

Math Syllabus

Year	2019-2020
Available Resources	Pearson – Envision e-textbook Khan Academy
Process Skills	Apply math in everyday situations; use problem-solving models; create representations; analyze information



Math Syllabus

Syllabus
1st Semester

1st Nine Weeks

Week 1-3 Place value of whole numbers and decimals. Interpret the value of each place value position. Represent the value of the digit in whole numbers through 1,000,000,000 and decimals to the 100ths. Compare and order whole numbers to 1,000,000,000. Represent decimals including 10ths and 100ths using concrete and visual models (and money). Represent fractions and decimals on a number line.

Assessment

Week 4-6 Addition and subtraction of whole numbers and decimals.

Round whole numbers to a given place value through the hundred thousands place. Add and subtract whole numbers and decimals to the 100ths place. Round to the nearest 10, 100, or 1,00. Describe the basic purpose of financial institutions, including keeping money safe, borrowing money and lending; distinguish between fixed and variable expenses.

Assessment

Week 7-9 Multiplication of whole numbers.

Determine products of a number and 10 or 100. Represent the product of 2 two-digit numbers using arrays, area models, or equations, including perfect squares through 15 by 15. Use strategies and algorithms to multiply up to a four-digit number by a one-digit number and to multiply a two-digit number. Round to the nearest 10, 100, 1,000 and estimate solutions.

Assessment

2nd Nine Weeks

Week 1-3 Division of Whole Numbers

Represent the quotient of up to a four-digit whole number divided by a one-digit whole number using arrays, area models, or



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equations. Divide a four-digit dividend by a one-digit divisor. Round to the nearest 10, 100, 1,000 or use compatible numbers to estimate solutions involving whole numbers. Solve one and two step problems involving multiplication and division while interpreting remainders when applicable. Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.

Assessment



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Week 3-6 Use All Operations to Solve Problems.

Add and subtract whole numbers and decimals to the 100ths place. Solve one and two step problems involving multiplication and division while interpreting remainders when applicable. Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity. Represent problems using an input-output table and numerical expressions to generate a number pattern that follows a given rule representing the relationship of the values.
Assessment

Week 6-9 Data Representation

Distinguish between fixed and variable expenses. Calculate profit in a given situation. Represent data on a frequency table, dot plot, or stem and leaf plot marked with whole numbers and fractions. Solve one and two step problems using data in whole number, decimal, and fraction forms in a frequency table, dot plot, or stem and leaf plot.
Assessment



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Syllabus
2nd Semester

3rd Nine Weeks

Week 1-3 Fractions and Decimals

Relate decimals to fractions that name tenths and hundredths. Compare two fractions with different numerators and different denominators. Represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations.

Assessment

Week 4-6 Measurement

Solve problems related to perimeter and area of rectangles where dimensions are whole numbers.

Assessment

Week 7-9 Geometry – points, lines, and angles

Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines or the presence or absence of angles of a specified size.

Assessment



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4th Nine Weeks

Geometry – measuring angles; making connections; essential understandings of fractions; essential understandings of all operations.

Week 1-3 Geometry – Measuring Angles

Determine the approximate measures of angles in degrees to the nearest whole number using a protractor. Draw an angle with a given measure.

Assessment

Week 4-6 Making Connections

Represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations.

Represent multi-step problems involving the four operations with whole numbers using strip diagrams and equations with a letter standing for the unknown quantity.

Assessment

Week 7-9 Essential Understandings of Fractions and All Operations

Relate decimals to fractions that name tenths and hundredths. Compare two fractions with different numerators and different denominators. Represent and solve addition and subtraction of fractions with equal denominators using objects and pictorial models that build to the number line and properties of operations. Add and subtract whole numbers and decimals to the hundredths place using the standard algorithm.

Assessment

