## EMDI Questions/Recording Sheet: Kindergarten

**Student:** Student A **Teacher:**_____ **Date:** _____

Green = grade level prompts; Yellow = prior grade level prompts

### 1_K. Count a Collection

**Materials:** a collection of 20 counters

A. "Show me 12 counters."
B. When done ask, "How many counters are there?"
C. "Write that number for me."

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ Correctly counts to 12. | ☐ Correctly counts to _____. | Does not have cardinality. - Had to redirect several times to get to 12. When at 11 had to put them back to create 12. |
| ☐ Creates a set of 12. | ☐ Creates a set of____. | |
| ☑ 1-1 Correspondence. | ☐ Lacks 1-1 Correspondence. | |
| ☑ Slides counters to keep track. | ☐ Doesn't keep track of count. | |
| ☐ Says "12" without recounting. | ☑ Recounts to say 12. | |
| ☐ Writes 12. | ☑ Writes 11 | |

### Count a Collection (1_PK)

**Materials:** a collection of 10 counters

A. "Show me 6 counters."
B. When done ask, "How many counters are there?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☑ Correctly counts to 6. | ☐ Correctly counts to _____. | |
| ☑ Creates a set of 6. | ☐ Creates a set of____. | |
| ☑ 1-1 Correspondence. | ☐ Lacks 1-1 Correspondence. | |
| ☐ Slides counters to keep track. | ☐ Doesn't keep track of count. | |
| ☑ Says "6" without recounting. 2nd time asked | ☑ Recounts to say 6. | |

### 2_K. Forward Number Sequence

**Materials:** none

A. "Start counting from 1. I will tell you when to stop." (Stop the student at 45 or earlier if struggling.)
B. "When you count, what number comes right after 12?"
C. "When you count, what number comes right after 39?"
D. "Start at 36 and count on. I will tell you when to stop." (Stop the student at 52.)
E. "Count to 100 by tens."

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ Counts from 1 to 45 fluently. | ☐ Correctly counts from 1 to 12 | 1...12 ~~13~~ 14.. 29, 40... 45 (no thirties) |
| | ☐ Drops back to count - Uses fingers to count - other | |
| ☐ After 12 is 13. | ☐ After 12 is _____ | |
| ☐ After 39 is 40. | ☐ After 39 is _____ | |
| ☐ Counts from 36 to 52. | ☐ Correctly counts from 36 to __ | |
| ☐ Counts by tens to 100 fluently. | ☐ Drops back to count - Uses fingers to count - other | |
| | ☐ Correctly counts by 10s to ___ | |
| | ☐ Drops back to count - Uses fingers to count – other | |

## Subitizing (4_PK)

**Materials:** dot cards in order 2, 4, 5, 3

"I am going to show you some cards with dots on them very quickly."
Present one card at a time for 2 seconds and say, "How many dots do you see?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| Identifies number of dots:<br>☐ 2<br>☐ 4<br>☐ 5<br>☐ 3 | ☐ Identifies as _____<br>☐ Identifies as _____<br>☐ Identifies as _____<br>☐ Identifies as _____<br>☐ Tries to touch card to count<br>☐ Recreates number on fingers and counts | |

## 5_K. Number Identification

**Materials:** number cards in this order:
14, 17, 20, 12, 16, 18, 11, 15, 19, 13

Present one card at a time in the order shown and ask, "What number is this?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| Identifies numbers:<br>☐ 14 ?<br>☐ 17 ?<br>☐ 20<br>☐ 12<br>☐ 16<br>☐ 18<br>☐ 11<br>☐ 15<br>☐ 19<br>☐ 13 | ☐ Counts up to say number<br>☐ List incorrect IDs below:<br>(correct number/ number said) | |

## Number Identification (5_PK)

**Materials:** number cards in this order:
3, 8, 5, 1, 7,0, 9, 2, 4, 10, 6

Present one card at a time in the order shown and ask, "What number is this?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| Identifies numbers:<br>☑ 3<br>☑ 8 10?sc<br>☑ 5<br>☑ 1<br>☐ 7 6<br>☐ 0<br>☑ 9<br>☑ 2<br>☑ 4<br>☑ 10<br>☐ 6 8 | ☐ Counts up to say number<br>☒ List incorrect IDs below:<br>(correct number/ number said)<br>7/6 6/8 | (zero not in screening materials) |

Additional Space for observations

## 6_K. Compare

**Materials:** dot cards: 5 green & 9 yellow and 4 green & 4 yellow; Number Cards: 3 & 7 and 8 & 6

After each student response, ask, "How do you know?"

