

Fraction of a Number Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Selects correct number of unit blocks to represent the starting number ("of something").			
	Separates unit blocks into the appropriate number of equal parts indicated by the denominator.			
	Counts the appropriate number of equal parts as indicated by the numerator.			
Write	Writes all numerals and mathematical symbols to accurately represent equation.			
Say	Clearly and accurately identifies starting number.			
	Clearly and accurately explains the denominator as indicating how many equal parts to divide the starting number into and the numerator as indicating how many of those equal parts will be counted.			
	Clearly and accurately states the problem and the final value.			

Fraction of One Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Selects green square piece representing one unit and inverts to white side.			
	Selects appropriate clear overlay to divide unit into number of equal parts indicated by the denominator.			
	Selects appropriate colored piece inserted in between unit and overlay to represent number of parts indicated by the numerator.			
Write	Writes all numerals and mathematical symbols to accurately represent the expression.			
Say	Clearly and accurately explains the denominator as indicating how many equal parts to divide the starting number into and the numerator as indicating how many of those equal parts will be counted.			

Equivalent Fractions Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds starting fraction (see “Fraction of One”).			
	Starting with halves, systematically places each clear overlay, rotated 90°, on top of starting fraction to create equivalent fraction (removing previous rotated overlay before proceeding).			
Write	Writes all numerals and mathematical symbols to accurately represent the expression.			
Say	Clearly and accurately identifies the starting fraction.			
	Clearly and accurately identifies the resulting equivalent fraction.			
	Clearly identifies resulting equivalent fraction as being “the same amount but more pieces” and that the pieces are smaller.			

Addition of Fractions with Like Denominators Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds starting fractions (see "Fraction of One").			
	Moves colored pieces (or colored pieces and clear overlay) together to model combining of starting fractions.			
Write	Writes all numerals and mathematical symbols to accurately represent the equation.			
Say	Clearly and accurately explains the need to have a like denominator when adding or subtracting (e.g., "To compare or combine, you must be the same kind.")			
	Clearly and accurately explains the denominator stays the same (unit of comparison) and the numerators are added to arrive at the sum.			
	Clearly and accurately states the problem and the final sum.			

Addition of Fractions with Unlike Denominators Rubric (Shortcut Method)

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds starting fractions (see "Fraction of One").			
	Places the clear overlay indicated by the other addend's denominator, rotated 90°, atop each starting fraction to create equivalent fractions with like denominators for the two starting fractions.			
	Shows the combining of the starting fractions by using a dry erase marker to mark on the clear overlays the parts that are being combined to find the sum.			
Write	Writes all numerals and mathematical symbols to accurately represent the equation.			
	Writes the steps showing the process of finding a like denominator ("rule of four"), as applicable.			
	Writes the new equation with the equivalent fractions that have a like denominator along with the accurate sum.			
Say	Clearly and accurately explains the need to have a like denominator when adding or subtracting (e.g., "To compare or combine, you must be the same kind.")			
	Clearly describes the process of using the clear overlay representing the opposite addend's denominator to create equivalent fractions with a like denominator.			
	Clearly and accurately explains the new like denominator stays the same (unit of comparison) and the numerators are added to arrive at the sum.			
	Clearly and accurately states the problem and the final sum.			

Division of Fractions with Like Denominators Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds starting fractions (see "Fraction of One").			
	Uses the colored piece of the fraction representing the divisor as a measuring tool to evaluate how many groups of the divisor can be counted out of the dividend.			
Write	Writes all numerals and mathematical symbols to accurately represent the equation.			
	Writes the steps for dividing the numerators and denominators to find the accurate quotient.			
Say	Clearly and accurately explains the need to have a like denominator when dividing fractions.			
	Clearly and accurately explains the denominator of the quotient will be 1 whenever dividing fractions with a like denominator.			
	Clearly and accurately explains the quotient is a result of dividing the numerators.			
	Clearly and accurately states the problem and the final quotient.			

Division of Fractions with Unlike Denominators Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds starting fractions (see "Fraction of One").			
	Places the clear overlay indicated by the opposite fraction's denominator, rotated 90°, atop each starting fraction to create equivalent fractions with like denominators for the two starting fractions.			
	Uses a dry-erase marker to mark the divisor groups on the dividend to evaluate how many of the divisor groups you can count out of the dividend.			
Write	Writes all numerals and mathematical symbols to accurately represent the equation.			
	Writes the steps of the "rule of four" on the equation showing the process of finding equivalent fractions with a like denominator.			
	Rewrites the new equation with the equivalent fractions that now have a like denominator.			
	Writes the steps for dividing the numerators and denominators to find the accurate quotient.			
Say	Clearly and accurately explains the need to have a like denominator when dividing fractions.			
	Clearly describes the process of using the clear overlay representing the opposite fraction's denominator to create equivalent fractions with a like denominator.			
	Clearly and accurately explains the denominator of the quotient will be 1 whenever dividing fractions with a like denominator.			
	Clearly and accurately explains the quotient is a result of dividing the numerators.			
	Clearly and accurately states the problem and the final quotient.			

Fraction of a Fraction (Multiplication) Rubric

Criteria		1. Beginning Steps	2. Nearing Expectations	3. Meets Expectations
Build	Correctly builds the starting fraction that represents what you are taking a fraction of (the “of something”).			
	Places the correct clear overlay indicated by the denominator of the other fraction/factor, rotated 90°, atop the clear overlay of the starting fraction.			
	Slides out the colored piece until only the required parts are filled in with color as indicated by the numerator of the other fraction/factor.			
Write	Writes all numerals and mathematical symbols to accurately represent the equation.			
	Writes the steps of multiplying the numerators and the denominators of the two fractions.			
Say	Clearly and accurately explains the denominator as indicating how many equal parts to divide the starting fraction (the “of something”) into and the numerator as indicating how many of those equal parts will be counted.			
	Clearly and accurately explains that the product is the result of multiplying the numerator times the numerator and the denominator times the denominator.			