EMDI Screening Questions: Grade 5

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

1_G5. Compare Decimals

Materials: screening cards; symbol cards; available: grid paper, base ten blocks

Place a card in front of the student one at a time, along with the symbol cards, and say, "Choose the comparison symbol that shows the relationship between these two numbers." Once, they placed the symbol ask, "Can you read this for me?" Follow up: "How do you know?"

A. $0.165 \quad 0.2$

B. $0.25 \quad 0.054$

C. $0.43 \quad 0.430$

Compare Decimals (3_G4)

Materials: screening cards; symbol cards; available: grid paper, base ten blocks

Place a card in front of the student, along with the symbol cards, and say:

"Choose the comparison symbol that shows the relationship between these two numbers." Once they have placed the symbol ask, "Can you read this for me?" Follow up: "How do you know?"

A. $0.16 \quad 0.2$

B. $0.25 \quad 0.19$

C. $0.4 \quad 0.40$

Decimal/Fraction Identification (2_G4)

Materials: screening cards; available: paper and pencil

A. Show card $\frac{6}{10}$ and ask the student to read the number. Then ask, "How would you write this number in decimal form?" Follow up: "How do you know?"

B. Show card $\frac{54}{100}$ and ask the student to read this number. Then ask, "How would you write this number in decimal form?" Follow up: "How do you know?"

C. Show card 0.07 and ask the student to read the number. Then ask, "How would you write this decimal number as a fraction?" Follow up: "How do you know?"

2_G5. Rounding: Place Value

Materials: screening cards; available: paper and pencil

A. Place 21.543 card in front of student and ask the student to read the number. Then ask, "How would you round this number to the nearest **hundredths**?" Follow up: "How do you know?"

B. Place 96.064 card in front of student and ask the student to read the number. Then ask, "How would you round this number to the nearest **tenths**?" Follow up: "How do you know?"

Rounding: Place Value (1_G4) **Materials:** screening cards; available: paper and pencil

A. Place 4,546 card in front of student and ask the student to read the number. Then ask, "How would you round this number to the nearest **hundred**?" Follow up: "How do you know?"

B. Place 48.67 card in front of student and ask the student to read the number. Then ask, "How would you round this number to the nearest **tenths**?" Follow up: "How do you know?"

3_G5. Multiplication and Division by 10 **Materials:** screening cards; available: paper and pencil

Place a screening card in front of student one at a time, and ask the question shown. If needed for any items, follow up with "How did you figure out your answer?"

A. "What is this number in standard form?" 427×10^2

B. "What is this number in standard form?" $347.8 \div 10$

C. "How many times greater is the value of the 4 in 604,000 than the value of the 4 in 513,400?"

4_G5. Operations with Decimals **Materials:** screening cards; available: paper and pencil

Place a screening card in front of student one at a time, and ask, "What is the answer to this problem?" If needed, follow up: "How did you figure out your answer?"

A. 48.34 + 16.07

B. 57.9 – 12.78

C. 16 x 2.75

D. 40 ÷ 0.25

Operations with Whole Numbers (5_G4) **Materials** screening cards; available: paper and pencil

Place one card in front of the student at a time and ask, "What is the answer to this problem?" If needed, follow up: "How did you figure out your answer?"

A. 765 + 218

B. 5,600 ÷ 7

C. 43 x 21

5_G5. Estimate Fraction Sums and Differences **Materials:** screening cards

Show each card and ask students to estimate rather than work out an exact answer.

A. $\frac{9}{10} + \frac{3}{5}$ "Using estimation, is the sum less than 1 or greater than 1?"

B. $\frac{1}{5} + \frac{2}{9}$ "Using estimation, is the sum less than $\frac{1}{2}$ or greater than $\frac{1}{2}$?"

C. $\frac{3}{4} - \frac{1}{3}$ "Using estimation, Is the difference less than $\frac{1}{2}$ or greater than $\frac{1}{2}$?"

Compare Fractions (4_G4) **Materials:** screening cards; symbol cards >, <, and =

Place a card in front of the student, along with the symbol cards, and say, "Choose the comparison symbol that shows the relationship between these two fractions." Once they have placed the symbol ask, "Can you read this for me?" Then follow up: "How do you know?"

