

SUMMER SUCCESS: MATH © 2007

correlated to

Michigan Mathematics Grade Level Content Expectations Grades 4-8



YOUR MICHIGAN GREAT SOURCE REPRESENTATIVES

BARBARA BATDORFF

(BARRY, CLINTON, EATON, GENESEE, GRATIOT, HURON,
INGHAM, IONIA, LAPEER, MACOMB, MONTCALM, SAGINAW,
SANILAC, SHIAWASSEE, ST. CLAIR, TUSCOLA,
& WAYNE COUNTIES)

800-289-4490, option 4

Barbara_Batdorff@hmco.com

JANICE BRATEL

(UPPER PENINSULA)

800-289-4490, option 4

Janice_Bratel@hmco.com

JERRY SUDDETH-LOTT

(ALL OTHER COUNTIES EXCEPT THOSE LISTED ABOVE & THE UPPER PENINSULA)

800-289-4490, option 4

Jerry_Suddeth-Lott@hmco.com



Summer Success: Math ©2007
correlated to
Michigan Mathematics
Grade Level Content Expectations
Fourth Grade

N u m b e r a n d O p e r a t i o n s

U n d e r s t a n d a n d u s e n u m b e r n o t a t i o n a n d p l a c e v a l u e

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.01 Read and write numbers to 1, 000,000; relate them to the quantities they represent; compare and order.</p>	<p>Teacher’s Guide: 20, 30, 38, 42, 50, 64, 117</p>
<p>N.ME.04.02 Compose and decompose numbers using place value to 1,000,000’s, e.g., 25,068 is 2 ten thousands, 5 thousands, 0 hundreds, 6 tens, and 8 ones.</p>	<p>Teacher’s Guide: 26, 28, 45, 47, 53, 63, 65, 120, 121</p>
<p>N.ME.04.03 Understand the magnitude of numbers up to 1,000,000; recognize the place values of numbers and the relationship of each place value to the place to its right, e.g., 1,000 is 10 hundreds.</p>	<p>Teacher’s Guide: 33, 49, 52, 67, 120</p>

U s e f a c t o r s a n d m u l t i p l e s

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.04 Find all factors of any whole number through 50, list factor pairs, and determine if a one-digit number is a factor of a given whole number.</p>	<p>Teacher’s Guide: 29, 81, 110, 114</p>
<p>N.ME.04.05 List the first ten multiples of a given one-digit whole number; determine if a whole number is a multiple of a given one-digit whole number.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher’s Guide: 24, 29, 34, 42, 43, 45, 49, 52, 56, 60, 89</p>

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.MR.04.06 Know that some numbers including 2, 3, 5, 7, and 11 have exactly two factors (1 and the number itself) and are called prime numbers.</p>	<p>Teacher's Guide: 56, 63, 70, 110, 114</p>
<p>N.MR.04.07 Use factors and multiples to compose and decompose whole numbers.</p>	<p>Teacher's Guide: 39, 42, 114</p>

Add and subtract whole numbers

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.FL.04.08 Add and subtract whole numbers fluently.</p>	<p>Teacher's Guide: 21, 22, 23, 34, 40, 46, 47, 69, 112, 118</p>

Multiply and divide whole numbers

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.09 Multiply two-digit numbers by 2, 3, 4, and 5 using the distributive property, e.g., $21 \times 3 = (1 + 20) \times 3 = (1 \times 3) + (20 \times 3) = 3 + 60 = 63$</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 29, 42, 59, 107</p>
<p>N.FL.04.10 Multiply fluently any whole number by a one-digit number and a three-digit number by a two-digit number; for a two-digit by one-digit multiplication use distributive property to develop meaning for the algorithm.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 26, 29, 38, 42, 59, 61, 107</p>
<p>N.FL.04.11 Divide numbers up to four-digits by one-digit numbers and by 10.</p>	<p>Teacher's Guide: 49, 61, 112, 118, 120, 122, 123</p>
<p>N.FL.04.12 Find the value of the unknowns in equations such as $a \div 10 = 25$; $125 \div b = 25$.</p>	<p>Teacher's Guide: 22, 33, 38, 114</p>
<p>N.MR.04.13 Use the relationship between multiplication and division to simplify computations and check results.</p>	<p>Teacher's Guide: 27, 38, 39, 114, 115, 117, 119, 120</p>

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.MR.04.14 Solve contextual problems involving whole number multiplication and division.</p>	<p>Teacher's Guide: 29, 31, 33, 40, 50, 52, 56, 110, 120</p>

Read, interpret and compare decimal fractions

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.15 Read and interpret decimals up to two decimal places; relate to money and place value decomposition.</p>	<p>Teacher's Guide: 45, 61, 67, 81, 86</p>
<p>N.ME.04.17 Locate tenths and hundredths on a number line.</p>	<p>Teacher's Guide: 76</p>
<p>N.ME.04.18 Read, write, interpret, and compare decimals up to two decimal places.</p>	<p>Teacher's Guide: 45, 58, 85, 117</p>
<p>N.MR.04.19 Write tenths and hundredths in decimal and fraction forms, and know the decimal equivalents for halves and fourths.</p>	<p>Teacher's Guide: 65, 88</p>

Understand fractions

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.20 Understand fractions as parts of a set of objects.</p>	<p>Teacher's Guide: 22, 47, 48, 51, 60, 92, 94, 96, 97, 103, 105, 106, 107, 124</p>
<p>N.MR.04.21 Explain why equivalent fractions are equal, using models such as fraction strips or the number line for fractions with denominators of 12 or less, or equal to 100.</p>	<p>Teacher's Guide: 57, 60, 101, 103, 110, 123</p>
<p>N.MR.04.23 Understand the relationships among halves, fourths, and eighths and among thirds, sixths, and twelfths.</p>	<p>Teacher's Guide: 60, 103, 106</p>

