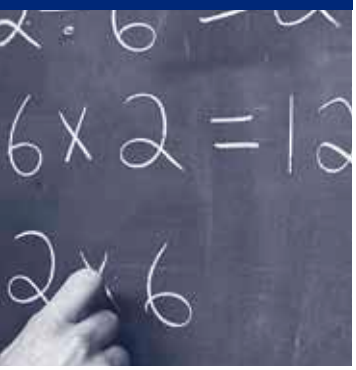
Core Knowledge Sequence

Content and Skill Guidelines for Grades K–8

Core Knowledge®



Mathematics: Kindergarten

Teachers: Mathematics has its own vocabulary and patterns of thinking. It is a discipline with its own language and conventions. Thus, while some lessons may offer occasional opportunities for linking mathematics to other disciplines, it is critically important to attend to math as math. From the earliest years, mathematics requires incremental review and steady practice: not only the diligent effort required to master basic facts and operations, but also thoughtful and varied practice that approaches problems from a variety of angles, and gives children a variety of opportunities to apply the same concept or operation in different types of situations. While it is important to work toward the development of "higher-order problem-solving skills," it is equally important—indeed, it is prerequisite to achieving "higher order" skills—to have a sound grasp of basic facts, and an automatic fluency with fundamental operations.

I. Patterns and Classification

- Establish concepts of likeness and difference by sorting and classifying objects according to various attributes: size, shape, color, amount, function, etc.
- Define a set by the common property of its elements.
- In a collection of objects that includes a given set and an item that does not belong, indicate which item does not belong.
- Moving from concrete objects to pictorial representations, recognize patterns and predict the extension of a pattern.
- Extend a sequence of ordered concrete objects.

II. Numbers and Number Sense

- Using concrete objects and pictorial representations, compare sets:
  same as (equal to)
  more than
  less than
  most
  least
- Count
  forward from 1 to 31, first beginning with 1, and later from any given number
  backward from 10
  from 1 to 10 by twos
  by fives and tens to 50
- Write numbers 1 to 31 (with special attention to the difference between certain written symbols, such as 6 and 9; 2 and 5; 1 and 7; 12 and 21, etc.).
- Count and write the number of objects in a set.
- Given a number, identify one more, one less.
- Identify ordinal position, first (1st) through sixth (6th).
- Identify pairs.
- Interpret simple pictorial graphs.
- Identify $\frac{1}{2}$ as one of two equal parts of a region or object; find $\frac{1}{2}$ of a set of concrete objects.

III. Money

- Identify pennies, nickels, dimes, and quarters.
- Identify the one-dollar bill.
- Identify the dollar sign ($) and cents sign (¢).
- Write money amounts using the cents sign (¢).

IV. Computation

- Add and subtract to ten, using concrete objects.
- Recognize the meaning of the plus sign (+).
- Subtraction: the concept of "taking away"; recognize the meaning of the minus sign (-).

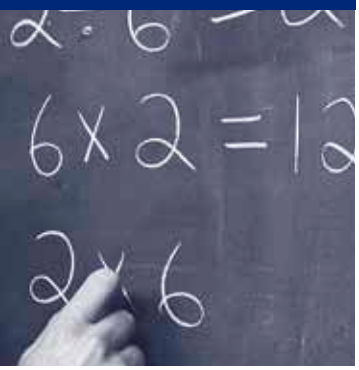
V. Measurement

- Identify familiar instruments of measurement, such as ruler, scale, thermometer.
- Compare objects according to:
  - Linear measure
    - long and short; longer than, shorter than
    - measure length using non-standard units
    - begin to measure length in inches
    - height: taller than, shorter than
  - Weight
    - heavy, light
    - heavier than, lighter than
  - Capacity (volume)
    - full and empty
    - less full than, as full as, fuller than
  - Temperature: hotter and colder
- Time
  - Sequence events: before and after; first, next, last.
  - Compare duration of events: which takes more or less time.
  - Read a clock face and tell time to the hour.
  - Know the days of the week and the months of the year.
  - Orientation in time: today, yesterday, tomorrow; morning, afternoon; this morning vs. yesterday morning, etc.

