

## EMDI Questions/Recording Sheet: Grade 2

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

Green = grade level prompts

Yellow = prior grade level prompts

<b>1_G2. Forward Number Sequence</b>		<b>Materials:</b> None needed
<p>A. "Start at 40 and count by fives. I will tell you when to stop." (Stop at 125.)</p> <p>B. "Start at 8 and count by tens. I will tell you when to stop." (Stop at 88.)</p> <p>C. "Start at 406 and count by hundreds. I will tell you when to stop." (Stop at 906.)</p>		
Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> Counts from 40 to 125 by 5s fluently  <input type="checkbox"/> Counts from 8 to 88 by 10s fluently  <input type="checkbox"/> Counts from 406 to 906 by 100s fluently	<input type="checkbox"/> Correctly counts by 5s from 40 to ____ Switches to tens - Drops back to count. - Other  <input type="checkbox"/> Correctly counts by 10s from 8 to ____ Drops back to count. - Uses fingers to count. - Other  <input type="checkbox"/> Correctly counts by 100s from 406 to ____	
<b>Forward Number Sequence (1_G1)</b>		<b>Materials:</b> None needed
<p>A. "Start at 86 and count on. I will tell you when to stop." (Stop at 120 or sooner if struggling.)</p> <p>B. "When you count, what number comes right after 17?"</p> <p>C. "When you count, what number comes right after 79?"</p> <p>D. "Start at 7 and count up by 10s. I'll tell you when to stop." (Stop at 77.)</p>		
Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> Counts from 86 to 120 fluently  <input type="checkbox"/> After 17 is 18  <input type="checkbox"/> After 79 is 80  <input type="checkbox"/> Counts from 7 to 77 by 10s fluently	<input type="checkbox"/> Correctly counts from 86 to ____ Drops back to count. - Uses fingers to count - Other  <input type="checkbox"/> After 17 is ____  <input type="checkbox"/> After 79 is ____  <input type="checkbox"/> Correctly counts by 10s from 7 to ____  <input type="checkbox"/> Drops back to count - Uses fingers to count - Other	

**2\_G2. Backward Number Sequence****Materials:** None needed

- A. "Start at 238 and count down by tens. I will tell you when to stop." (Stop at 138.)  
 B. "Start at 512 and count down by one hundreds. I will tell you when to stop." (Stop at 112.)

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> Correctly counts back from 238 by 10s fluently <input type="checkbox"/> Correctly counts back from 512 by 100s fluently	<input type="checkbox"/> Counts back from 238 to ___ <input type="checkbox"/> Unable to count back by 10s <input type="checkbox"/> Counts back from 512 to ___ <input type="checkbox"/> Unable to count back by 100s	

**Backward Number Sequence (2\_G1)****Materials:** None needed

- A. "Start at 50 and count down by tens."  
 B. "Start at 68 and count down by tens. I'll tell you when to stop." (Stop at 18.)

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> Correctly counts back from 50 by 10s <input type="checkbox"/> Counts fluently <input type="checkbox"/> Correctly counts back from 68 by 10s <input type="checkbox"/> Counts fluently	<input type="checkbox"/> Counts back from _____ <input type="checkbox"/> Unable to count back <input type="checkbox"/> Counts back from _____ <input type="checkbox"/> Unable to count back	

**3\_G2. Number Identification****Materials:** paper and pencil

- A. "Write three hundred twenty-nine."  
 B. "Write four hundred fifteen."  
 C. "Write eight hundred six."  
 D. "Write nine hundred forty."

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> 329 <input type="checkbox"/> 415 <input type="checkbox"/> 806 <input type="checkbox"/> 940	<input type="checkbox"/> Unable to write number(s)  <i>Record what the child wrote</i>	

**Number Identification (3\_G1)****Materials:** paper and pencil

- A. "Write the number twenty-nine."  
 B. "Write the number sixty."  
 C. "Write the number one hundred four."  
 D. "Write the number one hundred fifteen."

Abilities	Challenges/Strategies	Notes
Writes <input type="checkbox"/> 29 <input type="checkbox"/> 60 <input type="checkbox"/> 104 <input type="checkbox"/> 115	<input type="checkbox"/> Unable to write number(s) <i>Record what the child wrote</i>	

**4\_G2. Place Value: Part 1****Materials:** screening card, base ten blocks

- Say, "I am going to show you a number using base ten blocks."  
 A. "Write the numeral shown with these blocks." (2 hundreds, 4 tens and 7 ones)  
 B. "Write the numeral shown with these blocks." (3 hundreds and 6 ones)  
 Say, "I am going to show you a number to build."  
 C. Show card for 503 and say, "Build this number using base ten blocks."  
 D. After student builds 503 ask, "Can you show me a different way to build this same number with the base ten blocks?"

