



# 3<sup>rd</sup> Grade

## Tier 2 Intervention Lessons

**Readiness Standard 5 - 2.OA.2b**

**Learning Target:** I will subtract numbers within 20

**Readiness for 2.NBT.5b:** Subtract 2-digit numbers

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## IES Recommendations for Tier 2 and 3 intervention lessons:

2. Instructional materials for students receiving interventions should focus intensely on in-depth treatment of whole numbers in kindergarten through grade 5 and on rational numbers in grades 4 through 8. These materials should be selected by committee.	<b>Low</b>
3. Instruction during the intervention should be explicit and systematic. This includes providing models of proficient problem solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.	<b>Strong</b>
4. Interventions should include instruction on solving word problems that is based on common underlying structures.	<b>Strong</b>
5. Intervention materials should include opportunities for students to work with visual representations of mathematical ideas and interventionists should be proficient in the use of visual representations of mathematical ideas.	<b>Moderate</b>
6. Interventions at all grade levels should devote about 10 minutes in each session to building fluent retrieval of basic arithmetic facts.	<b>Moderate</b>
7. Monitor the progress of students receiving supplemental instruction and other students who are at risk.	<b>Low</b>
8. Include motivational strategies in tier 2 and tier 3 interventions.	<b>Low</b>

(Institute of Educational Sciences, Assisting Students Struggling with Mathematics: Response to Intervention (RtI) for Elementary and Middle Schools, 2009, p. 6)

## Gradual release of responsibility model

### Teacher Responsibility

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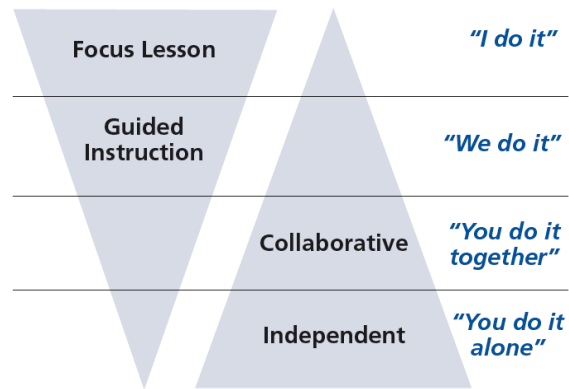


Figure 1

[\(Dr. Douglas Fisher, Effective Use of the Gradual Release of Responsibility Model\)](#)



# Planning Guide: Session 1

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

Recommended Actions	
<p><b>Beginning</b> (15 min.)</p>	<p><u>Review</u> the readiness standard with the intervention group using the <b>Guided Review</b></p> <ul style="list-style-type: none"> <li>➤ Introduce the learning target and why it is important for future learning</li> <li>➤ Read each question on the Guided Review and ask students to share what they remember from the previous school year.</li> </ul>
<p><b>Middle</b> (5 min.)</p>	<ul style="list-style-type: none"> <li>➤ Ask students to <u>reflect</u> on their progress towards the learning target           <ul style="list-style-type: none"> <li>➤ What did I remember about the learning target?</li> <li>➤ What did I learn today about the learning target?</li> <li>➤ How confident do I feel about doing the learning target on my own?</li> </ul> </li> </ul>
<p><b>End</b> (10 min.)</p>	<ul style="list-style-type: none"> <li>➤ <u>Assess</u> each student’s progress using <b>Quick Check – Form A</b></li> <li>➤ Guide students to self-correct their <b>Quick Check – Form A</b></li> <li>➤ Guide students to <u>chart their progress</u> by recording the date and Quick Check score in their <b>Growth Chart</b></li> <li>➤ Collect each student’s Quick Check and Growth Chart</li> </ul>
<p><b>After</b></p>	<ul style="list-style-type: none"> <li>➤ Create sub-groups to differentiate the middle of sessions 2 through 8           <ul style="list-style-type: none"> <li>○ Group 1 – Include students who <u>did not</u> meet the learning goal</li> <li>○ Group 2 – Include students who met or exceeded the learning goal</li> </ul> </li> </ul>



# 3<sup>rd</sup> Grade Fall Guided Review

Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

$13 - 5 = \underline{\quad}$

$14 - 9 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 4 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$11 - 8 = \underline{\quad}$