A. Show the card with the 5-green-dots and the 9-yellow-dots, and say, "Here are two groups of dots. Point to the group that is less."

B. Show the card with 4-green-dots and 4-yellow-dots, and say, "Here are two groups of dots. What can you tell me about these groups?"

C. Show the numerals card with 3 and 7, and say, "Look at these two numbers. Point to the number that is greater."

D. Show the numerals card with 8 and 6, and say, "Look at these two numbers. Point to the number that is less."

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☑ 5 is less than 9<br>☑ 4 and 4 is equal or the same<br>☐ 6 is greater than 3<br>☑ 6 is less than 8<br>☐ Sound justification | ☐ Confuses meaning of greater than/less than<br>☐ Not able to compare: 5 and 9; 4 and 4; 7 and 3; 6 and 8<br>☐ Not able to compare numbers<br>☐ Not able to say why 6 doesn't come after that. | |

## Compare (6_PK)

**Materials:** card with 5 green & 3 yellow dots

Show the card with 5 green dots and 3 yellow dots, and say,
"Are there more green dots or more yellow dots?"
Ask: "How do you know?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ 5 is more than 3<br>☐ Sound justification | ☐ Confuses meaning of more<br>☐ Not able to compare numbers<br>☐ Not able to say why | |

Additional Space for Observations

## 7_K. Add/Subtract Fluently within 5

**Materials:** cards with addition and subtraction expressions and counters

If the student's strategy is unclear, ask, "How did you figure out your answer?"

A. Show card and say, "4 add 1." (If confusing to student, restate as "4 plus 1.")
B. Show card and say, "2 add 3." (If confusing to student, restate as "2 plus 3.")
C. Show card and say, "5 subtract 3." (If confusing to student, restate as "5 take away 3.")
D. Show card and say, "3 subtract 2." (If confusing to student, restate as "3 take away 2.")

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ **4 + 1 = (5)**<br>Count All – Count On – Known Fact<br>☐ **2 + 3 = (5)**<br>Count Back – Count Up – Known Fact<br>☐ **5 - 3 = (2)**<br>Known Fact- Related Fact- Decompose/Recompose- Count All, On or Back<br>☐ **3 – 2 = (1)**<br>Known Fact- Related Fact- Decompose/Recompose- Count All, On or Back | ☐ **4 + 1 =** 6<br>Attempts: Count All – Count On – Known Fact<br>☐ **2 + 3 =** 4<br>Attempts: Count All – Count On – Known Fact<br>☐ **5 - 3 =** 5<br>Attempts: Count Back – Count Up – Known Fact<br>☐ **3 – 2 =** 3<br>Attempts: Count Back – Count Up – Known Fact | "4 comes after 3" |

## 8_K. Making Ten

**Materials:** cards with ten frames and dots or blank ten frame and counters

*NOTE: The examiner should clear frame between questions to avoid confusion.*

If the student's strategy is unclear, ask, "How did you figure out your answer?"

