Kindergarten Lesson Summary

Overall Objectives
This lesson will help students:
• decompose a number into two parts;
• describe part-part-whole relationships.

Learning Expectations
Students will:
• Demonstrate understanding of sets and whole numbers; Km1
• Recognize and use patterns; Km4
• Show willingness to persevere in solving problems; Km6
• Seek further information, assistance, or materials when necessary; Km7
• Count orally to 30, and use cardinal and ordinal numbers during play and daily classroom routines (e.g., identify first, second, and third places in a race); Km11
• Recognize and write numerals from 1 to 10; Km12

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 papers (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 how the students are 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?
  - Look at the way you have separated the counters. What two numbers make 5?
  - What will you record on your sheet?
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.

![Diagram showing two groups of marbles: 2 and 3 make 5]

• 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.

• Reinforce part-part-whole concepts by asking questions such as:
  – What was the whole amount of marbles?
  – How can 5 be separated into two parts?

Assessment
Observe students to assess how well they:

• separate a set of 5 counters into 2 parts;
• record and explain number combinations for 5.

Adaptation/Extensions
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.