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.ME.04.24 Know that fractions of the form m/n where m is greater than n, are greater than 1 and are called improper fractions; locate improper fractions on the number line.</p>	<p>Teacher's Guide: 106</p>
<p>N.MR.04.25 Write improper fractions as mixed numbers, and understand that a mixed number represents the number of "wholes" and the part of a whole remaining, e.g., $5/4 = 1 + \frac{1}{4} = 1 \frac{1}{4}$.</p>	<p>Teacher's Guide: 99, 106</p>
<p>N.MR.04.26 Compare and order up to three fractions with denominators 2, 4, and 8, and 3, 6, and 12, including improper fractions and mixed numbers.</p>	<p>Teacher's Guide: 100</p>

Add and subtract fractions

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.MR.04.27 Add and subtract fractions less than 1 with denominators through 12 and/or 100, in cases where the denominators are equal or when one denominator is a multiple of the other, e.g., $1/12 + 5/12 = 6/12$; $1/6 + 5/12 = 7/12$; $3/10 - 23/100 = 7/100$.</p>	<p>Teacher's Guide: 92, 96, 99, 101, 103, 104</p>

Add and subtract decimal fractions

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
<p>N.MR.04.31 For problems that use addition and subtraction of decimals through hundredths, represent with mathematical statements and solve.</p>	<p>Teacher's Guide: 58, 81, 88</p>
<p>N.FL.04.32 Add and subtract decimals through hundredths.</p>	<p>Teacher's Guide: 56, 60, 67, 68, 70, 81, 83</p>

E s t i m a t e

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
N.FL.04.34 Estimate the answers to calculations involving addition, subtraction, or multiplication.	Teacher's Guide: 33, 70, 85, 95, 117, 123
N.FL.04.35 Known when approximation is appropriate and use it to check the reasonableness of answers; be familiar with common place-value errors in calculations.	Teacher's Guide: 33, 56
N.FL.04.36 Make appropriate estimations and calculations fluently with whole numbers using mental math strategies.	Teacher's Guide: 56, 61, 70, 85, 99, 117, 120, 124

M e a s u r e m e n t

M e a s u r e u s i n g c o m m o n t o o l s a n d a p p r o p r i a t e u n i t s

M.UN.04.01 Measure using common tools and select appropriate units of measure.	Teacher's Guide: 20, 22, 26, 32, 35, 38, 58, 106
M.PS.04.02 Give answers to a reasonable degree of precision in the context of a given problem.	Teacher's Guide: 26, 33, 35, 38, 49, 52, 56, 60, 110

C o n v e r t m e a s u r e m e n t u n i t s

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
M.TE.04.05 Carry out the following conversions from one unit of measure to a larger or smaller unit of measure; meters to centimeters, kilograms to grams, liters to milliliters, hours to minutes, minutes to seconds, years to months, weeks to days, feet to inches, ounces to pounds (using numbers that involve only simple calculations).	Teacher's Guide: 22, 29, 31, 38, 45, 60, 70, 76, 81, 88, 92, 96, 103, 117, 120

Use perimeter and area formulas

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
M.TE.04.06 Know and understand the formulas for perimeter and area of a square and a rectangle; calculate the perimeters and areas of these shapes and combinations of these shapes using the formulas.	Teacher's Guide: 29, 43, 52, 61, 70, 76, 121
M.TE.04.07 Find one dimension of a rectangle given the other dimension and its perimeter or area.	Teacher's Guide: 70
M.PS.04.09 Solve contextual problems about perimeter and area of squares and rectangles in compound shapes.	Teacher's Guide: 43, 61, 70, 76

Understand right angles

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
M.TE.04.10 Identify right angles and compare angles to right angles.	Teacher's Guide: 110, 117, 120, 121

Geometry

Identify basic geometric shapes and their components, and solve problems

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
G.GS.04.02 Identify basic geometric shapes including isosceles, equilateral, and right triangles, and use their properties to solve problems.	Teacher's Guide: 38, 42, 97, 103
G.GS.04.03 Identify and count the faces, edges, and vertices of basic three dimensional geometric solids including cubes, rectangular prisms, and pyramids; describe the shape of their faces.	Teacher's Guide: 56, 60

Recognize symmetry and transformations

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
G.TR.04.04 Recognize plane figures that have line symmetry.	Teacher's Guide: 29, 40, 44, 47
G.TR.04.05 Recognize rigid motion transformations (flips, slides, turns) of a two-dimensional object.	Teacher's Guide: 26, 41, 44, 81, 104

Data and Probability

Grade Level Content Expectations, Fourth Grade	Summer Success: Math, Grade 4
D.RE.04.01 Construct tables and bar graphs from given data.	Teacher's Guide: 20, 29, 38, 49, 67, 70, 81, 85, 96, 99, 103, 110, 114, 117
D.RE.04.02 Order a given set of data, find the median, and specify the range of values.	Teacher's Guide: 88, 117
D.RE.04.03 Solve problems using data presented in tables and bar graphs, e.g., compare data represented in two bar graphs and read bar graphs showing two data sets.	The opportunity to address this objective is available on the following pages: Teacher's Guide: 33, 52, 86, 106



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Grade Level Content Expectations
Fifth Grade