A. $\frac{5}{9}$ $\frac{5}{12}$

B. $\frac{6}{8}$ $\frac{3}{4}$

C. $\frac{4}{5}$ $\frac{6}{7}$

6_G5. Fraction Addition & Subtraction Strategies **Materials:** paper and pencil; available: fraction circles or bars, number lines, grid paper

Place a card in front of the student and ask, "What is the answer to this problem?" If needed, follow up: "How did you figure out your answer?"

A. $\frac{5}{8} + \frac{3}{12}$

B. $1\frac{4}{5} + 4\frac{1}{4}$

C. $4\frac{1}{2} - 2\frac{1}{3}$

Addition & Subtraction Strategies (Fractions) (6_G4) **Materials:** screening cards available: fraction circles or bars, number lines, grid paper

Place a card in front of the student and ask, "What is the answer to this problem?" If needed, follow up: "How did you figure out your answer?"

A. $\frac{2}{7} + \frac{4}{7}$

B. $1\frac{3}{10} + 4\frac{7}{10}$

C. $8\frac{5}{8} - 2\frac{3}{8}$

7_G5. Estimating Fraction Products and Quotients **Materials:** screening cards

Show each card and ask students to estimate rather than work out an exact answer. If needed, follow up: "How do you know?"

A. $2 \times \frac{4}{5}$ "Using estimation, is the product less than $\frac{4}{5}$ or greater than $\frac{4}{5}$?"

B. $\frac{2}{3} \times \frac{9}{10}$ "Using estimation, is the product less than $\frac{9}{10}$ or greater than $\frac{9}{10}$?"

C. $3 \div \frac{1}{8}$ "Using estimation, is the quotient less than 3 or greater than 3?"

8_G5. Fraction Multiplication and Division

Materials: screening cards;
available: paper and pencil; fraction circles or bars, number lines, grid paper

Show each card, and ask, "What is the answer to this problem? If needed, follow up: "How did you figure out your answer?"

A. $\frac{2}{3} \times \frac{5}{8}$ B. $\frac{1}{5} \div 2$

Multiplication of Fractions (7_G4)

Materials: screening cards

Place the card $4 \times \frac{2}{3}$ in front of the student and say, "Take a look at this card." Next, spread the remaining cards in the set out in front of the student and ask,

A. "Which of these cards is another way to show or represent $4 \times \frac{2}{3}$?"

B. Point to the $4 \times \frac{2}{3}$ card and ask, "What is the answer to this problem?" If needed, follow up with "How did you figure out your answer?"

9_G5 Fraction Word Problems

Materials: screening cards; paper and pencil;
available: fraction pieces or bars, number lines, grid paper

Place card in front of the student and ask the student to read the problem aloud and then solve it. If needed, follow up: "How did you figure out your answer?"

A. Penny is making snack bags of raisins. She wants each snack bag to contain $\frac{1}{4}$ cup of raisins. If she has 3 cups of raisins, how many snack bags can she make?

B. Jackie and Gina mow their neighbor's lawn. First, Jackie mowed $\frac{2}{3}$ of the lawn. Then, Gina mowed $\frac{3}{4}$ of what Jackie did not mow. What part of the whole lawn did Gina mow?

Fraction Word Problem (8_G4)

Materials: screening cards; Have a variety of materials available to students: fraction pieces or bars, number lines, paper/pencil, grid paper

Place card in front of the student and ask the student to read the problem aloud and then solve it. If needed, follow up: "How did you figure out your answer?"

If the student does not express the answer as a mixed numeral, follow up: "Is there another way to express this answer?"

A. There are 2 containers of paint with $\frac{3}{5}$ of a gallon in each container. How many gallons of paint are there?

B. Trina's watering can has 2 gallons of water in it. After she waters her plants, there is ¾ of a gallon of water in the watering can. How much water did she use?

C. There are 7 children sitting at the table. Paulina gives ½ of an apple to each of them. How many apples does she give out?