Abilities	Challenges/Strategies	Abilities
Identifies Number: <input type="checkbox"/> 247 <input type="checkbox"/> 306  Builds Number: <input type="checkbox"/> 503 <input type="checkbox"/> 503 (another way)	<input type="checkbox"/> Identifies as _____ Tagging/organization Issues - Unitizing issues - Other  <input type="checkbox"/> Builds Number as _____ Tagging/organization issues - Unitizing issues - Other	

**Place Value: Part 1 (4\_G1)****Materials:** screening cards; Create 5 “bundles” of ten and 15 ones using connecting cubes or other materials.

Point to a bundle and say, “Each of these has ten.”

- A. Show 2 bundles of ten and 4 ones. Say, “What number does this represent?”
- B. Show 1 bundle of ten and 6 ones. Say, “What number does this represent?”

Say, “Now, I am going to show you a number to build.”

- C. Show card for 15 and say, “Build this number.”
- D. Show card for 36 and say, “Build this number.”

Abilities	Challenges/Strategies	Notes
Identifies Number: <input type="checkbox"/> 24 <input type="checkbox"/> 16  Builds Number: <input type="checkbox"/> 15 <input type="checkbox"/> 36	<input type="checkbox"/> Identifies as _____ Tagging/organization issues - Unitizing issues - Other  <input type="checkbox"/> Builds Number as _____ Tagging/organization issues- Unitizing issues – Other	

**5\_G2. Place Value: Part 2****Materials:** screening cards;  
available: base ten blocks; arrow cards; hundred chart

- A. Show card for 235 and ask “What number is 10 more than this number?”  
 B. Show card for 416 and ask “What number is 10 less than this number?”  
 C. Show card for 875 and ask “What number is 100 less than this number?”  
 D. Show card for 509 and ask “What number is 100 more than this number?”

Abilities	Challenges/Strategies	Notes
Fluently adds on ten more <input type="checkbox"/> 245  Fluently subtracts ten less <input type="checkbox"/> 406  Fluently subtracts 100 less <input type="checkbox"/> 775  Fluently adds on 100 more <input type="checkbox"/> 609	<input type="checkbox"/> Counts on by ones to make ten more <input type="checkbox"/> Counts back by ones to make ten less <input type="checkbox"/> Models with base ten materials or arrow cards <input type="checkbox"/> Uses hundred chart (correctly/incorrectly) <input type="checkbox"/> Not able to find ten more <input type="checkbox"/> Not able to make ten less <input type="checkbox"/> Not able to make 100 more <input type="checkbox"/> Not able to make 100 less	

**Place Value: Part 2 (5\_G1)****Materials:** screening cards  
available: 7 bundles of 10 and ones; hundred chart

- A. Show card for 30 and ask “What number is 10 more than this number?”  
 B. Show card for 45 and ask “What number is 10 more than this number?”  
 C. Show card for 40 and ask “What number is 10 less than this number?”  
 D. Show card for 74 and ask “What number is 10 less than this number?”

Abilities	Challenges/Strategies	Notes
Fluently adds on ten more <input type="checkbox"/> 40 <input type="checkbox"/> 55  Fluently subtracts ten less <input type="checkbox"/> 30 <input type="checkbox"/> 64	<input type="checkbox"/> Not able to find ten more <input type="checkbox"/> Counts on by ones to make ten more <input type="checkbox"/> Models with manipulatives <input type="checkbox"/> Not able to make ten less <input type="checkbox"/> Counts back by ones to make ten less <input type="checkbox"/> Models with manipulatives	

**6\_G2. Compare** **Materials:** screening cards, symbol cards

Show card and say, "Using these signs, compare these two numbers." Once, the student has placed the symbol, ask, "Can you read this for me?" Then follow up with, "How do you know?"

- A. 217 \_\_\_ 301
- B. 540 \_\_\_ 504
- C. 157 \_\_\_ 751
- D. 617 \_\_\_ 617

Abilities	Challenges/Strategies	Notes
<ul style="list-style-type: none"> <li><input type="checkbox"/> Compares 217 and 301</li> <li><input type="checkbox"/> Compares 540 and 504</li> <li><input type="checkbox"/> Compares 157 and 751</li> <li><input type="checkbox"/> Compares 617 and 617</li> <li><input type="checkbox"/> Uses place value to explain</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Confuses place value</li> <li><input type="checkbox"/> Confuses meaning of greater than/less than</li> <li><input type="checkbox"/> Not able to compare numbers</li> </ul>	

**Compare (6\_G1)** **Materials:** screening cards and symbol cards  
>, <, and =

Show card and say, "Using these signs, compare these two numbers." Once, the student has placed the symbol, ask, "Can you read this for me?" Then follow up with, "How do you know?"