VI. Geometry

- Identify left and right hand.
- Identify top, bottom, middle.
- Know and use terms of orientation and relative position, such as:
  - closed, open
  - on, under, over
  - in front, in back (behind)
  - between, in the middle of
  - next to, beside
  - inside, outside
  - around
  - far from, near
  - above, below
  - to the right of, to the left of
  - here, there
- Identify and sort basic plane figures: square, rectangle, triangle, circle.
- Identify basic shapes in a variety of common objects and artifacts (windows, pictures, books, buildings, cars, etc.).
- Recognize shapes as the same or different.
- Make congruent shapes and designs.
- Compare size of basic plane figures (larger, smaller).

Mathematics: Grade 1



Teachers: Mathematics has its own vocabulary and patterns of thinking. It is a discipline with its own language and conventions. Thus, while some lessons may offer occasional opportunities for linking mathematics to other disciplines, it is critically important to attend to math as math. From the earliest years, mathematics requires incremental review and steady practice: not only the diligent effort required to master basic facts and operations, but also thoughtful and varied practice that approaches problems from a variety of angles, and gives children a variety of opportunities to apply the same concept or operation in different types of situations. While it is important to work toward the development of "higher-order problem-solving skills," it is equally important—indeed, it is prerequisite to achieving "higher order" skills—to have a sound grasp of basic facts, and an automatic fluency with fundamental operations.

I. Patterns and Classification

- Establish concepts of likeness and difference by sorting and classifying objects according to various attributes: size, shape, color, amount, function, etc.
- Define a set by the common property of its elements.
- In a collection of objects that includes a given set and an item that does not belong, indicate which item does not belong.
- Recognize patterns and predict the extension of a pattern.

II. Numbers and Number Sense

Teachers: Review and build on topics from kindergarten.

- Write numbers 0 - 100.
- Count from 0 - 100 by ones; twos; fives; tens.
- Count by tens from a given single-digit number.
- Count forward and backwards.
- Use tallies.
- Identify ordinal position, 1st to 10th.
- Identify dozen; half-dozen; pair.
- Recognize place value: ones, tens, hundreds.
- Identify more and less; counting how many more or less.
- Given a number, identify one more and one less; ten more and ten less.
- Compare quantities using the signs <, >, and = .
- Recognize fractions as part of a whole: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$
- Create and interpret simple pictorial graphs and bar graphs.

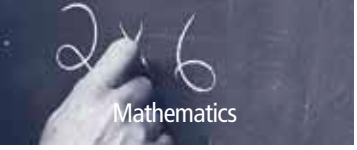
III. Money

- Identify and recognize relative value of penny, nickel, dime, quarter.
- Recognize and use dollar ($) and cents (¢) signs.
- Show how different combinations of coins equal the same amounts of money.

IV. Computation

A. ADDITION (using concrete objects, and paper and pencil)

- Know the meaning of the plus (+) sign.
- Know what a "sum" is.
- Know addition facts to 10 + 10 (untimed mastery).
- Add in any order.
- Know what happens when you add zero.
- Know how to write addition problems horizontally and vertically.
- Know that when you add 3 numbers, you get the same sum regardless of grouping of addends.
- Solve two-digit addition problems with and without regrouping.



B. SUBTRACTION (using concrete objects, and paper and pencil)

- Understand subtraction as "taking away."
- Know the meaning of the minus sign (-).
- Know what a "difference" is.
- Know subtraction facts corresponding to addition facts (untimed mastery).
- Know how to write subtraction problems horizontally and vertically.
- Solve two-digit subtraction problems with and without regrouping.
- Mentally subtract 10 from a two-digit number.

C. SOLVING PROBLEMS AND EQUATIONS

- Write an addition or subtraction equation to solve basic one-step story and picture problems.
- Solve simple equations in the form of ___ - 2 = 7; 5 + ___ = 7.