Number and Operations

Understand division of whole numbers

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.MR.05.01 Understand the meaning of division of whole numbers with and without remainders; relate division to fractions and to repeated subtraction.</p>	<p>Teacher’s Guide: 31, 48, 50, 51, 53, 58, 68, 82, 101</p>
<p>N.MR.05.02 Relate division of whole numbers with remainders to the form $a=bq + r$, eg., $34 \div 5 = 6$, so $5 \times 6 + 4 = 34$; note remainder (4) is less than divisor (5)</p>	<p>The opportunity to address this objective is available on the following pages: Teacher’s Guide: 31, 48, 50, 51, 53, 61, 68, 84, ,101</p>
<p>N.MR.05.03 Write mathematical statements involving division for given situations.</p>	<p>Teacher’s Guide: 45, 48, 50, 51, 52</p>

Multiply and divide whole numbers

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.FL.05.04 Multiply a multi-digit number by a two-digit number; recognize and be able to explain common computational errors such as not accounting for place value.</p>	<p>Teacher’s Guide: 24, 26, 48, 61, 71, 101</p>
<p>N.FL.05.05 Solve applied problems involving multiplication and division of whole numbers.</p>	<p>Teacher’s Guide: 26, 33, 39, 42, 45, 49, 52, 58, 60, 110, 117</p>

Find prime factorization of whole numbers

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.MR.05.07 Find the prime factorization of numbers from 2 through 50, express in exponential notation, e.g., $24 = 2^3 \times 3$, and understand that every whole number greater than 1 is either prime or can be expressed as a product of primes.</p>	<p>Teacher's Guide: 89, 106</p>

Understand meaning of decimal fractions and percentages

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.ME.05.08 Understand the relative magnitude of ones, tenths, and hundredths and the relationship of each place value to the place to its right, e.g., one is 10 tenths, one tenth is 10 hundredths.</p>	<p>Teacher's Guide: 56, 60, 66, 70, 88, 115, 119,</p>
<p>N.ME.05.09 Understand percentages as parts out of 100, use % notation, and express a part of a whole as a percentage.</p>	<p>Teacher's Guide: 114, 118</p>

Understand fractions as division statements; find equivalent fractions

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.ME.05.10 Understand a fraction as a statement of division, e.g., $2 \div 3 = \text{two thirds}$, using simple fractions and pictures to represent</p>	<p>Teacher's Guide: 40, 56, 62, 63, 78, 81, 110</p>
<p>N.ME.05.11 Given two fractions, e.g., one-half and one-fourth, express them as fractions with a common denominator, but not necessarily a least common denominator, e.g., $\frac{1}{2} = \frac{4}{8}$ and $\frac{1}{4} = \frac{2}{8}$; use denominators less and 12 or factors of 100.</p>	<p>Teacher's Guide: 79, 81, 92, 93, 96, 98, 99, 101, 103, 104, 107, 108, 110, 113, 114, 116, 117, 123</p>

Multiply and divide fractions

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.ME.05.12 Find the product of two unit fractions with small denominators using an area model.</p>	<p>Teacher's Guide: 56, 101, 106, 114, 117, 120, 122</p>
<p>N.ME.05.13 Divide a fraction by a whole number and a whole number by a fraction, using simple unit fractions.</p>	<p>Teacher's Guide: 106, 117</p>

Add and subtract fractions using common denominators

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.FL.05.14 Add and subtract fractions with unlike denominators through 12 and/or 100, using the common denominator that is the product of the denominators of the 2 fractions, e.g., $\frac{3}{8} + \frac{7}{10}$: use 80 as the common denominator.</p>	<p>Teacher's Guide: 106, 110, 114, 115, 122</p>

Multiply and divide powers of ten

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.MR.05.15 Multiply a whole number by powers of 10; 0.01, 0.1, 10, 100, 1,000; and identify patterns.</p>	<p>Teacher's Guide: 22, 29, 38, 45, 47, 39, 52, 60</p>
<p>N.MR.05.16 Divide numbers by 10's, 100's, 1,000's using mental strategies.</p>	<p>Teacher's Guide: 26, 29, 33, 42, 45, 49, 52, 85, 115, 120</p>
<p>N.MR.05.17 Multiply one-digit and two-digit whole numbers by decimals up to two decimal places.</p>	<p>Teacher's Guide: 26, 85, 92</p>

Solve applied problems with fractions

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.FL.05.18 Use mathematical statements to represent an applied situation involving addition and subtraction of fractions.</p>	<p>Teacher's Guide: 56, 97, 99, 103, 106, 114</p>
<p>N.MR.05.19 Solve contextual problems that involve finding sums and differences of fractions with unlike denominators using knowledge of equivalent fractions.</p>	<p>Teacher's Guide: 20, 56, 96, 97, 99, 114</p>
<p>N.FL.05.20 Solve applied problems involving fractions and decimals; including rounding of answers and checking reasonableness.</p>	<p>Teacher's Guide: 20, 56, 63, 67, 68, 74, 78, 81, 94, 96, 97, 103, 106, 112, 114, 115, 117, 120</p>
<p>N.MR.05.21 Solve for the unknown in equations such as $_ + x = \frac{7}{12}$</p>	<p>Teacher's Guide: 97, 103, 110, 114, 120</p>

Express, interpret, and use ratios; find equivalences

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>N.MR.05.22 Express fractions and decimals as percentages and vice versa.</p>	<p>Teacher's Guide: 115, 118, 120</p>

Measurement

Know and convert among, measurement units within a given system

<p>M.UN.05.02 Know the units of measure of volume: cubic centimeter, cubic meter, cubic inches, cubic feet, cubic yards and use their abbreviations (cm_, m_, in_, ft_, yd_).</p>	<p>Teacher's Guide: 47, 115</p>
<p>M.UN.05.03 Compare the relative sizes of one cubic inch to one cubic foot, and one cubic centimeter to one cubic meter.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 47, 115</p>

