

Grade 1	Lesson: 2-4 Introducing Subtraction Expressions and Number Sentences	Reference to English
Math Standard(s): 1.OA.1 & 1.OA.4 & 1.OA.6 Domain: Operations and Algebraic Thinking		
Content Objective(s):		Language Objective(s):
Students will write and solve subtraction number sentences. <i>I can write and solve subtraction number sentences.</i>		Students will say the subtraction sentence. <i>I can say the subtraction sentence.</i>
Essential Understanding: A missing part of a whole is one interpretation of subtraction. Subtraction number sentences can be used to show a missing part subtraction situation.		Academic Vocabulary for Word Wall: Listen: subtract, difference, minus, equal Read: minus sign, equal sign Write: Speak: subtract, minus, equal Sentence Frame: ___ - ___ = ___
Materials: <ul style="list-style-type: none"> Connecting cubes Paper Guided Practice page 54-55 Problem Solving page 56 		Additional Lesson Vocabulary: Hide, hidden
Lesson: Introducing Subtraction Expressions and Number Sentences		Instructional Time: 40 minutes
<p>Opening: (3 minutes)</p> <ul style="list-style-type: none"> Write and addition sentence on the board with a missing number. $___ + ___ = ___$. <p>T: "You have learned how to find the missing part of a number when you know one part of the number. Look at the board. The whole number is 7. I will write 7 in the addition sentence. The part we know is 2. I will write that in the addition sentence. What is the missing number?"</p> <p><i>S: will raise their hand and say, "5."</i></p> <p>T: "Good job, today you will learn how to write subtraction sentences after finding a missing part."</p> <ul style="list-style-type: none"> Hold up both hands, clearly showing all ten fingers. <p>T: "How many fingers am I showing?"</p> <p><i>S: will say "10".</i></p> <ul style="list-style-type: none"> Then put 5 fingers (one hand) behind your back. <p>T: "How many fingers are behind my back?"</p> <p><i>S: will say "5".</i></p> <ul style="list-style-type: none"> Remind the students that they need to identify the parts they know (the 5 fingers they can see) to find the missing part. <p>Introduction to New Material (Direct Instruction): (7 minutes)</p> <ul style="list-style-type: none"> Use cubes <p>T: "I have 6 cubes in all. I hide some of the cubes under the table, and now you can see 3. How can you find out how many cubes are hidden? Tell your neighbor."</p> <p><i>S: will share their answers with their neighbor, "3" or "3 cubes."</i></p> <p>T: "How many cubes are hidden? Everyone together, 3. Good job."</p> <ul style="list-style-type: none"> Distribute 9 connecting cubes, a whiteboard, and a dry erase marker to each child. Have the children pull 6 of the cubes down close to them. <p>T: "Every one needs 6 cubes on their white board."</p> <p><i>S: will put 6 cubes on their white board.</i></p> <p>T: "You know that the whole is 6 cubes. Write a 6 on your whiteboard."</p> <ul style="list-style-type: none"> The teacher will write a 6 on the whiteboard. The students will each write a 6 on their whiteboard. <p>T: "This is a minus sign – (teacher draws a minus sign on the whiteboard after the number 6). Make a minus sign after your number 6."</p> <p><i>S: will write a minus sign on their whiteboards.</i></p> <p>T: "Now you see 3 cubes. Write a 3 after the minus sign."</p> <ul style="list-style-type: none"> The teacher will write a 3 on the whiteboard. The students will each write a 3 on their whiteboard. <p>T: "I had 6 cubes and I have 3 cubes left. The 6 is the whole and the 3 is one of the parts. You have 6 cubes in front of you. I want you to take 3 of those cubes away."</p> <ul style="list-style-type: none"> Have the children move 3 of the cubes away from the pile of 6 cubes. <p>T: "What is the missing part?"</p> <p><i>S: will say "3".</i></p>		

T: "Count with me, 1,2,3.

S: *will count with the teacher.*

T: "This is an equal sign = (teacher write an equal sign on the whiteboard after the number 3). You write the difference after the equal sign. The difference is the result when one number is subtracted from another number."

T: "So, we write a 3 after the equal sign."

S: will make an equal sign and then write the number 3 on their whiteboards.

T: "What you did was subtract 3 from 6 to get 3. So, 3 is the difference."

- Teacher will label the minus and equal sign on their subtraction sentence on the whiteboard.

T: "This is a subtraction sentence. We will use subtraction sentences in our activity today."

T: "Today you are going to work with a partner to make some subtraction sentences. You will need 9 connecting cubes, a whiteboard, and dry erase makers for this activity."

- The teacher will get 9 connecting cubes, a whiteboard, and a dry erase marker to model this activity.

T: "I have 9 cubes."

- Teacher makes a train with 9 cubes.

T: "Count the cubes with me."

S: will count "1, 2, 3, 4, 5, 6, 7, 8, 9".

T: "I know that the whole is 9. I have 9 total cubes. So, I write a 9 on my whiteboard."

- Teacher writes a 9 on the whiteboard.

T: "I am going to hide some cubes under this paper."