V. Measurement

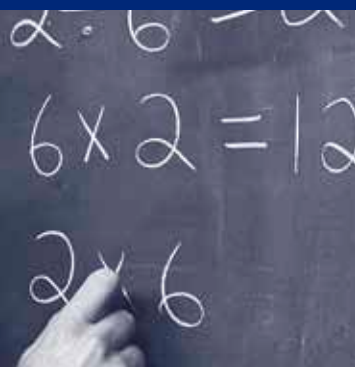
- Identify familiar instruments of measurement, such as ruler, scale, thermometer.
- Compare objects according to:
  - Linear measure
    - Measure length using non-standard units.
    - Measure length in inches and feet, and in centimeters.
    - Measure and draw line segments in inches and centimeters.
  - Weight
    - Compare weights of objects using a balance scale.
    - Measure weight in non-standard units and in pounds.
  - Capacity (volume)
    - Estimate and measure capacity in cups.
    - Identify quart, gallon.
  - Temperature: associate temperature in degrees Fahrenheit with weather.
- Time
  - Sequence events: before and after; first, next, last.
  - Compare duration of events: which takes more or less time.
  - Read a clock face and tell time to the half-hour.
  - Know the days of the week and the months of the year, both in order and out of sequence.
  - Orientation in time: today, yesterday, tomorrow; morning, afternoon, evening, night; this morning vs. yesterday morning, etc.

VI. Geometry

- Identify left and right hand.
- Identify top, bottom, middle.
- Know and use terms of orientation and relative position, such as:

closed, open	around
on, under, over	far from, near
in front, in back (behind)	above, below
between, in the middle of	to the right of, to the left of
next to, beside	here, there
inside, outside	

- Identify and draw basic plane figures: square, rectangle, triangle, circle.
- Describe square, rectangle, triangle according to number of sides.
- Identify basic solid figures: sphere, cube, cone.
- Identify basic shapes in a variety of common objects and artifacts (balls, cans, windows, pictures, books, buildings, cars, etc.).
- Make congruent shapes and designs.



Mathematics: Grade 2

Teachers: Mathematics has its own vocabulary and patterns of thinking. It is a discipline with its own language and conventions. Thus, while some lessons may offer occasional opportunities for linking mathematics to other disciplines, it is critically important to attend to math as math. From the earliest years, mathematics requires incremental review and steady practice: not only the diligent effort required to master basic facts and operations, but also thoughtful and varied practice that approaches problems from a variety of angles, and gives children a variety of opportunities to apply the same concept or operation in different types of situations. While it is important to work toward the development of "higher-order problem-solving skills," it is equally important—indeed, it is prerequisite to achieving higher order skills—to have a sound grasp of basic facts, and an automatic fluency with fundamental operations.

I. Numbers and Number Sense

- Write numbers to 1,000.
- Read and write words for numbers from one to one-hundred.
- Order and compare numbers to 1,000, using the signs <, >, and = .
- Count
  - by twos, threes, fives, and tens
  - by tens from any given number
  - by hundreds to 1,000; by fifties to 1,000
  - forward and backward
- Use a number line.
- Use tallies.
- Identify ordinal position, 1st to 20th, and write words for ordinal numbers, first to twentieth.
- Identify even and odd numbers.
- Identify dozen; half-dozen; pair.
- Recognize place value: ones, tens, hundreds, thousands.
- Write numbers up to hundreds in expanded form (for example 64 = 60 + 4; 367 = 300 + 60 + 7).
- Given a number, identify one more and one less; ten more and ten less.
- Round to the nearest ten.
- Create and interpret simple bar graphs.
- Identify and extend numerical and symbolic patterns.
- Record numeric data systematically and find the lowest and highest values in a data set.

II. Fractions

- Recognize these fractions as part of a whole set or region and write the corresponding numerical symbols: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{10}$.
- Recognize fractions that are equal to 1.

III. Money

- Recognize relative values of a penny, nickel, dime, quarter, and dollar.
- Write amounts of money using $ and ¢ signs, and the decimal point.
- Show how different combinations of coins equal the same amounts of money.
- Add and subtract amounts of money.

IV. Computation

A. ADDITION

- Achieve timed mastery of addition facts (2 seconds).
- Recognize what an addend is.
- Know how to write addition problems horizontally and vertically.
- Know how to add in any order and check a sum by changing the order of the addends.
- Estimate the sum.
- Solve two-digit and three-digit addition problems with and without regrouping.
- Find the sum (up to 999) of any two whole numbers.
- Add three two-digit numbers.
- Practice doubling (adding a number to itself).