Find areas of geometric shapes using formulas

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>M.PS.05.05 Represent relationships between areas of rectangles; triangles, and parallelograms using models.</p>	<p>Teacher's Guide: 22, 33, 42, 49, 86</p>
<p>M.TE.05.06 Understand and know how to use the area formula of a triangle: $A = \frac{1}{2}bh$ (where b is length of the base and h is height), and represent using models and manipulative.</p>	<p>Teacher's Guide: 22, 33</p>
<p>M.TE.05.07 Understand and know how to use the area formula for a parallelogram; $A = bh$, and represent using models and manipulative.</p>	<p>Teacher's Guide: 22, 33, 42, 49, 56, 86, 92, 96, 120</p>

Understand concept of volume

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>M.TE.05.09 Use filling (unit cubes or liquids), and counting or measuring to find the volume of a cube and rectangular prism.</p>	<p>Teacher's Guide: 81, 114</p>
<p>M.PS.05.10 Solve applied problems about the volumes of rectangular prisms using multiplication and division and using the appropriate units.</p>	<p>Teacher's Guide: 115</p>

Geometry

Know the meaning of angles and solve problems

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>G.TR.05.01 Associate an angle with a certain amount of turning; know that angles are measured in degrees; understand that 90°, 180°, 270°, and 360° are associated respectively, with $\frac{1}{4}$, $\frac{1}{2}$, and $\frac{3}{4}$, and full turns.</p>	<p>Teacher's Guide: 68, 86, 88</p>
<p>G.GS.05.02 Measure angles with a protractor and classify them as acute, right, obtuse, or straight.</p>	<p>Teacher's Guide: 68, 83, 86</p>
<p>G.GS.05.03 Identify and name angles on a straight line and vertical angles.</p>	<p>Teacher's Guide: 60, 68, 86</p>
<p>G.GS.05.04 Find unknown angles in problems involving angles on a straight line, angles surrounding a point and vertical angles.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 68, 86, 88</p>
<p>G.GS.05.05 Know that angles on a straight line add up to 180° and angles surrounding a point add up to 360°; justify informally by "surrounding" a point with angles.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 68, 86, 88</p>
<p>G.GS.05.06 Understand why the sum of the interior angles of a triangle is 180° and the sum of the interior angles of a quadrilateral is 360°, and use these properties to solve problems.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 83, 86, 88</p>

Solve problems about geometric shapes

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
<p>G.GS.05.07 Find unknown angles and sides using the properties of triangles, including right, isosceles, and equilateral triangles; parallelograms, including rectangles and rhombuses; and trapezoids.</p>	<p>Teacher's Guide: 68, 70, 74, 88</p>

Data and Probability

Construct and interpret line graphs

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
D.RE.05.01 Read and interpret line graphs, and solve problems based on line graphs, e.g., distance-time graphs, and problems with two or three line graphs on same axes, comparing different data.	The opportunity to address this objective is available on the following pages: Teacher's Guide: 29
D.RE.05.02 Construct line graphs from tables of data; include axis labels and scale.	The opportunity to address this objective is available on the following pages: Teacher's Guide: 29, 42, 49

Find and interpret mean and mode for a given set of data

Grade Level Content Expectations, Fifth Grade	Summer Success: Math, Grade 5
D.AN.05.03 Given a set of data, find and interpret the mean (using the concept of fair share) and mode.	Teacher's Guide: 50, 63, 70, 71, 88, 106, 120 The opportunity to address this objective is available on the following pages: Teacher's Guide: 26, 29, 33, 38
D.AN.05.04 Solve multi-step problems involving means.	The opportunity to address this objective is available on the following pages: Teacher's Guide: 26, 29, 33, 38, 52, 63, 70, 71, 88, 106, 120

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Grade Level Content Expectations
Sixth Grade

Number and Operations

Multiply and Divide Fractions

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
N.MR.06.01 Understand division of fractions as the inverse of multiplication. e.g., if $4/5 \div 2/3 = _$ then $2/3 \cdot _ = 4/5 \cdot 3/2 = 12/10$	Teacher's Guide: 21, 103
N.MR.06.02 Given an applied situation involving dividing fractions, write a mathematical statement to represent the situation.	Teacher's Guide: 103
N.MR.06.03 Solve for the unknown in equations as $_ \div _ = 1$, $_ \div _ = _$, and $_ = 1 \cdot _$	Teacher's Guide: 24, 26, 38, 103
N.MR.06.04 Multiply and divide any two fractions, including mixed numbers fluently.	Teacher's Guide: 21, 29, 38, 40, 42, 43, 49, 52, 103

Represent rational numbers as fractions or decimals

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
N.ME.06.05 Order rational numbers and place them on the number line.	Teacher's Guide: 22, 23, 24, 29, 38, 41, 42, 45, 45, 49, 52, 63

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.ME.06.06 Represent rational numbers as fractions or terminating decimals when possible, and translate between these representations.</p>	<p>Teacher's Guide: 24, 25, 26, 29, 32, 38, 42, 45, 46, 47, 49, 52, 53, 56, 60, 63, 67, 70</p>

Add and subtract integers and rational numbers

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.MR.06.08 Understand integer subtraction as the inverse of integer addition. Understand integer division as the inverse of integer multiplication.</p>	<p>Teacher's Guide: 29</p>
<p>N.FL.06.09 Add and multiply integers between -10 and 10; subtract and divide integers using the related facts. Use the number line and chip models for addition and subtraction.</p>	<p>Teacher's Guide: 22</p>
<p>N.FL.06.10 Add, subtract, multiply and divide positive rational numbers fluently.</p>	<p>Teacher's Guide: 22, 24, 25, 26, 29, 30, 31, 32, 45, 64, 74, 96, 97, 110, 116, 123</p>