- The teacher breaks off 4 cubes and cover them with a paper.

T: "There are 9 cubes in all and I can see 5 of them. So, what is the part I know?"

S: will say "5".

- Teacher will make a minus sign after the 9 then write a number 5.

T: "What is the hidden part?"

S: will say "4".

T: "Write the subtraction sentence with me, $9 - 5 = 4$."

S: will write the subtraction sentence on the whiteboard.

T: "Say the subtraction sentence with me, $9 - 5 = 4$."

S: *will say the subtraction sentence with the teacher.*

T: "You can subtract to find the difference. $9-5$ is 4. The difference is the amount that is left over after you subtract. What is the difference here?"

S: will say "4".

T: "The 9 stands for the 9 cubes I started with. The 5 stands for the part I know. The 4 stands for the hidden part. So, 9 minus 5 equals 4."

Guided Practice: (13 minutes)

Use the modeling cycle:

Teacher Does:

- The teacher already demonstrated the activity to the students.
- Write ____ - ____ = ____ on the whiteboard.
- The students should already have the cubes, markers, white boards and erasers.

1 Student Does with Teacher:

T: "I need a student to help me."

- Pick a student to come up and demonstrate the activity with the teacher.

T: "We are going to do this activity together. How many cubes do we have?"

S: will say "9".

- Teacher writes a 9 on the whiteboard.

T: "Yes we have 9 cubes in all. I am going to hide some of the cubes under this paper."

- Break off 2 cubes and cover them with a paper.

T: "How many cubes can you see? Count with me, 1,2,3,4,5,6,7."

S: will count with the teacher and say "7".

- Teacher writes a - (minus sign) and the number 7 on the whiteboard.

T: "There are 9 cubes. We can see 7 cubes. What is the hidden part?"

S: will say "2".

- Teacher writes an = (equal signal) and then the number 2 on the whiteboard.

T: "Please read this subtraction sentence to me."

S: will say "9 minus 7 equals 2."

T: "Great job!"

2 Students Do:

T: "I need 2 students to help me. Raise your hand if you want to help me."

- Teacher will choose 2 students.

T: "You two are going to demonstrate this activity for us. How many cubes do you see?"

S: will say "9".

T: "Student #1 will hide some of the cubes under the paper. Student #2 writes the subtraction sentence on the whiteboard as he/she reads it aloud."

S: #1 hides some of the cubes under the paper.

S: #2: will say the subtraction subtraction sentence. (While student #2 writes the subtraction sentence on the whiteboard, then he/she will also read the subtraction sentence aloud).

T: "Now, switch. Student #2 hides the cubes and Student #1 you will write the subtraction sentence."

S: will demonstrate the activity.

T: "Thank you for helping. You two may go back to your seats. Now you all know how to do the activity. I am going to separate you into pairs. When I say your name, come and get 9 connecting cubes, a piece of paper, a whiteboard, and a dry erase marker. You will have 5 minutes to do this activity with your partner. When I clap my hands I want your attention on me."

- As the teacher calls on the students they will come up and get their cubes, paper, whiteboards, and dry erase markers.

- Teacher will walk around the classroom as the students do the activity and make sure they are on task.

T: (Clap to get their attention.) "You have 10 seconds to put your supplies away and sit at the carpet. 10,9,8,7,6,5,4,3,2,1. Good, you all made it."

All Students Do:

T: "Now I am going to let you work with a partner to do the same activity."

S: will separate into groups of 2 and do the activity.

Independent Practice: (10 minutes)

T: "Now it is your turn to do it on your own. Each of you will be given this worksheet. Let's do the first problem together."

- Pass out guided practice page 54-55.

T: "How many cubes do we have altogether?"

S: will say "8".

T: "Trace the 8 on number 1. Now look at the picture. How many blue cubes are there? Let's count together."

S: will count with the teacher "1, 2, 3, 4".

T: "Correct, there are 4 blue cubes. We will trace the 4. So, what is the difference? $8 - 4 = \underline{\quad}$?"

S: will say "4".

T: "Trace the 4. Now it is your turn to do problems #2, 3, 4, and 5. You will have 3 minutes, when I clap my hands come back to the carpet."

- Students will get to work finishing pages 54-55. As they are working independently the teacher will walk around the room asking students to answer questions and check for any misconceptions.
- Teacher claps hands and students return to the carpet. Do problems 6, 7, and 8 on the problem solving page together.

Closing: (2 minutes)

- Collect the papers and bring the class together on the floor.

T: "Great job today! Let's look at question #3. How many cubes do we have altogether?"

S: will say "7".

T: "How many orange cubes can we see? Tell your neighbor."

S: will tell their neighbor, "3 cubes".

T: "What is the difference? Show me with your fingers."

S: will say "4".

T: "The 7 stands for the 7 cubes. The 3 stands for the part we know. The 4 stands for the hidden part. Great job today!"

- Write $7 - 3 = 4$ on the board.

T: "Read the subtraction sentence with me, $7 - 3 = 4$."

S: will say, " $7 - 3 = 4$ " with the teacher.

Assessment:

Guided Practice