B. SUBTRACTION

- Understand the inverse relation between addition and subtraction; use addition to check subtraction.
- Know addition and subtraction "fact families."
- Achieve mastery of subtraction facts.
- Estimate the difference.
- Know how to write subtraction problems horizontally and vertically.
- Solve two-digit and three-digit subtraction problems with and without regrouping.
- Given two whole numbers of 999 or less, find the difference.

C. INTRODUCTION TO MULTIPLICATION

- Recognize the "times" sign (**x**).
- Know what "factor" and "product" mean.
- Understand that you can multiply numbers in any order.
- Multiplication facts: know the product of any single-digit number x 1, 2, 3, 4, 5.
- Know what happens when you multiply by 1, by 0, and by 10.
- Practice simple word problems involving multiplication.

D. SOLVING PROBLEMS AND EQUATIONS

- Solve basic word problems.
- Write and solve simple equations in the form of ___ - 9 = 7; 7 + ___ = 16; 4 x ___ = 8.

V. Measurement

A. LINEAR MEASURE

- Make linear measurements in feet and inches, and in centimeters.
- Know that one foot = 12 inches.
- Know abbreviations: ft., in.
- Measure and draw line segments in inches to 1/2 inch, and in centimeters.
- Estimate linear measurements, then measure to check estimates.

B. WEIGHT

- Compare weights of objects using a balance scale.
- Estimate and measure weight in pounds, and know abbreviation: lb.

C. CAPACITY (VOLUME)

- Estimate and measure capacity in cups.
- Measure liquid volumes: cups, pints, quarts, gallons.
- Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart).

D. TEMPERATURE

- Measure and record temperature in degrees Fahrenheit to the nearest 2 degrees.
- Know the degree sign: °

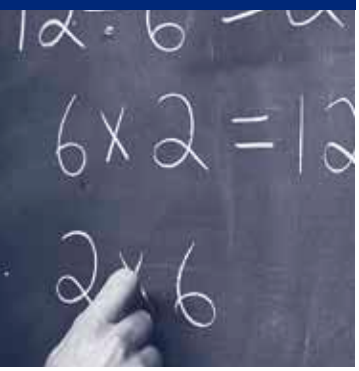
E. TIME

- Read a clock face and tell time to five-minute intervals.
- Know how to distinguish time as A.M. or P.M.
- Understand noon and midnight.
- Solve problems on elapsed time (how much time has passed?).
- Using a calendar, identify the date, day of the week, month, and year.
- Write the date using words and numbers.

VI. Geometry

Teachers: Review and reinforce topics from grade 1 as necessary (left and right, orientation and position, etc.)

- Identify and draw basic plane figures: square, rectangle, triangle, circle.
- Describe square, rectangle, triangle according to number of sides; distinguish between square and rectangle as regards length of sides (a square has sides of equal length).
- Measure perimeter in inches of squares and rectangles.
- Identify solid figures—sphere, cube, pyramid, cone, cylinder—and associate solid figures with planar shapes: sphere (circle), cube (square), pyramid (triangle).
- Make congruent shapes and designs.
- Identify lines as horizontal; vertical; perpendicular; parallel.
- Name lines and line segments (for example, line AB; segment CD).
- Identify a line of symmetry, and create simple symmetric figures.



Mathematics: Grade 3

Teachers: Mathematics has its own vocabulary and patterns of thinking. It is a discipline with its own language and conventions. Thus, while some lessons may offer occasional opportunities for linking mathematics to other disciplines, it is critically important to attend to math as math. From the earliest years, mathematics requires incremental review and steady practice: not only the diligent effort required to master basic facts and operations, but also thoughtful and varied practice that approaches problems from a variety of angles, and gives children a variety of opportunities to apply the same concept or operation in different types of situations. While it is important to work toward the development of "higher-order problem-solving skills," it is equally important—indeed, it is prerequisite to achieving "higher order" skills—to have a sound grasp of basic facts, and an automatic fluency with fundamental operations.

I. Numbers and Number Sense

- Read and write numbers (in digits and words) up to six digits.
- Recognize place value up to hundred thousands.
- Order and compare numbers to 999,999, using the signs <, >, and = .
- Count by twos, threes, fives, and tens; count by tens from any given number.
- Write numbers in expanded form.
- Use a number line.
- Identify ordinal position, 1st to 100th.
- Review: even and odd numbers; dozen; half-dozen; pair.
- Round to the nearest ten; to the nearest hundred.
- Identify perfect squares (and square roots) to 100, and recognize the square root sign: $\sqrt{}$
- Identify Roman numerals from 1 to 20 (I - XX).
- Understand what negative numbers are in relation to familiar uses (such as temperatures below zero).
- Locate positive and negative whole numbers on a number line.
- Create and interpret bar graphs and line graphs.
- Record outcomes for a simple event (for example, tossing a die) and display the results graphically.

