

Grade 1 Lesson Summary

Overall Objectives

This lesson will help students:

- decompose a number into two parts;
- identify a missing part of a number;
- describe part-part-whole relationships.

Learning Expectations

Students will:

- Understand whole numbers by exploring number relationships using concrete materials (e.g., demonstrate with blocks that 7 is one less than 8 or two more than 5); 1m1
- Compare and order whole numbers using concrete materials and drawings to develop number meanings (e.g., to show place value, arrange 32 counters in groups of 3 tens and 2 ones); 1m4
- Compare, order, and represent whole numbers to 50 using concrete materials and drawings; 1m18
- Pose and solve simple number problems orally (e.g., how many students wore boots today?); 1m34
- Use concrete materials to help in solving simple number problems; 1m35
- Describe their thinking as they solve problems; 1m36

The code that follows each learning expectation comes from the Ontario Curriculum Unit Planner. See www.ocup.org for further details.

Materials

- “Tina’s Pockets” Activity Sheet (one per student)
- 5 counters for each pair of students
- “5 Marbles in 2 Pockets” Recording Sheet (one per student)
- Sheets of paper (21.5 cm X 28 cm) and markers
- Home Connections – “How Is 4 Behind My Door?” Activity Sheet (one per student)

Approach

Get Started

In a guided learning session:

- Set a context for the activity by telling students about Tina and her marbles. Use the “Tina’s Pockets” Activity Sheet and 5 counters as you explain the situation.

Today I want to tell you about a student named Tina, who loves to play marbles with her friends at school. Every day, Tina puts her 5 favourite marbles in the front pockets of her jeans so that she can take them to school. On some days, Tina puts all her marbles in one pocket. And on other days, she puts all her marbles in the other pocket. Most of the time, she uses both pockets and puts some marbles in each one.

- Present a problem for the students to solve: “What are different ways that Tina can put 5 marbles in her 2 pockets?”
- Explain that the students will use 5 counters to represent Tina’s marbles on the “Tina’s Pockets” Activity Sheet. Show the students how to place counters on one or both pockets, count the counters on each pocket, and record their findings on the “5 Marbles in 2 Pockets” Recording Sheet. Pair students to work on the activity.

Work on It

In a shared learning session:

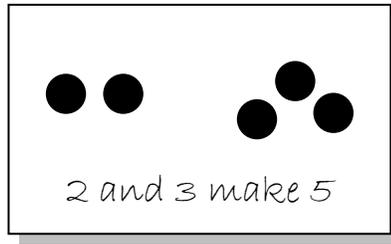
- Observe how well students are able to separate the counters into two groups, count the counters in each group, and complete the “___ and ___ make 5” statement on the recording sheet.
- Pose questions such as:
 - How many marbles did Tina put in this pocket? And how many marbles did she put in the other pocket?
 - If Tina puts 3 marbles in this pocket, how many marbles does she put in the other pocket?
 - If Tina puts all 5 marbles in one pocket, how many marbles does she put in the other pocket?
 - Look at the way you have separated the counters. What two numbers make 5?
 - What will you record on your sheet?
- Check to see that students are exploring different number combinations for 5. It may be necessary to ask, “What if she put ___ marbles in this pocket? How many marbles would she put in the other pocket?”

Reflect and Connect

In a guided learning session:

- Ask students, “How many marbles could Tina put in each pocket? What two numbers make 5?”

On a sheet of paper, draw dots to represent the two subsets of 5. Below the diagram, record a statement that describes the part-part-whole relationship.



- Ask the students to give other number combinations for 5 (including $0 + 5$ and $5 + 0$). On a sheet of paper, record a diagram and corresponding statement for each combination.
- Have students suggest ways to check that all possible number combinations for 5 have been recorded. Their methods might include a strategy for putting the number combinations in order, beginning at 0 and 5, and continuing with 1 and 4, 2 and 3, 3 and 2, and so on.
- Reinforce part-part-whole concepts by asking questions such as:
 - What was the whole amount of marbles?
 - How can a set of 5 be separated into two parts?
 - If 3 is one part, what is the other part?

Assessment

Observe students to assess how well they:

- separate a set of 5 counters into 2 parts;
- record and explain number combinations for 5;
- find a missing part if the other part is given (e.g., If 3 is one part of 5, what is the other part?).

Extensions/Adaptations

Some students may require assistance in drawing diagrams or completing written statements on their recording sheet.

For students needing a greater challenge, ask them to separate a larger quantity of counters into 2 groups. As well, students could find ways to separate 5 counters into three groups.

Home Connections

Provide each student with a copy of Home Connections – “How Is 4 Behind My Door?”. Encourage the students to play the game with someone at home. Demonstrate the game to the students so they will be familiar with the procedures.