$12 - 3 = \underline{\quad}$

$13 - 6 = \underline{\quad}$

$11 - 4 = \underline{\quad}$



# 3<sup>rd</sup> Grade Winter Guided Review

Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

$13 - 5 = \underline{\quad}$

$14 - 9 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 4 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$11 - 8 = \underline{\quad}$

$12 - 3 = \underline{\quad}$

$13 - 6 = \underline{\quad}$

$11 - 4 = \underline{\quad}$



# 3<sup>rd</sup> Grade Spring Guided Review

Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

$13 - 5 = \underline{\quad}$

$14 - 9 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 4 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$11 - 8 = \underline{\quad}$

$12 - 3 = \underline{\quad}$

$13 - 6 = \underline{\quad}$

$11 - 4 = \underline{\quad}$



# Session 1: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I remember today about subtracting numbers to 20?
  
- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)





# Quick Check - Form A

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$14 - 5 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$13 - 5 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 9 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



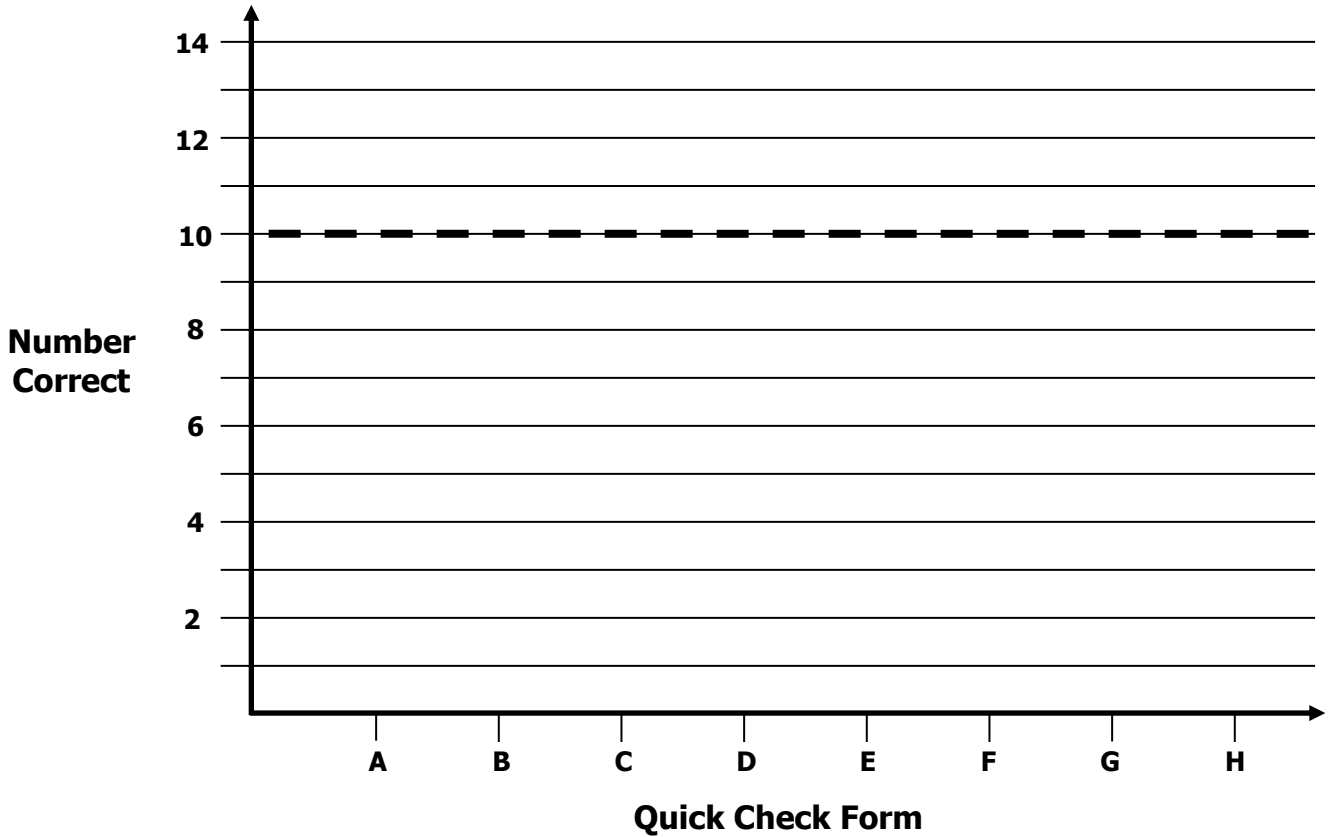
# Growth Chart

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Goal:** 10 out of 14 correct



Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		



# Planning Guide: Sessions 2 Through 8

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

<b>Recommended Actions</b>			
<b>Beginning</b> (5 min.)	<ul style="list-style-type: none"> <li>➤ Review the learning target with the whole group and ask each student to set a goal for today's learning</li> </ul>		
<b>Middle</b> (15 min.)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>Group 1:</b> <i>(Students who <u>did not</u> meet the learning goal on the previous Quick Check)</i></p> <ul style="list-style-type: none"> <li>➤ Model solving a word problem – “I do”</li> <li>➤ Guided Practice – “We do together/ You do together”</li> </ul> <p><b>Session 2:</b> Subtract within 20 using counters and the “think add to subtract” strategy.</p> <p><b>Session 3:</b> Subtract within 20 using drawings and the “think add to subtract” strategy.</p> <p><b>Session 4:</b> Subtract within 20 using number bonds and the “think add to subtract” strategy.</p> </td> <td style="width: 50%; vertical-align: top;"> <p><b>Group 2:</b> <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> <li>➤ Independent practice – “You do alone”</li> </ul> <p><b>Activity:</b> <i>“Whose Difference is Greater?”</i></p> <p><i>(Look for additional activities in 2<sup>nd</sup> grade core instruction resources.)</i></p> </td> </tr> </table>	<p><b>Group 1:</b> <i>(Students who <u>did not</u> meet the learning goal on the previous Quick Check)</i></p> <ul style="list-style-type: none"> <li>➤ Model solving a word problem – “I do”</li> <li>➤ Guided Practice – “We do together/ You do together”</li> </ul> <p><b>Session 2:</b> Subtract within 20 using counters and the “think add to subtract” strategy.</p> <p><b>Session 3:</b> Subtract within 20 using drawings and the “think add to subtract” strategy.</p> <p><b>Session 4:</b> Subtract within 20 using number bonds and the “think add to subtract” strategy.</p>	<p><b>Group 2:</b> <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> <li>➤ Independent practice – “You do alone”</li> </ul> <p><b>Activity:</b> <i>“Whose Difference is Greater?”</i></p> <p><i>(Look for additional activities in 2<sup>nd</sup> grade core instruction resources.)</i></p>
<p><b>Group 1:</b> <i>(Students who <u>did not</u> meet the learning goal on the previous Quick Check)</i></p> <ul style="list-style-type: none"> <li>➤ Model solving a word problem – “I do”</li> <li>➤ Guided Practice – “We do together/ You do together”</li> </ul> <p><b>Session 2:</b> Subtract within 20 using counters and the “think add to subtract” strategy.</p> <p><b>Session 3:</b> Subtract within 20 using drawings and the “think add to subtract” strategy.</p> <p><b>Session 4:</b> Subtract within 20 using number bonds and the “think add to subtract” strategy.</p>	<p><b>Group 2:</b> <i>(Students who met the learning goal)</i></p> <ul style="list-style-type: none"> <li>➤ Independent practice – “You do alone”</li> </ul> <p><b>Activity:</b> <i>“Whose Difference is Greater?”</i></p> <p><i>(Look for additional activities in 2<sup>nd</sup> grade core instruction resources.)</i></p>		
<b>End</b> (10 min.)	<ul style="list-style-type: none"> <li>➤ Bring the students back together.</li> <li>➤ Ask students to reflect on their progress towards the learning target               <ul style="list-style-type: none"> <li>○ What did I learn today about counting?</li> <li>○ How confident do you feel about counting on my own? (Thumbs up, down, or sideways)</li> </ul> </li> <li>➤ Assess each student's progress using the next <b>Quick Check</b> form</li> <li>➤ Guide students to self-correct their <b>Quick Check</b></li> <li>➤ Guide students to chart their progress in their <b>Growth Chart</b> <ul style="list-style-type: none"> <li>○ If not using Delta Math lessons, record the activity in the table</li> </ul> </li> <li>➤ Collect each student's <b>Quick Check</b> and <b>Growth Chart</b></li> </ul>		
<b>After</b>	<ul style="list-style-type: none"> <li>➤ Regroup students to differentiate the middle of sessions 3 through 8               <ul style="list-style-type: none"> <li>○ Promote students who met the learning goal to group 2</li> <li>○ Exit students who met the learning goal for a third time</li> </ul> </li> <li>➤ Problem solve with a team to plan additional support for students who did not exit</li> </ul>		



# Session 2: Modeling (I Do)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

Josiah brought 13 cookies to share with his friends. He gave 5 of them away before lunch. How many cookies did Josiah have to give away during lunch?