A. Place 5 counters on ten-frame. Ask, "How many are there? How many more do you need to make 10?"
B. Place 7 counters on ten-frame. Ask, "How many counters are there? How many more do you need to make 10?"
C. Place 2 counters on ten-frame. Ask, "How many are there? How many more do you need to make 10?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ **5 + _(5)_ = 10**<br>☐ Count Back – Count Up – Known Fact - Other<br>☐ **7 + _(3)_ = 10**<br>☐ Count Back – Count Up – Known Fact - Other<br>☐ **2 + _(8)_ = 10**<br>☐ Count Back – Count Up – Known Fact - Other | 9<br>☐ **5 + __ = 10**<br>☑ counts all - needs to touch to count - other<br>☐ **7 + __ = 10** 9<br>☐ counts all - needs to touch to count - other<br>☐ **2 + __ = 10** 9<br>☐ counts all - needs to touch to count - other | |

## Forward Number Sequence (2_PK) — Materials: none

A. "Start counting at 1. I will tell you when to stop." (Stop the student at 20.)
B. "When you count, what number comes right after 4?"
C. "When you count, what number comes right after 8?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ Counts from 1 to 20 fluently.<br>☐ After 4 is 5.<br>☐ After 8 is 9. | ☐ Correctly counts from 1 to ___<br>☐ Drops back to count<br>☐ Uses fingers to count - other<br>☐ After 4 is _____<br>☐ After 8 is _____ | |

## 3_K. Backward Number Sequence — Materials: none

"Start at 12 and count down."

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☐ Correctly counts back from 12 fluently. | ☐ Counts back from _____<br>☑ Unable to count back. | I don't know how. |

## Backward Number Sequence (3_PK) — Materials: none

"Start at 5 and count down."

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☑ Correctly counts back from 5 fluently. | ☐ Counts back to _____<br>☐ Counts forward to count back.<br>☐ Unable to count back. | |

## 4_K. Subitizing — Materials: dot cards in order 4, 6, 3, 5

"I am going to show you some cards with dots on them very quickly."
Present one card at a time for 2 seconds and say, "How many dots do you see?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| Identifies number of dots:<br>☑ 4<br>☐ 6<br>☑ 3<br>☑ 5 | ☐ Identifies as _____<br>☑ Identifies as 6<br>☐ Identifies as _____<br>☐ Identifies as _____<br>☒ Tries to touch card to count<br>☐ Recreates number on fingers and counts | 6 - tried to touch to count<br>Needed to see it twice |

| **9_K. Addition and Subtraction Word Problems** | **Materials:** word problem cards, counters, paper & pencil, variety of materials such as: counters, base ten blocks, snapping cubes, ten frame, number line |
|---|---|

Read the problem to the student and observe strategy. If the student's strategy is unclear, ask, "How did you figure out your answer?"

A. "I picked 6 apples. Then I picked 3 more apples. How many apples are there now?"

B. "There were 8 birds in the tree. 5 flew away. How many birds are still in the tree?"

| Abilities | Challenges/Strategies | Notes |
|---|---|---|
| ☒ **6 +3 = _(9)_**<br>Model- Count All – Count On – Known Fact<br><br>☑ **8 – 5 = _(3)_**<br>Creates Model -Count All – Count On – Known Fact | ☐ **6 +3 = __**<br>Creates Model- Count All – Count On – Known Fact<br><br>☐ **8 – 5 = __**<br>Creates Model -Count All – Count On – Known Fact | |

Name Student A Age _____ Date _____

School _____ Grade _____ Teacher _____

## EMDI Scoring Guide: Kindergarten

**4: ON TARGET** Shows automaticity and/or uses appropriate strategy for grade level; able to explain thinking and makes no mistakes or self corrects without prompting.
**3: CLOSE TO TARGET** Has good core understanding but it is not completely developed; growing fluency and ability to explain thinking; may need prompting.
**2: BELOW TARGET** Shows some understanding but has gaps or flaws in thinking, fluency and explanation.
**1: VERY BELOW TARGET** Shows little to no understanding.

*NOTE: Only grade level items are included on the scoring guide. (Foundational skills are not included.)