- A. 57 \_\_\_ 23
- B. 24 \_\_\_ 36
- C. 15 \_\_\_ 51
- D. 67 \_\_\_ 67

Abilities	Challenges/Strategies	Notes
<ul style="list-style-type: none"> <li><input type="checkbox"/> Compares 57 and 23</li> <li><input type="checkbox"/> Compares 24 and 36</li> <li><input type="checkbox"/> Compares 15 and 51</li> <li><input type="checkbox"/> Compares 67 and 67</li> <li><input type="checkbox"/> Uses place value to explain</li> </ul>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Not able to compare: 57 and 23; 24 and 36; 15 and 51; 67 and 67</li> <li><input type="checkbox"/> Confuses tens and ones</li> <li><input type="checkbox"/> Confuses meaning of greater than/less than</li> </ul>	

**7\_G2. Estimating Sums and Differences** **Materials:** screening cards expression

- A. Place  $275 + 280$  in front of student.  
 “Is the answer to this problem more or less than 500?” Follow up: “How did you figure out your answer?”
- B. Place  $165 - 89$  in front of student.  
 “Is the answer to this problem more or less than 100?” Follow up: “How did you figure out your answer?”

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> Estimates more than 500 Rounds – Other  <input type="checkbox"/> Estimates less than 100 Rounds - $89 > 65$ - Other	<input type="checkbox"/> Does not estimate (+)  <input type="checkbox"/> Only considers 100 place (+)  <input type="checkbox"/> Does not estimate (-)  <input type="checkbox"/> Only considers 100 place (-)	

**Addition & Subtraction Fluency/Strategies (7\_G1)** **Materials:** screening cards 19-15

Place card in front of student. Ask, “What would your answer be?” If needed, follow up: “How did you figure out your answer?”

- A.  $3 + 5$   
 B.  $7 + 9$   
 C.  $7 - 4$   
 D.  $19 - 15$

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> <b><math>3 + 5 = (8)</math></b>  Count All – Count On – Known Fact	<input type="checkbox"/> <b><math>3 + 5 = \underline{\quad}</math></b>  Attempts: Count All – Count On – Known Fact	
<input type="checkbox"/> <b><math>7 + 9 = (16)</math></b>  Known Fact- Related Fact-Decompose/Recompose - Count All, On or Back	<input type="checkbox"/> <b><math>7 + 9 = \underline{\quad}</math></b>  Attempts: Known Fact- Related FACT- Decompose/Recompose- Count All, On or Back	
<input type="checkbox"/> <b><math>7 - 4 = (3)</math></b>  Count Back – Count Up – Known Fact	<input type="checkbox"/> <b><math>7 - 4 = \underline{\quad}</math></b>  Attempts: Count Back – Count Up – Known Fact	
<input type="checkbox"/> <b><math>19 - 15 = (4)</math></b>  Known Fact- Related Fact-Decompose/Recompose- Count All, On or Back to or Back From	<input type="checkbox"/> <b><math>19 - 15 = \underline{\quad}</math></b>  Attempts: Known Fact- Related FACT- Decompose/Recompose- Count All, On or Back to or Back From	

**8\_G2. Addition & Subtraction Strategies**

**Materials:** screening cards  
available: paper and pencil, base ten blocks, hundred chart

Place card in front of student. Ask, “What would your answer be?” Follow up: “How did you figure out your answer?” **(Encourage mental math first and offer tools if needed or if the student asks for them.)**

- A.  $46 + 35$
- B.  $28 + 25 + 22$
- C.  $87 - 39$

Abilities	Challenges/Strategies	Notes
<p><input type="checkbox"/> <b><math>46 + 35 = (81)</math></b></p> <p>Strategy: Place Value-Compensate - Count up-Other</p> <p><input type="checkbox"/> <b><math>28 + 25 + 22 = (75)</math></b></p> <p>Strategy: Place Value-Compensate - Count up-Other</p> <p><input type="checkbox"/> <b><math>87 - 39 = (48)</math></b></p> <p>Strategy: Place Value-Compensate - Count up-Other</p>	<p><input type="checkbox"/> <b><math>46 + 35 = \underline{\quad}</math></b></p> <p>Strategy attempted: Place Value- Compensate - Count up-Other</p> <p><input type="checkbox"/> <b><math>28 + 25 + 22 = \underline{\quad}</math></b></p> <p>Strategy attempted: Place Value- Compensate - Count up-Other</p> <p><input type="checkbox"/> <b><math>87 - 39 = \underline{\quad}</math></b></p> <p>Strategy attempted: Place Value- Compensate - Count up-Other</p>	

**Add/Subtract Relationships (8\_G1)**

**Materials:** screening cards  
available: counters, snapping cubes, paper, pencil

Show card and say, “What is the missing number?” If needed, follow up: “How did you figure out your answer?”