# Session 2: Modeling (I Do - Teacher Notes)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

Josiah brought 13 cookies to share with his friends. He gave 5 of them away before lunch. How many cookies did Josiah have to give away during lunch?

**I am going to think aloud to model solving this problem.**

**Your job is to watch, listen, think and ask questions.**

**First, it is important to know what the problem is about.**

**This problem is about Josiah sharing cookies with his friends.**

**Second, I need to determine what I need to find.**

**I need to find the number of cookies Josiah had left to share during lunch.**

**Third, I need to determine what I know.**

**I know that he shared 5 cookies with friends before lunch.**

**Fourth, I need to figure out what I can try.**

**I am going to try modeling the actions using counters.**

**I will place 13 counters, red-side up, on the double 10-frame to represent the cookies Josiah gave away before lunch. (Place 13 counters red-side up.)**

**Since Josiah is giving away cookies, I will model this problem using subtraction...  $13 - 5$ . (Place the *Subtract Within 20: Equation card* above the 10 frames.)**

**Next, I will turn 5 counters over to their yellow-sides to represent the cookies Josiah shared before lunch. (Flip 5 counters over to their yellow-sides.)**

**This leaves 8 red counters that represent the cookies Josiah has left to share with friends during lunch.**

The worksheet shows a double 10-frame with 13 red counters. 5 counters are flipped to yellow. Above the frame is the equation  $13 - 5 = \underline{\quad}$ . Below the frame is the equation  $5 + \underline{\quad} = 13$ . The text on the worksheet reads: "Session 2: Modeling (I Do)", "3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b", "Learning Target: I will subtract numbers to 20", "Readiness for adding and subtracting 2-digit numbers", "Josiah brought 13 cookies to share with his friends. He gave 5 of them away before lunch. How many cookies did Josiah have to give away during lunch?"

**Last, I need to make sure that my answer makes sense.**

**I found that Josiah has 8 cookies to share during lunch. It makes sense because I knew how much he started with and the part he gave away before lunch. And, I modeled the problem with counters to find the unknown part.**

**I also know that the two parts added together must equal the total.**

**Can you see the addition problem, 5 plus 8 equals 13, on the double 10-frame mat?**

**Anytime I need to subtract a part from a total, I can think addition...the part plus what number equals the total. (Place the Ten-equation card " $5 + \underline{\quad} = 13$ " and answer under the double 10-frames.)**

**5 plus what number equals 13? 8**



# Double 10-Frame Mat

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b





# Modeling & Guided Practice Cards

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Use for Modelling

$$13 - 5 = \underline{\quad}$$

Use for Problem 1

$$14 - 9 = \underline{\quad}$$

Use for Problem 2

$$15 - 7 = \underline{\quad}$$

Use for Problem 3

$$16 - 8 = \underline{\quad}$$

Use for Problem 4

$$13 - 6 = \underline{\quad}$$

Use for Problem 5

$$12 - 5 = \underline{\quad}$$

Use for Problem 6

$$13 - 8 = \underline{\quad}$$

Use for Problem 7

$$11 - 8 = \underline{\quad}$$

Use for Problem 8

$$15 - 6 = \underline{\quad}$$

Use for Problem 9

$$13 - 5 = \underline{\quad}$$

Use for Problem 10

$$12 - 6 = \underline{\quad}$$



# Think Add to Subtract Cards

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

$$5 + \underline{\quad} = 13$$

$$9 + \underline{\quad} = 14$$

$$7 + \underline{\quad} = 15$$

$$8 + \underline{\quad} = 16$$

$$6 + \underline{\quad} = 13$$

$$5 + \underline{\quad} = 12$$

$$8 + \underline{\quad} = 13$$

$$8 + \underline{\quad} = 11$$

$$6 + \underline{\quad} = 15$$

$$5 + \underline{\quad} = 13$$

$$6 + \underline{\quad} = 12$$





Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 203<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

## Session 2: Guided Practice (We Do)

**Materials:**

- 2-colored counters (20 per student)
- Double 10-frame mat (1 per student)
- Subtract Within 20 Equation Cards (1 set per student)
- Add to Subtract Cards (1 set per student)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use counters, a double 10-frame and Think Add to Subtract cards to find or check your answer.