Find equivalent ratios

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.ME.06.11 Find equivalent ratios by scaling up or scaling down.</p>	<p>Teacher's Guide: 28, 29, 35, 45, 46, 52, 60, 63, 115, 120</p>

Solve decimal, percentage and rational number problems

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.FL.06.12 Calculate part of a number given the percentage and the number.</p>	<p>Teacher's Guide: 24, 27, 33, 38, 39, 49, 50, 56, 63, 67, 70, 71, 85, 86, 118, 120, 123</p>
<p>N.MR.06.13 Solve contextual problems involving percentages such as sales taxes and tips.</p>	<p>Teacher's Guide: 22, 26, 27, 39, 45, 49, 53, 56, 60, 110, 112, 114, 115, 123</p>

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.FL.06.14 For applied situations, estimate the answers to calculation involving operations with rational numbers.</p>	<p>Teacher's Guide: 20, 22, 24, 26, 27, 33, 39, 42, 45, 47, 49</p>
<p>N.FL.06.15 Solve applied problems that use the four operations with appropriate decimal numbers.</p>	<p>Teacher's Guide: 24, 27, 33, 42, 45, 49, 50, 52, 56, 60, 70, 96, 99</p>

Use exponents

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.ME.06.16 Understand and use integer exponents, excluding powers of negative bases; express numbers in scientific notation.</p>	<p>Teacher's Guide: 58, 60, 63, 65, 67, 68, 70, 75, 85, 106, 107, 110, 114, 115, 116, 117, 118, 123</p>

Understand rational numbers and their location on the number line

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>N.ME.06.17 Locate negative rational numbers (including integers) on the number line; know that numbers and their negatives add to 0, and are on opposite sides and at equal distance from 0 on a number line.</p>	<p>Teacher's Guide: 92, 94, 102, 105</p>
<p>N.ME.06.18 Understand that rational numbers are quotients of integers (non zero denominators), e.g., a rational number is either a fraction or a negative fraction.</p>	<p>Teacher's Guide: 92, 94, 102, 105 The opportunity to address this objective is also available throughout the text.</p>
<p>N.ME.06.19 Understand that 0 is an integer that is neither negative nor positive.</p>	<p>The opportunity to address this objective is available throughout the text.</p>
<p>N.ME.06.20 Know that absolute value of a number is the value of the number ignoring the sign; or is the distance of the number from 0.</p>	<p>Teacher's Guide: 92, 94, 102, 105 The opportunity to address this objective is also available throughout the text.</p>

Algebra

Calculate rates

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>A.PA.06.01 Solve applied problems involving rates, including speed, e.g., if a car is going 50 mph, how far will it go in 3_ hours.</p>	<p>Teacher's Guide: 29, 74</p>

Understand the coordinate plane

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>A.RP.06.02 Plot ordered pairs of integers and use ordered pairs of integers to identify points in all four quadrants of the coordinate plane.</p>	<p>Teacher's Guide: 29</p>

Use variables, write expressions and equations, and combine like terms

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>A.FO.06.03 Use letters with units, to represent quantities in a variety of contexts, e.g., y lbs., k minutes, x cookies.</p>	<p>Teacher's Guide: 29, 30, 33, 38, 74, 89, 92, 96, 107, 120</p>
<p>A.FO.06.04 Distinguish between an algebraic expression and an equation.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher's Guide: 22, 29, 30, 33, 38, 49, 56, 60, 63, 67, 70, 74, 78, 81, 85, 88, 92, 99, 103, 110, 114, 117</p>
<p>A.FO.06.05 Use standard conventions for writing algebraic expressions, e.g., $2x + 1$ means "two times x plus 1" and $2(x + 1)$ means "two times the quantity (x + 1)"</p>	<p>Teacher's Guide: 33, 74, 101</p>
<p>A.FO.06.06 Represent information given in words using algebraic expressions and equations.</p>	<p>Teacher's Guide: 28, 29, 30, 56, 60, 63, 74, 92</p>

Represent linear functions using tables, equations, and graphs

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>A.RP.06.08 Understand that relationships between quantities can be suggested by graphs and tables.</p>	<p>Teacher's Guide: 26, 33, 52, 67, 85, 96, 99, 103, 106, 110, 117, 120, 123</p>
<p>A.RP.06.10 Represent simple relationships between quantities using verbal descriptions, formulas or equations, tables, and graphs, e.g., perimeter-side relationship for a square, distance-time graphs, and conversions such as feet to inches.</p>	<p>Teacher's Guide: 20, 22, 29, 52</p>

Solve equations

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>A.FO.06.11 Relate simple linear equations with integer coefficients, e.g., $3x = 8$ or $x + 5 = 10$, to particular contexts and solve.</p>	<p>Teacher's Guide: 14, 21, 24, 31, 68, 70, 92</p>
<p>A.FO.06.12 Understand that adding or subtracting the same number to both sides of an equation creates a new equation that has the same solution.</p>	<p>Teacher's Guide: 31</p>
<p>A.FO.06.13 Understand that multiplying or dividing both sides of an equation by the same non-zero number creates a new equation that has the same solutions.</p>	<p>Teacher's Guide: 21, 29, 38</p>

Measurement

Convert with measurement systems

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>M.UN.06.01 Convert between basic units of measurement within a single measurement system, e.g., square inches to square feet.</p>	<p>Teacher's Guide: 20, 29, 33, 38, 42, 56, 65, 96, 97, 101, 103</p>

