Math Grade 5 C

Grade Level Standard(s):

KY.5.NF.1

Materials:

- Math 5 C Fraction Model
- Math 5 C Attainment Task Questions for Student Use

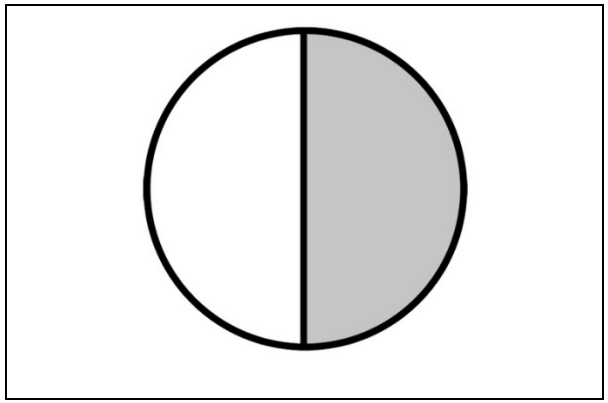
Response Code:

- Indicate the answer provided by the student.

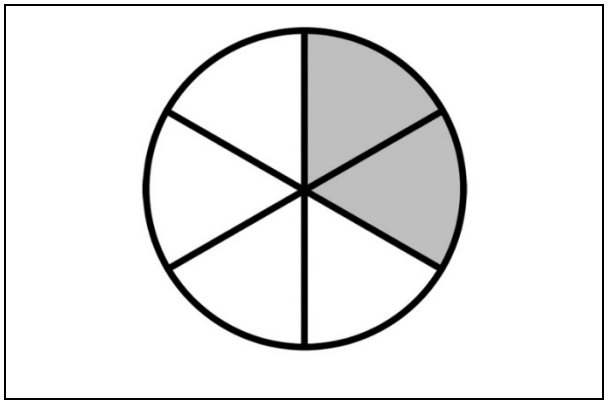
Text Coding:

- “Quotation marks” indicate the script that the teacher should read to the student.
- *Italicized text* provides further direction for the test administrator.
- Words in parenthesis ( ) are optional; they may replace or be read in addition to the word(s) immediately preceding.

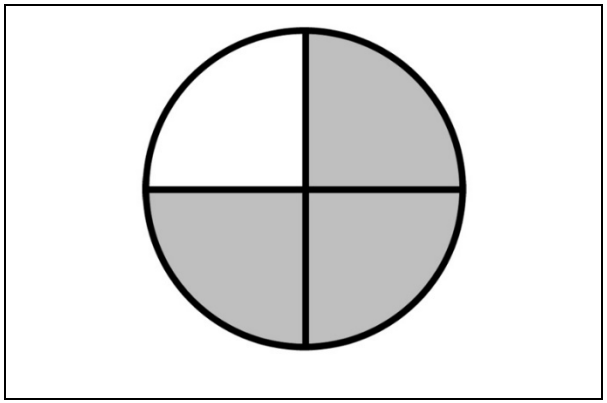
a. $\frac{1}{2}$



b. $\frac{2}{6}$



c. $\frac{3}{4}$



Before beginning task administration, please ensure that all conditions specified in the administration protocol (starting on page 10 of the Administration Guide Overview and Attainment Task Administration) have been met. Inform the student that the task is about to start by saying, "We are about to start the task, and I am going to ask you some questions."

All questions from this task are available for presentation to the student in the supplemental material Math 5 C Attainment Task Questions for Student Use.

Present the student with Math 5 C Fraction Model.

"Rafael surveyed his classmates about their favorite summertime activities."

5. "Use the fraction model; $\frac{1}{4}$ of the students like swimming and $\frac{1}{2}$ like inside activities. What fraction of students like either swimming or inside activities?"

Response Option	***Response Rationale***
a. $\frac{1}{2}$	*The student attempts to solve the fractional word problem but uses the incorrect operation (subtracts instead of adds).*
b. $\frac{2}{6}$	*The student attempts to add the fractions from a word problem but instead adds the numerators and then adds the denominators.*
c. $\frac{3}{4}$ **(Correct)**	*The student adds fractions with different denominators from a word problem by using two fraction models to add the fractions.*
Depth of Knowledge (DOK) 2	

Math 5 C Fraction Model

Math 5 C Attainment Task Questions for Student Use

5. Use the fraction model; $\frac{1}{4}$ of the students like swimming and $\frac{1}{2}$ like inside activities. What fraction of students like either swimming or inside activities?

Kentucky Academic Standard: KY.5.NF.1 - Efficiently add and subtract fractions with unlike denominators (including mixed numbers) by…
● using reasoning strategies, such as counting up on a number line or creating visual fraction models
● finding common denominators.
MP.2, MP.3

Alternate Assessment Target: *Limit full standard to denominators of 2, 3, 4, 6, 8, 10 and limit to equations where only one fraction has to be converted.*

Student Group	Number of Students*	Percent Correct
All students	392	55.10%
Gender		
Female	119	55.46%
Male	273	54.95%
Ethnicity		
African American	35	54.29%
American Indian or Alaska Native	<10	Not Reported
Asian	<10	Not Reported
Hispanic or Latino	21	52.38%
Native Hawaiian or Pacific Islander	<10	Not Reported
White (non-Hispanic)	305	54.43%
Two or More Races	23	65.22%
English Learner	20	65.00%
Economically Disadvantaged	317	54.57%

*Number of students that attempted the item