1.  $14 - 9 = \underline{\quad}$	2.  $15 - 7 = \underline{\quad}$
3.  $16 - 8 = \underline{\quad}$	4.  $13 - 6 = \underline{\quad}$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

## Session 2: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to add numbers to 20.

5.  $12 - 5 = \underline{\quad}$	6.  $13 - 8 = \underline{\quad}$
7.  $11 - 8 = \underline{\quad}$	8.  $15 - 6 = \underline{\quad}$
9.  $13 - 5 = \underline{\quad}$	10.  $12 - 5 = \underline{\quad}$



## Session 2: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form B

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$13 - 5 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$14 - 5 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



# Session 3: Modeling (I Do)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

12 kangaroos were hopping around in a field. 5 of the kangaroos got tired and went home. How many kangaroos are in the field now?



# Session 3: Modeling (I Do - Teacher Notes)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

12 kangaroos were hopping around in a field. 5 of the kangaroos got tired and went home. How many kangaroos are in the field now?

**I am going to think aloud to model solving this problem.**

**Your job is to watch, listen, think and ask questions.**

**First, it is important to know what the problem is about.**

**This problem is about kangaroos hopping around in a field.**

**Second, I need to determine what I need to find.**

**I need to find the number of kangaroos that got tired and went home.**

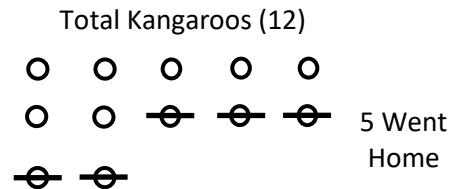
**Third, I need to determine what I know.**

**I know that 12 kangaroos were hopping around in a field and 5 kangaroos got tired and went home.**

**Fourth, I need to figure out what I can try.**

**This time, I am going to try modeling the actions with a drawing.**

**I will draw 12 circles to represent the total number of kangaroos.**  
(Draw and label 12 circles.)



**Next, I will cross out 5 circles to represent the kangaroos that went home.**

(Draw “subtraction” lines through 5 circles and write the subtraction equation.)

$$12 - 5 = \underline{7}$$

**There are 7 circles not crossed off, so 7 kangaroos stayed in the field.**

(Write the answer to the subtraction equation.)

$$5 + \underline{7} = 12$$

**Last, I need to make sure that my answer makes sense.**

**I found that 7 kangaroos stayed in the field. It makes sense because I knew that there were 12 total and 5 went home, so I modeled the problem with a math drawing to find the unknown part of 12.**

**I also know that the two parts added together must equal the total.**

**Can you see the addition problem, 5 plus 7 equals 12, in the drawing?**

(Write the “Add to Subtract” equation  $5 + \underline{\quad} = 12$ .)

**Anytime I need to subtract, I can think addition...like 5 plus what number equals 12? 7**



Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20**Readiness** for adding and subtracting 2-digit numbers

## Session 3: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

1.

$$15 - 9 = \underline{\quad}$$

2.

$$12 - 7 = \underline{\quad}$$

3.

$$14 - 8 = \underline{\quad}$$

4.

$$15 - 6 = \underline{\quad}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 3: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5.  $14 - 5 = \underline{\quad}$	6.  $12 - 8 = \underline{\quad}$
7.  $13 - 7 = \underline{\quad}$	8.  $16 - 9 = \underline{\quad}$
9.  $15 - 7 = \underline{\quad}$	10.  $17 - 8 = \underline{\quad}$



**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 3: Guided Practice (*We Do – Teacher Notes*)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