Find the volume and surface area

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>M.PS.06.02 Draw patterns (of faces) for a cube and rectangular prism that, when cut, will cover the solid exactly (nets).</p>	<p>Teacher's Guide: 120, 121</p>
<p>M.TE.06.03 Compute the volume and surface area of cubes and rectangular prisms given the lengths of their sides, using formulas.</p>	<p>Teacher's Guide: 33, 34, 120, 121</p>

Geometry

Understand and apply basic properties

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>G.GS.06.01 Understand and apply basic properties of lines, angles, and triangles, including</p> <ul style="list-style-type: none"> • Triangle inequality • Relationships of vertical angles, complementary angles, supplementary angles • Congruence of corresponding and alternate interior angles when parallel lines are cut by a transversal, and that such congruencies imply parallel lines • Locate interior and exterior angles of any triangle, and use the property that an exterior angles of a triangle is equal to the sum of the remote (opposite) interior angles • Know that the sum of the exterior angles of a convex polygon is 360° 	<p>Teacher's Guide: 38, 42, 43, 45, 49, 60, 65, 81, 82, 94, 118</p>

Construct geometric shapes

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>G.SR. 06. 05 Use paper folding to perform basic geometric constructions of perpendicular lines, midpoints of line segments and angle bisectors; justify informally.</p>	<p>Teacher's Guide: 116</p>

Data and Probability

Understand the concept of probability and solve problems

Grade Level Content Expectations, Sixth Grade	Summer Success: Math, Grade 6
<p>D.PR.06.01 Express probabilities as fractions, decimals, or percentages between 0 and 1; know that 0 probability means an event will not occur and that probability 1 means an event will occur.</p>	<p>Teacher's Guide: 20, 22, 26, 31, 43</p>
<p>D.PR.06.02 Compute probabilities of events from simple experiments with equally likely outcomes, e.g., tossing dice, flipping coins, spinning spinners, by listing all possibilities and finding the fraction that meets given conditions.</p>	<p>Teacher's Guide: 20, 22, 26, 31, 43, 56, 60, 74</p>

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Grade Level Content Expectations
Seventh Grade

Number and Operations

Understand derived quantities

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
N.MR.07.02 Solve problems involving derived quantities such as density, velocity, and weighted averages.	Teacher's Guide: 94, 97, 104, 107, 110, 114, 121

Understand and solve problems involving rates, ratios, and proportions

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
N.MR.07.04 Convert ratio quantities between different systems of units, such as feet per second to miles per hour.	The opportunity to address this objective is available on the following pages: Teacher's Guide: 78, 81, 88
N.FL.07.05 Solve proportion problems using such methods as unit rate, scaling, finding equivalent fractions, and solving the proportion equation $a/b = c/d$; know how to see patterns about proportional situations in tables.	Teacher's Guide: 26, 29, 33, 38, 42, 47, 49, 50, 52, 81, 85, 88, 98, 105

Recognize irrational numbers

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
N.MR.07.06 Understand the concept of square root and cube root, and estimate using calculators.	Teacher's Guide: 22, 24, 92, 96, 99, 103, 106

C o m p u t e w i t h r a t i o n a l n u m b e r s

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>N.FL.07.07 Solve problems involving operations with integers.</p>	<p>Teacher’s Guide: 20, 25, 28, 29, 34, 35, 38, 43, 48, 49, 56, 58, 60, 63, 65, 67, 68, 70, 71, 82, 85, 87, 94, 104, 107, 112, 115, 118</p>
<p>N.FL.07.08 Add, subtract, multiply, and divide positive and negative rational numbers fluently.</p>	<p>Teacher’s Guide: 20, 23, 28, 30, 38, 43, 45, 56, 61, 62, 63, 74, 76, 79, 85, 86, 89, 92, 122</p>
<p>N.FL.07.09 Estimate results of computations with rational numbers.</p>	<p>Teacher’s Guide: 45, 88</p>

A l g e b r a

U n d e r s t a n d a n d a p p l y d i r e c t l y p r o p o r t i o n a l r e l a t i o n s h i p s a n d r e l a t e t o l i n e a r r e l a t i o n s h i p s

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>A.PA.07.01 Recognize when information given in a table, graph, or formula suggests a directly proportional or linear relationship.</p>	<p>Teacher’s Guide: 33, 45, 47, 53, 63, 66, 95, 99, 113</p>
<p>A.RP.07.02 Represent directly proportional and linear relationships using verbal descriptions, tables, graphs, and formulas, and translate among these representations.</p>	<p>Teacher’s Guide: 47, 63, 66</p>
<p>A.PA.07.04 For directly proportional or linear situations, solve applied problems using graphs and equations, e.g., the heights and volume of a container with uniform cross-section; height of water in a tank being filled at a constant rate; degrees Celsius and degrees Fahrenheit; distance and time under constant speed.</p>	<p>Teacher’s Guide: 99, 103, 120, 121, 123, 124</p>

Apply basic properties of real numbers in algebraic contexts

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>A.PA.07.11 Understand and use basic properties of real numbers; additive and multiplicative identities, additive and multiplicative inverses, commutativity, associativity, and the distributive property of multiplication over addition.</p>	<p>Teacher's Guide: 29, 63, 67, 69, 78, 79, 86, 88, 96</p>

Combine algebraic expressions and solve equations

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>A.FO.07.12 Add, subtract, and multiply simple algebraic expressions of the first degree, e.g., $(92x + 8y) - 5x + y$, or $x(x + 2)$ and justify using properties of real numbers.</p>	<p>Teacher's Guide: 22, 29, 33, 49, 60, 67, 69, 106</p>
<p>A.FO.07.13 From applied situations, generate and solve linear equations of the form $ax + b = c$ and $ax + b = cx + d$, and interpret solutions.</p>	<p>Teacher's Guide: 123</p>

