

Grade 1	Lesson: 6-6 Subtraction Facts	Reference to English
Math Standard(s): 1.OA.8		Domain: Operations and Algebraic Thinking
Content Objective(s):		Language Objective(s):
Students will solve addition problems by recognizing and recording its parts in small groups. <i>I can solve addition problems by recognizing and recording its parts with a small group.</i>		Students will speak the words inside, outside and in all while adding parts. <i>I can speak the words inside, outside and in all while adding parts.</i>
Essential Understanding: Addition and subtraction have an inverse relationship. The inverse relationship between addition and subtraction can be used to find subtraction facts; every subtraction fact has a related addition fact.		Academic Vocabulary: Listen: Read: Write: Speak: Sentence Frame:
Materials: • Index Cards		Language and Word Wall:
Lesson: Subtraction Facts		Instructional Time:
<p>Opening: (minutes)</p> <p>T: “You have learned that subtraction facts have related addition facts. Let’s do one fact family together to begin.”</p> <p>T: “Now I am going to write 3 numbers on the board. 7, 5, 12. I am going to write one addition fact, $7 + 5 = 12$. (Teacher will write it on the board) I need you to write the other on your white board. Remember to use the same numbers.”</p> <p>S: <i>will write the other addition fact with the same numbers, $5 + 7 = 12$.</i></p> <p>T: “Show me the addition fact your wrote on the board. Good job, I will write it on my board. $5 + 7 = 12$. Look at the two equations. They have the same numbers, 12, 5, 7. Now let’s use the same numbers to do subtraction facts. I will write the first one, you will write the 2nd one. $12 - 5 = 7$. (Teacher will write it on the board) Your turn, write the other subtraction facts on your white board.”</p> <p>S: <i>will write $12 - 7 = 5$ on their white board.</i></p> <p>T: “Show me your equations. Good, I will write it on the board too. Say it with me as I write it, $12 - 7 = 5$.”</p> <p>T: “Look at these 4 equations. 2 addition facts and 2 subtraction facts. They all use the same numbers so they are a FACT FAMILY.”</p> <p>T: “Today you will learn how to decide what addition fact will help solve a subtraction problem.”</p>		
<p>Introduction to New Material (Direct Instruction): (minutes)</p> <ul style="list-style-type: none"> On the board write $13 - 6 = \underline{\quad}$. As the teacher does the 1st problem, think aloud and write all the information on the board as you go. <p>T: “What addition fact will help you find the difference? 6 plus what equals 13. Hmm, if I have six and I want to get to 13 I will add? I can count on. Count with me, 7,8,9,10,11,12,13. How many counters did I add. 1,2,3,4,5,6,7. I added 7 counters. So, $6 + 7 = 13$. That also means that $13 - 6 = 7$.”</p>		
<p>Guided Practice: (minutes)</p> <p><i>Use the modeling cycle:</i></p> <p><u>Teacher Does:</u></p> <p>T: “I am going to separate you into groups of 2. You will be given 1 sheet of paper and you will have to read the addition and subtraction facts to each other as you answer the questions. I will show you what I mean.”</p> <p><u>1 Students Do with Teacher:</u></p> <p>T: “I need 1 student to come up and help me.”</p> <ul style="list-style-type: none"> Teacher will choose a student. <p>T: “I will say the subtraction fact. $18 - 9 = \underline{\quad}$? You will find the related addition fact on the paper and say it.</p> <p>S: <i>will say “$9 + 9 = 18$”</i></p> <p>T: “Let’s draw a line to the related addition fact and answer the subtraction fact. $18 - 9 = 9$. They use the same numbers, they are a fact family! Your turn, you say the next subtraction problem.”</p> <p>S: <i>will say “$17 - 9 = \underline{\quad}$?”</i></p> <p>T: “The related addition fact is, $9 + 8 = 17$. Let’s draw a line to it. What number is missing from the subtraction problem?”</p> <p>S: <i>will say “8”.</i></p> <p>T: “Fill in the blank and say the subtraction fact.”</p> <p>S: <i>will say “$17 - 9 = 8$”</i></p> <p>T: “Good job. Please sit down.”</p>		

All Students Do:

T: "Now it is your turn. Finish the page with your partner. I will call out groups and you need to collect the papers and get started."