<p><b>1.</b></p> $15 - 9 = \frac{6}{\begin{array}{l} 1 \\ 5 \end{array}}$ <p>Count on from 9 to 15: <i>"10...11, 12, 13, 14, 15"</i>                  Record the unknown part: <i>"6"</i>                  Chunk the unknown part into the 10-partner and the rest:  <i>"I see 6 as 1 and 5"</i></p>	<p><b>2.</b></p> $12 - 7 = \frac{5}{\begin{array}{l} 3 \\ 2 \end{array}}$ <p>Count on from 7 to 12: <i>"8, 9, 10...11, 12"</i>                  Record the unknown part: <i>"5"</i>                  Chunk the unknown part into the 10-partner and the rest:  <i>"I see 5 as 3 and 2"</i></p>
<p><b>3.</b></p> $14 - 8 = \frac{6}{\begin{array}{l} 2 \\ 4 \end{array}}$ <p>Count on from 8 to 14: <i>"9, 10...11, 12, 13, 14"</i>                  Record the unknown part: <i>"6"</i>                  Chunk the unknown part into the 10-partner and the rest:  <i>"I see 6 as 2 and 4"</i></p>	<p><b>4.</b></p> $15 - 6 = \frac{9}{\begin{array}{l} 4 \\ 5 \end{array}}$ <p>Count on from 6 to 15: <i>"8, 9, 10...11, 12"</i>                  Record the unknown part: <i>"9"</i>                  Chunk the unknown part into the 10-partner and the rest:  <i>"I see 9 as 4 and 5"</i></p>



## Session 3: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form C

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$14 - 5 = \underline{\quad}$

$13 - 4 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$15 - 8 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



# Session 4: Modeling (I Do)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

Hector baked cookies for his brother's birthday party. He needs 3 eggs to make 4 dozen cookies. If there were 12 eggs in the refrigerator when he started, how many eggs should be left after he was finished baking 4 dozen cookies?



# Session 4: Modeling (I Do - Teacher Notes)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

Hector baked cookies for his brother’s birthday party. He needs 3 eggs to make 4 dozen cookies. If there were 12 eggs in the refrigerator when he started, how many eggs should be left after he was finished baking 4 dozen cookies?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Hector baking cookies for his brother’s birthday party.

Second, I need to determine what I need to find.

I need to find the number of eggs left in the refrigerator after making 4 dozen cookies.

Third, I need to determine what I know.

I know that there were 12 eggs when he started and he needed to use 3 of them.

Fourth, I need to figure out what I can try.

This time, I am going to try modeling the actions using an equation with number bonds.

Since Hector started with 12 eggs and used 3, I will write and label each number.

(Write and label Total...12 and Part...3.)

Since we want to know the number of eggs he did not use, a subtraction statement is needed to model this problem...12 minus 3 equals what number? (Write the – and = signs and label the Unknown Part.)

I know that I can always think add to subtract, so I will draw number bonds under the unknown part.

(Write two number bonds under the Unknown Part.)

So, 3 plus what number equals 12.

The first bond will be the number that makes 10 with the 3...7 plus 3 is 10.

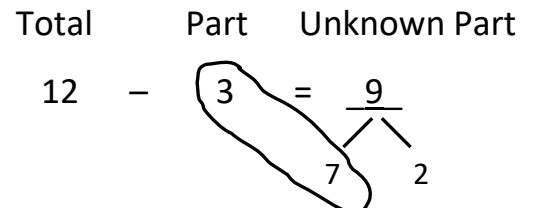
(Write a 7 under the first number bond and circle the ten.)

And, 2 more is 12.

(Write a 2 under the second number bond.)

Since  $7 + 2 = 9$ ...9 is the other part of 12...so  $12 - 3 = 9$ .

(Write 9 as the answer.)



Last, I need to make sure that my answer makes sense.

I found that there should be 9 eggs left. It makes sense because I knew Hector began with a total of 12 eggs and used 3 of them. So, I modeled the problem with a subtraction equation and used number bonds to help me find the unknown part by adding to ten then the rest.



Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20**Readiness** for adding and subtracting 2-digit numbers

## Session 4: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use number bonds and the Think Add to Subtract strategy to find or check your answer.

1.

$$15 - 9 = \underline{\quad}$$

2.

$$12 - 7 = \underline{\quad}$$

3.

$$14 - 8 = \underline{\quad}$$

4.

$$13 - 6 = \underline{\quad}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 4: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5. $14 - 5 = \underline{\quad}$	6. $17 - 9 = \underline{\quad}$
7. $13 - 7 = \underline{\quad}$	8. $15 - 8 = \underline{\quad}$
9. $12 - 4 = \underline{\quad}$	10. $16 - 9 = \underline{\quad}$
11. $14 - 9 = \underline{\quad}$	12. $13 - 5 = \underline{\quad}$

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 4: Guided Practice (We Do - Teacher Notes)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use number bonds and the Think Add to Subtract strategy to find or check your answer.