Geometry

Draw and construct geometric objects

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>G.SR.07.01 Use a ruler and other tools to draw squares, rectangles, triangles, and parallelograms with specified dimensions.</p>	<p>Teacher's Guide: 20, 22</p>
<p>G.SR.07.02 Use compass and straightedge to perform basic geometric constructions: the perpendicular bisector of a segment, an equilateral triangle, and the bisector of an angle; understand informal justifications.</p>	<p>Teacher's Guide: 20, 22</p>

Understand the concept of similar polygons, and solve related problems

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>G.TR.07.03 Understand that in similar polygons, corresponding angles are congruent and the ratios of corresponding sides are equal; understand the concepts of similar figures and scale factor.</p>	<p>Teacher’s Guide: 20, 22, 23, 42, 49, 88, 96, 103, 106</p>
<p>G.TR.07.04 Solve problems about similar figures and scale drawings.</p>	<p>Teacher’s Guide: 22, 26, 29, 63, 88, 120</p>
<p>G.TR.07.05 Show that two triangles are similar using the criteria: corresponding angles are congruent (AAA similarity); the ratios of two pairs of corresponding sides are equal and the included angles are congruent (SAS similarity); ratios of all pairs of corresponding sides are equal (SSS similarity); use these criteria to solve problems and to justify arguments.</p>	<p>Teacher’s Guide: 24, 81</p>
<p>G.TR.07.06 Understand and use the fact that when two triangles are similar with scale factor of r, their areas are related by a factor of r^2.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher’s Guide: 24, 81</p>

Data and Probability

Represent and interpret data

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>D.RE.07.01 Convert between basic units of measurement within a single measurement system, e.g., square inches to square feet.</p>	<p>Teacher’s Guide: 22, 26, 33, 38, 42, 60, 63, 67, 70, 74, 85</p>
<p>D.AN.07.02 Create and interpret scatter plots and find line of best fit; use an estimated line of best fit to answer questions about the data.</p>	<p>Teacher’s Guide: 45, 49, 52, 92, 96, 99, 103, 106</p>

Compute statistics about data sets

Grade Level Content Expectations, Seventh Grade	Summer Success: Math, Grade 7
<p>D.AN.07.03 Represent and interpret data using circle graphs, stem and leaf plots, histograms, and box-and-whisker plots, and select appropriate representation to address specific questions.</p>	<p>Teacher's Guide: 20, 113, 114, 117, 119</p>

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Grade Level Content Expectations
Eighth Grade

Number and Operations

Understand derived quantities

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>N.ME.08.01 Solve problems involving derived quantities such as density, velocity, and weighted averages.</p>	<p>Teacher's Guide: 38, 42, 45, 52, 74, 83, 88</p>
<p>N.ME.08.02 Understand meanings for zero and negative integer exponents.</p>	<p>Teacher's Guide: 56, 58, 60, 62, 99, 101, 102, 103, 104</p>
<p>N.ME.08.03 Understand that in decimal form, rational numbers either terminate or eventually repeat, and that calculators truncate or round repeating decimals; locate rational numbers on the number line; know fraction forms of common repeating decimals, e.g., $0.1 = 1/9$, $0.3 = 1/3$</p>	<p>Teacher's Guide: 33</p>
<p>N.ME.08.04 Understand that irrational numbers are those that cannot be expressed as the quotient of two integers, and cannot be represented by terminating or repeating decimals; approximate the position of familiar irrational numbers, e.g., $\sqrt{2}$, $\sqrt{3}$, π on the number line.</p>	<p>Teacher's Guide: 74, 81, 83, 85, 88</p>
<p>N.FL.08.05 Estimate and solve problems with square roots and cube roots using calculators.</p>	<p>Teacher's Guide: 45, 76, 77, 81, 83, 85, 86, 105</p>
<p>N.FL.08.06 Find square roots of perfect squares and approximate the square roots of non-perfect squares by locating between consecutive integers, e.g., $\sqrt{130}$ is between 11 and 12.</p>	<p>Teacher's Guide: 45, 76, 77, 81, 86</p>

Solve problems

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>N.MR.08.07 Understand percent increase and percent decrease in both sum and product form, e.g., 3% increase of a quantity x is $x + .03x = 1.03x$.</p>	<p>Teacher's Guide: 21</p>
<p>N.MR.08.08 Solve problems involving percent increases and decreases.</p>	<p>Teacher's Guide: 21, 24, 29, 33, 35</p>
<p>N.FL.08.11 Solve problems involving ratio units, such as miles per hour, dollars per pound, or persons per square mile.</p>	<p>Teacher's Guide: 26, 110</p>

Algebra

Understand the concept of non-linear functions using basic examples

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>A.RP.08.01 Identify and represent linear functions, quadratic functions, and other simple functions including inversely proportional relationships ($y = k/x$); cubic ($y = ax^3$); roots ($y = \sqrt{x}$); and exponentials ($y = a^x$, a is greater than 0); using tables, graphs, and equations.</p>	<p>Teacher's Guide: 81, 112, 114, 115, 118</p>
<p>A.PA.08.03 Recognize basic functions in problem context, e.g., area of a circle is πr^2, volume of a sphere is $\frac{4}{3}\pi r^3$, and represent those using tables, graphs, and formulas.</p>	<p>Teacher's Guide: 22, 33, 38, 43, 45, 47, 49, 50, 60, 63, 74, 76, 118, 120, 121, 124</p>
<p>A.RP.08.04 Use the vertical line test to determine if a graph represents a function in one variable.</p>	<p>Teacher's Guide: 22, 81</p>