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 1** **Count a Collection** | A. Creates a set of 12. | 1 | (2) | 3 | 4 | |
| | B. Restates 12 without counting. | (1) | 2 | 3 | 4 | **Total** |
| | C. Writes the number 12. | (1) | 2 | 3 | 4 | 4 /12 |
| Has cardinality with 5 and lower. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 2** **Forward Number Sequence** | A. Counts from 1 to 45. | 1 | (2) | 3 | 4 | |
| | B. Names the number after 12 is 13. | 1 | 2 | 3 | 4 | Stopped and did Pre-K |
| | C. Names the number after 39 is 40. | 1 | 2 | 3 | 4 | |
| | D. Counts from 36 to 52. | 1 | 2 | 3 | 4 | **Total** |
| | E. Counts by 10s to 100. | 1 | 2 | 3 | 4 | 2 /20 |
| Counted to 12, left out 13 and then counted to 29. Left out 30s. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 3** **Backward Number Sequence** | A. Counts down by ones from 12. | (1) | 2 | 3 | 4 | **Total** |
| | | | | | | 1 /4 |
| Can countdown from 5a | | | | | | |

Name _____ Age _____ Date _____

School _____ Grade _____ Teacher _____

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 4** **Subitize Dice Patterns** | A. Recognizes 4. | 1 | 2 | 3 | (4) | |
| | B. Recognizes 6. | 1 | 2 | (3) | 4 | |
| | C. Recognizes 3. | 1 | 2 | 3 | (4) | **Total** |
| | D. Recognizes 5. | 1 | 2 | 3 | (4) | 15 /16 |
| | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 5** **Identify Teen Numbers** | A. Identifies 14, 17, 20. | (1) | 2 | 3 | 4 | Used Pre-K |
| | B. Identifies 12, 16, 18. | (1) | 2 | 3 | 4 | **Total** |
| | C. Identifies 11, 15, 19, 13. | (1) | 2 | 3 | 4 | 3 /12 |
| | Does not know: 7, 6<br>8→10SC→8 | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 6** **Compare Numbers** | A. Identifies 5 as less than 9. (dots) | 1 | 2 | 3 | (4) | |
| | B. Identifies 4 and 4 as equal. (dots) | 1 | 2 | 3 | (4) | |
| | C. Identifies 7 as greater than 3. | 1 | (2) | 3 | 4 | **Total** |
| | D. Identifies 6 as less than 8. | 1 | 2 | 3 | (4) | 14 /16 |
| | Called 7 "six" and said it was greater.<br>Reasons about size using counting order. | | | | | |

Name _____ Age _____ Date _____

School _____ Grade _____ Teacher _____

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 7** **Add/Subtract Fluently Within 5** | A. 4 + 1 | (1) | 2 | 3 | 4 | |
| | B. 2 + 3 | (1) | 2 | 3 | 4 | |
| | C. 5 - 3 | (1) | 2 | 3 | 4 | **Total** |
| | D. 3 - 2 | (1) | 2 | 3 | 4 | 4 /16 |
| Does not understand algorithms. | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 8** **Making 10** (Ten frames) | A. 5 + ____ = 10 | (1) | 2 | 3 | 4 | |
| | B. 7 + ____ = 10 | (1) | 2 | 3 | 4 | **Total** |
| | C. 2 + ____ = 10 | (1) | 2 | 3 | 4 | 3 /12 |
| Does not understand nested numbers (decomposing/composing) | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **ITEM 9 Word Problems** | A. Solves 6 apples + 3 apples = ____ | 1 | 2 | 3 | (4) | **Total** |
| | B. Solves 8 birds – 5 birds = ____ | 1 | 2 | 3 | (4) | 8 /8 |
| Created models torepresent problems. | | | | | | |

Name Student A Age _____ Date _____

School _____ Grade _____ Teacher _____

| Kindergarten Results | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Category** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9** | **Total** |
| **Earned Points** | 4 | 2 | 1 | 15 | 3 | 14 | 4 | 3 | 8 | 54 |
| **Possible Points** | 12 | 20 | 4 | 16 | 12 | 16 | 16 | 12 | 8 | 116 |

**Comments:**

Strengths

Solving problems with context.
Using manipulatives to respresent problem.
Subitizing 5 and lower.

Challenges

Cardinality over 5.
Counting fluently. (forward and backward)
Recognizing teen numbers and numbers over 5.
Solving problems without context. (algorithms)