<p>1. <i>"9 plus 1 is 10 and 5 more equals 15"</i></p> $15 - 9 = \frac{6}{1 \quad 5}$	<p>2. <i>"7 plus 3 is 10 and 2 more equals 12"</i></p> $12 - 7 = \frac{5}{3 \quad 2}$
<p>3. <i>"8 plus 2 is 10 and 4 more equals 14"</i></p> $14 - 8 = \frac{6}{2 \quad 4}$	<p>4. <i>"6 plus 4 is 10 and 3 more equals 13"</i></p> $13 - 6 = \frac{7}{4 \quad 3}$





## Session 4: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form D

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$13 - 4 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$11 - 5 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 8 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$14 - 5 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

Number Correct =



Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20**Readiness** for adding and subtracting 2-digit numbers

## Session 5: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

1.

$$14 - 9 = \underline{\quad}$$

2.

$$11 - 8 = \underline{\quad}$$

3.

$$13 - 9 = \underline{\quad}$$

4.

$$14 - 7 = \underline{\quad}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 5: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5.  $14 - 6 = \underline{\quad}$	6.  $12 - 9 = \underline{\quad}$
7.  $13 - 8 = \underline{\quad}$	8.  $16 - 8 = \underline{\quad}$
9.  $15 - 6 = \underline{\quad}$	10.  $17 - 9 = \underline{\quad}$



# Session 5: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form E

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$14 - 5 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$13 - 5 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 9 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20**Readiness** for adding and subtracting 2-digit numbers

## Session 6: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

1.

$$15 - 8 = \underline{\quad}$$

2.

$$12 - 9 = \underline{\quad}$$

3.

$$14 - 5 = \underline{\quad}$$

4.

$$16 - 8 = \underline{\quad}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 6: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5.  $13 - 5 = \underline{\quad}$	6.  $11 - 8 = \underline{\quad}$
7.  $12 - 6 = \underline{\quad}$	8.  $15 - 9 = \underline{\quad}$
9.  $18 - 9 = \underline{\quad}$	10.  $14 - 8 = \underline{\quad}$





# Session 6: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form F

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$13 - 5 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$14 - 5 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



Name \_\_\_\_\_

Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20**Readiness** for adding and subtracting 2-digit numbers

## Session 7: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use number bonds and the Think Add to Subtract strategy to find or check your answer.

1.

$$14 - 8 = \underline{\quad}$$

2.

$$11 - 6 = \underline{\quad}$$

3.

$$13 - 9 = \underline{\quad}$$

4.

$$14 - 7 = \underline{\quad}$$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 7: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5. $13 - 5 = \underline{\quad}$	6. $18 - 9 = \underline{\quad}$
7. $14 - 9 = \underline{\quad}$	8. $16 - 7 = \underline{\quad}$
9. $12 - 6 = \underline{\quad}$	10. $15 - 8 = \underline{\quad}$
11. $13 - 9 = \underline{\quad}$	12. $12 - 7 = \underline{\quad}$



# Session 7: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form G

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$14 - 5 = \underline{\quad}$

$13 - 4 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$15 - 8 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$16 - 7 = \underline{\quad}$

$13 - 9 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

Number Correct =



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 8: Guided Practice (We Do)

**We Do Together:** (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- Use number bonds and the Think Add to Subtract strategy to find or check your answer.

1.  $14 - 8 = \underline{\quad}$	2.  $11 - 6 = \underline{\quad}$
3.  $13 - 9 = \underline{\quad}$	4.  $15 - 7 = \underline{\quad}$



Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers to 20

**Readiness** for adding and subtracting 2-digit numbers

## Session 8: Guided Practice (We Do - Continued)

**You Do Together:** (As a class, or in small groups)

- Students take turns leading to subtract numbers within 20.

5. $14 - 5 = \underline{\quad}$	6. $17 - 9 = \underline{\quad}$
7. $13 - 7 = \underline{\quad}$	8. $15 - 8 = \underline{\quad}$
9. $12 - 4 = \underline{\quad}$	10. $16 - 9 = \underline{\quad}$
11. $14 - 9 = \underline{\quad}$	12. $13 - 5 = \underline{\quad}$





# Session 8: Self-Reflection

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers to 20

Briefly discuss student responses:

- What did I learn today about subtracting numbers to 20?
  
