Three more people? Four more people?

Organize your data in a table. Do you see a pattern in the numbers? Describe the pattern in words or symbols. How do you know it works?

(3) How many handshakes will there be if you have 100 people in your group?