- A.  $11 = 7 + \underline{\quad}$
- B.  $\underline{\quad} - 4 = 6$
- C.  $12 - \underline{\quad} = 9$

Abilities	Challenges/Strategies	Notes
<p><input type="checkbox"/> <b><math>11 = 7 + \underline{(4)}</math></b></p> <p>Count Back – Count Up – Known Fact</p> <p><input type="checkbox"/> <b><math>\underline{(10)} - 4 = 6</math></b></p> <p>Count Back – Count Up – Known Fact</p> <p><input type="checkbox"/> <b><math>12 - \underline{(3)} = 9</math></b></p> <p>Count Back – Count Up – Known Fact</p>	<p><input type="checkbox"/> <b><math>11 = 7 + \underline{\quad}</math></b></p> <p>Attempts: Count All – Count On – Known Fact</p> <p><input type="checkbox"/> <b><math>\underline{\quad} - 4 = 6</math></b></p> <p>Attempts: Count Back – Count Up – Known Fact</p> <p><input type="checkbox"/> <b><math>12 - \underline{\quad} = 9</math></b></p> <p>Attempts: Count Back – Count Up – Known Fact</p>	

<b>9_G2. Add/Subtract Word Problems</b>	<b>Materials:</b> screening cards available: counters, base ten blocks, snapping cubes, ten frame, number line; paper and pencil
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Have the student read the problem aloud. If the student has difficulty, read the card to him/her. If needed, follow up: "How did you figure out your answer?"

- A. "Some children were playing on the playground. 15 more children arrived to play at the playground. Then there were 28 children. How many children were on the playground to start?"
- B. "Min has 19 fewer dimes than Zach. Min has 35 dimes. How many dimes does Zach have?"
- C. "Sara has 16 more books than Ian. Sara has 38 books. How many books does Ian have?"

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> <b>(13) + 15 = 28</b> Strategy: Place Value- Compensate - Count up/bk- Other  <input type="checkbox"/> <b>(54) - 35 = 19</b> <b>or 35 + 19 = (54)</b> Strategy: Place Value- Compensate - Count up/bk- Other  <input type="checkbox"/> <b>(22) + 16 = 38 or 38 - 16 = (22)</b> Strategy: Place Value- Compensate - Count up/bk- Other	<input type="checkbox"/> <b>__ + 15 = 18 or ____</b> Strategy attempted: Place Value- Compensate - Count up/bk- Other  <input type="checkbox"/> <b>__ - 35 = 19 or ____</b> Strategy attempted: Place Value- Compensate - Count up- Other  <input type="checkbox"/> <b>__ + 16 = 38 or ____</b> Strategy attempted: Place Value- Compensate - Count up- Other	

<b>Add/Subtract Word Problems (9_G1)</b>	<b>Materials:</b> screening cards available: counters, snapping cubes, ten frames, paper and pencil
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Read the problem to the student and observe strategy used to solve. If needed, follow up: "How did you figure out your answer?"

- A. Some children are playing on the playground. 6 children are on the swings and the rest are playing basketball. There are 15 children in all. How many children are playing basketball?"
- B. Mason has 37 grapes in a bowl. He eats some of the grapes for lunch. Now there are 5 grapes in the bowl. How many grapes did he eat?"
- C. Stewart has 14 apples. Mia has 12 more apples than Stewart. How many apples does Mia have?"

Abilities	Challenges/Strategies	Notes
<input type="checkbox"/> <b>6 +_(9)_ = 15</b> Model- Count All – Count On – Known Fact  <input type="checkbox"/> <b>37 - _(32)_ = 5</b> Creates Model -Count All – Count On – Known Fact  <input type="checkbox"/> <b>14 + 12 = _(26)_</b> Creates Model -Count All – Count On – Known Fact	<input type="checkbox"/> <b>6 + __ = 15</b> Creates Model- Count All – Count On – Known Fact  <input type="checkbox"/> <b>37 - __ = 5</b> Creates Model -Count All – Count On – Known Fact  <input type="checkbox"/> <b>14 + 12 = ____</b> Creates Model -Count All – Count On – Known Fact	