II. Fractions and Decimals

- Recognize fractions to $\frac{1}{10}$ and fractions whose denominator is 100.
- Identify numerator and denominator.
- Write mixed numbers.
- Recognize equivalent fractions (for example, $\frac{1}{2} = \frac{3}{6}$).
- Compare fractions with like denominators, using the signs <, >, and = .
- Know and write decimal equivalents to $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$.
- Read and write decimals to the hundredths.

III. Money

- Write amounts of money using $ and ¢ signs, and the decimal point.
- Make change, using as few coins as possible.
- Add and subtract amounts of money.
- Multiply and divide amounts of money by small whole numbers.

IV. Computation

Teachers: Children should know their basic addition and subtraction facts; review and reinforce as necessary to ensure mastery.

A. ADDITION

- Review and practice basic addition facts.
- Mentally estimate a sum.
- Use mental computation strategies.
- Addition with and without regrouping: find the sum (up to 10,000) of any two whole numbers.

B. SUBTRACTION

- Understand addition and subtraction as inverse operations; use addition to check subtraction.
- Review and practice basic subtraction facts.
- Mentally estimate the difference.
- Use mental computation strategies.
- Subtraction with and without regrouping: given two whole numbers of 10,000 or less, find the difference.

C. MULTIPLICATION

- Master basic multiplication facts to 10 x 10.
- Mentally multiply, by 10, 100, and 1,000.
- Multiply two whole numbers, with and without regrouping, in which one factor is 9 or less and the other is a multi-digit number up to three digits.
- Write numbers in expanded form using multiplication, for example: 9,278 = (9 x 1,000) + (2 x 100) + (7 x 10) + 8.
- Estimate a product.
- Solve word problems involving multiplication.

D. DIVISION

- Understand multiplication and division as inverse operations.
- Know the meaning of dividend, divisor, and quotient.
- Know basic division facts to 100 ÷ 10.
- Know that you cannot divide by 0.
- Know that any number divided by 1 = that number.
- Divide two- and three-digit dividends by one-digit divisors.
- Solve division problems with remainders.
- Check division by multiplying (and adding remainder).

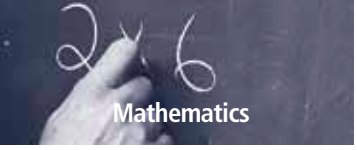
E. SOLVING PROBLEMS AND EQUATIONS

- Solve two-step word problems.
- Solve equations in the form of ___ x 9 = 63; 81 ÷ ___ = 9.
- Solve problems with more than one operation, as in (43 - 32) x (5 + 3) = ___.
- Read and write expressions that use parentheses to indicate order of multiple operations.

V. Measurement

A. LINEAR MEASURE

- Make linear measurements in yards, feet, and inches; and, in centimeters and meters.
- Know that one foot = 12 inches; one yard = 36 inches; 3 feet = 1 yard; 1 meter = 100 centimeters; 1 meter is a little more than one yard.
- Measure and draw line segments in inches (to 1/4 inch), and in centimeters.
- Estimate linear measurements, then measure to check estimates.



B. WEIGHT

- Compare weights of objects using a balance scale.
- Estimate and measure weight in pounds and ounces; grams and kilograms.
- Know abbreviations: lb., oz., g, kg

C. CAPACITY (VOLUME)

- Estimate and measure liquid capacity in cups, pints, quarts, gallons, and liters.
- Know that 1 quart = 2 pints; 1 gallon = 4 quarts.
- Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart).

D. TEMPERATURE

- Measure and record temperature in degrees Fahrenheit and Celsius.
- Know the degree sign: °
- Identify freezing point of water as 32° F = 0° C.

E. TIME

- Read a clock face and tell time to the minute as either A.M. or P.M.; tell time in terms of both "minutes before" and "minutes after" the hour.
- Solve problems on elapsed time (how much time has passed?).
- Using a calendar, identify the date, day of the week, month, and year.
- Write the date using words (for name of month) and numbers, and only numbers.