S: will collect their papers and begin the activity.

- Give students enough time to finish the activity then bring them back together on the carpet.

Independent Practice: (minutes)

T: "5,4,3,2,1. Clean up and bring your papers up to me. You have ten seconds. 10,9,8,7,6,5,4,3,2,1. Good, you all made it. Thank you for sitting so quietly."

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."

T: "9 + ____ = 14 and 14 - 9 = _____. Tell your neighbor the missing numbers."

S: will turn to their neighbors and tell them the missing numbers."

T: "If I have 9 and I want to get to 14, I can count on. As I add the counters, count with me. 10,11,12,13,14."

S: will count with the teacher "10,11,12,13,14"

T: "Tell your neighbor how many counters we added."

S: will show, "5".

T: "Now I am going to give you each a paper. Please do problems 2-14 at your desk. It is a lot of problems, but you can do it. I will walk around in case you need help. You have 5 minutes."

- Teacher will pass out the papers and students will begin the Guided Practice.
- Teacher will walk around the classroom to help the students who need help. If students are finishing faster than 4 minutes, cut it short and bring them back together when most of the students are finished.

T: (clap hands to get the students attention) "Please leave your papers at your desk and let's do questions 3,5,9 and 14 together."

- Go through questions 3,5,9 and 14 the same way you went through question 1 (faster if the students understand the concept).

Closing: (4 minutes)

- Collect the papers and bring the class back together on the floor.
- Hand out the student white boards with markers and erasers.

T: "Great Job today! Let's look at question 15. I am going to write 2 equations on the board, thumbs up if they are in the same fact family and thumbs down if they are in different fact families.

- Teacher will write $8 + 8 = 16$ and $16 - 8 = 8$.

S: will show thumbs ups.

T: "You are right, they are in the same fact family because they use all the same numbers."

- Do the same things with question 16.

T: "Question 17 is a story problem. As I say it, I want you to draw it for me and write the equation. Sam has some crayons. He finds 6 more. Draw 6 crayons and write 6 in the subtraction or addition equation. ____ = ____ + ____ or ____ - ____ = ____"

S: will draw 6 crayons and write the equations on their board.

T: "Now Sam has 13 crayons. Where do we put 13 in the equations? 13 is the whole, 6 is a part. Write it on your white board.

S: will fill in the blanks on their white boards with the information they have.

T: "3,2,1 Show me."

S: will hold up their white boards.

T: "I see that most of you are ready. You have filled in the blanks. I will do it on the board and I want you to check to make sure that yours is correct. Let's do the addition problem 1st, we know that 13 is the whole so it will go in the first blank. $13 = \underline{\quad} + \underline{\quad}$. I see that most of you put the 6 next. $13 = 6 + \underline{\quad}$. Check your work, does yours look the same?"

S: will check their addition equation.

T: "Now let's do the subtraction equation. Write it on our white board and fill in the blanks.

S: will write the subtraction equation on their white board and fill in the blanks..

T: "Let me look at your boards. We know the whole is 13. Let's put that in the first blank, $13 - \underline{\quad} = \underline{\quad}$. Show me with your fingers what number comes next."

S: will show the number 6 with their fingers.

T: "6 come next. $13 - 6 = \underline{\quad}$. Write the answer on your board and then tell your neighbor.

S: will write $13 - 6 = 7$ on their board and then turn to their neighbor and say " $13 - 6 = 7$."

T: "Say it with me, $13 - 6 = 7$. So, how many crayons did Sam have before he found more? Raise your hand."

S: will raise their hand and say "7"

- Continue with number 18, 19 and 20 as a whole group.

Assessment:

Guided Practice