Understand and represent quadratic functions

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>A.RP.08.05 Relate quadratic functions in factored form and vertex form to their graphs, and vice versa; in particular, note that solutions of a quadratic equation are the x intercepts of the corresponding quadratic function.</p>	<p>Teacher’s Guide: 121</p>
<p>A.RP.08.06 Graph factorable quadratic functions, finding where the graph intersects the x-axis and the coordinates of the vertex; use words “parabola” and “roots”; include functions in vertex form and those with leading coefficient -1, e.g., $y = x^2 - 36$, $y = (x-2)^2 - 9$; $y = -x^2$; $y = -(x-3)^2$</p>	<p>Teacher’s Guide: 121</p>

Recognize, represent, and apply common formulas

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>A.FO.08.07 Recognize and apply the common formulas: $(a + b)^2 = a^2 + 2ab + b^2$ $(a - b)^2 = a^2 - 2ab + b^2$ $(a + b)(a - b) = a^2 - b^2$; represent geometrically.</p>	<p>Teacher’s Guide: 53, 70</p>
<p>A.FO.08.08 Factor simple quadratic expressions with integer coefficients, e.g., $x^2 + 6x + 9$, $x^2 + 2x - 3$, and $x^2 - 4$; solve quadratic equations, e.g., $x^2 = 16$ or $x^2 = 5$ (by taking square roots); $x^2 - x - 6 = 0$, $x^2 - 2x = 15$ (by factoring); verify solutions by evaluation.</p>	<p>Teacher’s Guide: 120</p>

Understand solutions and solve equations, simultaneous equations, and linear inequalities

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>A.FO. 08.10 Understand that to solve the equation $f(x) = g(x)$ means to find all values of x for which the equation is true, e.g., determine whether a given value, or values from a given set, is a solution of an equation (0 is a solution of $3x^2 + 2 = 4x + 2$, but 1 is not a solution).</p>	<p>Teacher’s Guide: 117</p>

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>A.FO. 08.11 Solve simultaneous linear equations in two variables by graphing by substitution, and by linear combination; estimate solutions using graphs; include examples with no solutions and infinitely many solutions.</p>	<p>Teacher's Guide: 110, 114, 121</p>
<p>A.FO. 08.13 Set up and solve applied problems involving simultaneous linear equations and linear inequalities.</p>	<p>Teacher's Guide: 45, 61, 96, 97, 98, 99, 101, 103, 106, 116, 117</p>

G e o m e t r y

U n d e r s t a n d a n d u s e t h e P y t h a g o r e a n T h e o r e m

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>G.GS.08.01 Understand at least one proof of the Pythagorean Theorem; use the Pythagorean Theorem and its converse to solve applied problems including perimeter, area, and volume problems.</p>	<p>Teacher's Guide: 80, 81, 85, 88</p>

S o l v e p r o b l e m s a b o u t g e o m e t r i c f i g u r e s

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>G.SR.08.03 Understand the definition of a circle; know and use the formula for circumference and area of a circle to solve problems.</p>	<p>Teacher's Guide: 106</p>
<p>G.SR.08.04 Find area and perimeter of complex figures by subdividing them into basic shapes (quadrilaterals, triangles, circles).</p>	<p>Teacher's Guide: 20, 45, 67, 68, 84, 85</p>
<p>G.SR.08.05 Solve applied problems involving areas of triangles, quadrilaterals, and circles.</p>	<p>Teacher's Guide: 22, 33, 38, 40, 45, 47, 49, 63, 74, 76, 82, 84, 100</p>

Understand concepts of volume and surface area, and apply formulas

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>G.SR.08.06 Know the volume formulas for generalized cylinders ((area of base) x height), and spheres ($\frac{4}{3}\pi(\text{radius})^3$) and apply them to solve problems.</p>	<p>Teacher's Guide: 120, 121, 123, 124</p>
<p>G.SR.08.07 Understand the concept of surface area, and find the surface area of prisms, cones, spheres, pyramids, and cylinders.</p>	<p>Teacher's Guide: 110, 112, 114, 115, 117, 118</p>

Visualize solids

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>G.SR.08.08 Sketch a variety of two-dimensional representations of three-dimensional solids including orthogonal views (top, front, and side), picture views (projective or isometric), and nets; use such two-dimensional representations to help solve problems.</p>	<p>Teacher's Guide: 112, 115, 118, 120, 124</p>

Data and Probability

Draw, explain, and justify conclusions based on data

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>D.AN.08.01 Determine which measure of central tendency (mean, median, and mode) best represents a data set, e.g., salaries, home prices, for answering certain questions; justify the choice made.</p>	<p>Teacher's Guide: 38, 74, 78, 81, 83, 103</p>
<p>D.AN.08.02 Recognize practices of collecting and displaying data that may bias the presentation or analysis.</p>	<p>Teacher's Guide: 26, 42, 45, 96, 99, 103, 106</p>

Understand probability concepts for simple and compound events

Grade Level Content Expectations, Eighth Grade	Summer Success: Math, Grade 8
<p>D.PR.08.03 Compute relative frequencies from a table of experimental results for a repeated event. Interpret the results using relationship of probability to relative frequency.</p>	<p>Teacher’s Guide: 110</p>
<p>D.PR.08.05 Find and/or compare the theoretical probability, the experimental probability, and/or the relative frequency of a given event.</p>	<p>The opportunity to address this objective is available on the following pages: Teacher’s Guide: 45, 56, 70, 92, 96, 99, 103, 106, 114, 120, 123</p>
<p>D.PR.08.06 Understand the difference between independent and dependent events, and recognize common misconceptions involving probability, e.g., Alice rolls a 6 on a dice three times in a row; she is just as likely to roll a 6 on the fourth roll as she was on any previous roll.</p>	<p>Teacher’s Guide: 110, 117, 121, 123</p>



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