

Name _____ Age _____ Date _____

School _____ Grade _____ Teacher _____

EMDI Scoring Guide: Grade 4

3: 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.

2: CLOSE TO TARGET Has good core understanding but it is not completely developed; growing fluency and ability to explain thinking; may need prompting.

1: BELOW TARGET Shows some understanding but has gaps or flaws in thinking, fluency and explanation.

0: VERY BELOW TARGET Shows little to no understanding.

*NOTE: Only grade level items are included on the scoring guide. (Foundational skills are not included, though a score of 1 could be given if there is evidence of understanding at the grade below. Make a note in the item comment space to support the score.) Two possible summary sheets are included at the end of this scoring guide based on your need for data collection and share out.

*NOTE: Always encourage students to first think aloud about the solution without writing or using other tools (unless the question or prompt directly says to write or use a tool). If the student has difficulty and needs to use an optional tool, then this should be noted in the score-sheet.

ITEM 1 Rounding: Place Value	A. Rounds 4,546 to the nearest 100. (4,500)	0	1	2	3	Total /6
	B. Rounds 48.67 to the nearest tenth. (48.7)	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 3 if...	Score as a 2 if...	Score as a 1 if...
rounds number correctly to given place value; explains how they know; able to read number correctly	- rounds number correctly to given place value; explains how they know; unable to read number correctly - NOTE: prompt if read incorrectly and give 3 points if successful 2nd time	- rounds number correctly to given place value; is unable to explain how they know - shows some understanding of rounding but makes an error (e.g., wrong place)

ITEM 2 Decimal Fraction Identification	A. Writes 6/10 as a decimal. (0.6)	0	1	2	3	Total /9
	B. Writes 54/100 as a decimal. (0.54)	0	1	2	3	
	C. Writes 0.07 as a fraction (7/100)	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 3 if...	Score as a 2 if...	Score as a 1 if...
writes number in correct form; says both the decimal number and fraction correctly (fractions should be read as six-tenths or six one-tenths)	able to write number in correct form, but is unable to read one of the forms correctly	- able to write number correct form, but is unable to read either form correctly - shows some understanding but makes an error when writing a number

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ITEM 3 Compare Decimals	A. $0.16 < 0.2$	0	1	2	3	Total /9
	B. $0.25 > 0.19$	0	1	2	3	
	C. $0.40 = 0.4$	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 3 if...	Score as a 2 if...	Score as a 1 if...
- uses symbol correctly in the inequality to show understanding of greater/less than; reads correctly statement left to right - NOTE: if student reads statement backwards, but correctly (i.e., $0.2 > 0.16$ instead of $0.16 < 0.2$), the student can still score a 3 if when prompted they can read the inequality left to right correctly	uses symbol correctly in the inequality to show understanding of greater/less than; but is unable to read statement correctly	- shows understanding of comparison and greater/less than, but is not able to use symbol or read statement - incorrectly compares based on an error in interpreting one of the numbers.

ITEM 4 Compare Fractions	A. $5/9 > 5/12$	0	1	2	3	Total /9
	B. $6/8 = 3/4$	0	1	2	3	
	C. $4/5 < 6/7$	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 3 if...	Score as a 2 if...	Score as a 1 if...
- uses symbol correctly in the inequality to show understanding of greater/less than/equal to; reads statement correctly left to right - NOTE: if student reads statement backwards, but correctly (i.e., $5/12 < 5/9$ instead of $5/9 > 5/12$), the student can still score a 3 if when prompted they can read the inequality left to right correctly	uses symbol correctly in the statement to show understanding of greater/less than/equal to; but is unable to read statement correctly	- shows understanding of comparison and greater/less than/equal to, but is not able to use symbol or read statement - incorrectly compares based on an error in interpreting one of the fractions.

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ITEM 5 Whole Number Operations	A. $765 + 218$ (983)	0	1	2	3	Total /9
	B. $5,600 \div 7$ (800)	0	1	2	3	
	C. 43×21 (903)	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 2 if...	Score as a 1 if...	Score as a 0 if...
- correctly solves, but needs to use manipulatives or paper - correctly solves, but reasoning is difficult to follow or not efficient for the numbers presented - minor error in calculation but able to correct if prompted (record prompt used)	Needs to use manipulatives or paper to justify and loses track of reasoning	- incorrect response - reasoning does not support correct response

ITEM 6 Addition Subtraction Fractions	A. $2/7 + 4/7$ (6/7)	0	1	2	3	Total /9
	B. $1 \frac{3}{10} + 4 \frac{7}{10}$ (5 $\frac{10}{10}$ or 6)	0	1	2	3	
	C. $8 \frac{5}{8} - 2 \frac{3}{8}$ (6 $\frac{2}{8}$ or 6 $\frac{1}{4}$)	0	1	2	3	

Use the table as a guide. Only one bullet needs to be observed to score at the level described.

Score as a 3 if...	Score as a 2 if...	Score as a 1 if...
solves using mental math	solves efficiently using paper and pencil and/or manipulatives	solves using a tool or paper and pencil with inefficient method

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ITEM 7 Multiplying Fractions	A. Selects 3 cards that represent $4 \times 2/3$.	0	1	2	3	Total
	B. Solves $4 \times 2/3$. ($8/3$ or $2 \frac{2}{3}$)	0	1	2	3	/6
Use the table as a guide. Only one bullet needs to be observed to score at the level described.						
Score as a 3 if...	Score as a 2 if...	Score as a 1 if...				
- For A: identifies all 3 cards that represents $4 \times \frac{2}{3}$ - For B: solves correctly without using manipulatives	- For A: identifies 2 cards that represents $4 \times \frac{2}{3}$ - For B: solves correctly and uses manipulatives	- For A: identifies 1 card that represents $4 \times \frac{2}{3}$ - For B: solves incorrectly due to minor mathematical error				

ITEM 8 Fraction Word Problems	A. $2 \times 3/5 = (6/5 \text{ or } 1 \frac{1}{5} \text{ gallons})$	0	1	2	3	Total
	B. $2 - \underline{\hspace{1cm}} = \frac{3}{4}$ ($5/4 \text{ or } 1 \frac{1}{4} \text{ gallons})$	0	1	2	3	
	C. $7 \times \frac{1}{2} = (7/2 \text{ or } 3 \frac{1}{2} \text{ apples})$	0	1	2	3	
Use the table as a guide. Only one bullet needs to be observed to score at the level described.						
Score as a 3 if...		Score as a 2 if...		Score as a 1 if...		
• solves problem; includes units in their answer • NOTE: if student does not include units but is able to after prompting, they can still score a 3 • NOTE: Rereading the problem multiple times is not considered prompting		• solves problem; does not include units in their answer even after prompting		• solves problem with minor mathematical error; does not include units in their answer even after prompting		

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Grade 4 Results									
Category	1	2	3	4	5	6	7	8	Total
Earned Points									
Possible Points	6	9	9	9	9	9	6	9	66
Comments:									

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Grade 4 Results				
	0 Very Below Target	1 Below Target	2 Close to Target	3 On Target
# of times student earned this score				
Comments:				