- How confident do I feel about subtracting numbers to 20 on my own? (*Thumbs up, down, or sideways*)



# Quick Check - Form H

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

Name \_\_\_\_\_ Date \_\_\_\_\_

**Learning Target:** I will subtract numbers within 20.

**Directions:** When you are told to begin, answer as many subtraction problems as you can.  
(Work Time: 1 minute)

$13 - 4 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

$11 - 5 = \underline{\quad}$

$11 - 3 = \underline{\quad}$

$12 - 9 = \underline{\quad}$

$13 - 8 = \underline{\quad}$

$14 - 7 = \underline{\quad}$

$11 - 7 = \underline{\quad}$

$12 - 6 = \underline{\quad}$

$12 - 4 = \underline{\quad}$

$14 - 5 = \underline{\quad}$

$15 - 7 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

Number Correct =



# Independent Practice (You Do)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

**Learning Target:** I will subtract numbers within 20

**Title of Game:** “Whose Difference is Greater?”

**Number of Players:** 2

**Objective:** To be the player with the most cards at the end of the game.

**Materials:**

- Subtraction Problem Cards
  - Player 1 gets set A
  - Player 2 gets Set B

**Directions:**

- Each player shuffles their cards and places them face down in a pile.
- Player 1: Flip over the top card, say the problem and the “think add to subtract” equation to find the answer.  
*Example for  $12 - 8$ : “Since  $8 + 4 = 12$ , then  $12 - 8 = 4$ ”*  
*or*  
*“8 plus what is 12...8 + 2 is 10 and 2 more is 12...4”*
- Player 2: Flip over the top card, say the problem and the “think add to subtract” equation to find the answer.  
*Example for  $14 - 9$ : “Since  $9 + 5 = 14$ , then  $14 - 9 = 5$ ”*  
*or*  
*“9 plus what is 14...9 + 1 is 10 and 4 more is 14...5”*
- The player with the greater difference takes both cards
- Repeat until all cards have been played

**Decide the Winner:**

- At the end of the game, the teacher flips a coin
  - If the coin lands **heads up**, the winner is the player with the **greater** number of cards
  - If the coin lands **tails up**, the winner is the player with the **lesser** number of cards



# Subtraction Problem Cards (Set A)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

$11 - 9 = \underline{\quad}$

Set A

$13 - 9 = \underline{\quad}$

Set A

$14 - 9 = \underline{\quad}$

Set A

$16 - 9 = \underline{\quad}$

Set A

$11 - 8 = \underline{\quad}$

Set A

$12 - 8 = \underline{\quad}$

Set A

$14 - 8 = \underline{\quad}$

Set A

$15 - 8 = \underline{\quad}$

Set A

$12 - 7 = \underline{\quad}$

Set A

$14 - 7 = \underline{\quad}$

Set A



# Subtraction Problem Cards (Set B)

3<sup>rd</sup> Grade - Readiness Standard 5 - 2.OA.2b

$$12 - 9 = \underline{\quad}$$

Set B

$$15 - 9 = \underline{\quad}$$

Set B

$$17 - 9 = \underline{\quad}$$

Set B

$$12 - 8 = \underline{\quad}$$

Set B

$$14 - 8 = \underline{\quad}$$

Set B

$$16 - 8 = \underline{\quad}$$

Set B

$$13 - 7 = \underline{\quad}$$

Set B

$$14 - 7 = \underline{\quad}$$

Set B

$$11 - 6 = \underline{\quad}$$

Set B

$$12 - 6 = \underline{\quad}$$

Set B



# Questions for Solving Word Problems

$Q_1$

*What is the problem about?*

$Q_2$

*What do I need to find?*

$Q_3$

*What do I know?*

$Q_4$

*What can I try?*

$Q_5$

*Does my answer make sense?*



# Steps for Solving Word Problems

*Q<sub>1</sub>. What is the problem about?*

*Q<sub>2</sub>. What do I need to find?*

*Q<sub>3</sub>. What do I know?*

*Q<sub>4</sub>. What can I try?*

*Q<sub>5</sub>. Does my answer make sense?*