VI. Geometry

- Identify lines as horizontal, vertical, perpendicular, or parallel.
- Name lines and line segments (for example, line AB; segment CD).
- Polygons: recognize vertex (plural: vertices); identify sides as line segments (for example, side CD); identify pentagon, hexagon, and octagon (regular).
- Identify angles by letter names (for example, ∠ ABC); identify a right angle; know that there are four right angles in a square or rectangle.
- Compute area in square inches (in^2) and square centimeters (cm^2).
- Recognize and draw congruent figures; identify a line of symmetry, and create symmetric figures.
- Identify solid figures: sphere, cube, rectangular solid, pyramid, cone, cylinder.

SAXON MATH™ K–4

Scope and Sequence

The Scope and Sequence for the *Saxon K–4* mathematics series is intended to help educators view the progression of mathematical topics throughout the series. Topics are grouped into nine strands:

1. Numbers and Operations
2. Measurement
3. Geometry
4. Patterns, Algebra, and Functions
5. Statistics, Data Analysis, and Probability
6. Problem Solving
7. Communication
8. Mathematical Reasoning
9. Connections

The locators in the Scope and Sequence identify lessons in which direct instruction of a topic is presented. The first lesson where the concept is taught is referenced, and subsequent lessons are referenced only when the concept is extended. Occasional references to spans of The Meetings are included to show the daily practice of expanding skills and concepts.

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SAXON MATH™
SCOPE AND SEQUENCE

The locators in this Scope and Sequence indicate where direct instruction on each topic can be found. Locators refer to lessons and Meetings (M). In *Saxon Math K*, every tenth lesson has two parts, and in *Saxon Math 1, 2, 3,* and *4* every fifth lesson has two parts; locators for these lessons are labeled -1 or -2.

	Saxon Math K	Saxon Math 1	Saxon Math 2	Saxon Math 3	Saxon Math 4
Numbers and Operations					
Number Sense and Numeration					
Counts by 1's	M1; 7, 41, 61	2, 20-1, 34, 99, 131	1, 76, 77	23	22
Counts backward	109	4, 34, 43, 56	M5	M1–120-2	
Counts by 2's	125; M22	47, 51, 56, 64	M14	29, 51	26
Counts by 5's	91, 92; M18	70-1, 98	32, 46, 49, 78	13, 23, 30-2, 39	22
Counts by 10's	64, 65, 67, 68; M11	43, 46, 85-1, 90-1, 131	28, 76, 77, 95-2	13, 23, 64	22, 33
Counts by 100's		93, 131, 132	76, 77, 95-2	M3–9, 17–21	97
Counts by 25's			93	36	12
Counts by 3's			M78	M41–54	30-1
Counts by 4's			M106	M51–66	26
Counts by 6's				M81–91	26
Counts by 7's				M24–41	30-1
Counts by 8's				M91–103	26
Counts by 9's				M76–85-2	30-1
Counts by 12's				M31–40-2	22
Counts by 1,000's				130-2	97
Counts by ½'s				54	14
Counts by ¼'s				M86–94	69
Counts by 11's					30-1
Matches sets and numbers	24, 42, 62, 73	2, 5, 9, 10-1, 19			
Counts and groups numbers in tens and ones	M4A; 13, 64, 65, 67, 68	46, 84, 93, 131, 133	37, 76, 113, 95-2	22, 52, 64, 67, 76	11, 13, 16, 41
Uses expanded form to represent numbers	67, 81, 113	M3–135	84	41, 104, 112	53
Writes digits 0–9	12	3, 5, 8			
Writes numbers using words		63		68, 78, 103, 106	32, 52
Reads and writes whole numbers to 30	21, 74, 111, 120-1, 130-1	3, 5, 8, 11–33	1, 4	3, 8	1
Reads and writes whole numbers to 100 (2-digit numbers above 30)		34–111	1, 4	3, 8	6
Reads and writes whole numbers to 1,000 (3-digit numbers)		112–135	74, 76	27, 34, 41, 64	25-1

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	Saxon Math K	Saxon Math 1	Saxon Math 2	Saxon Math 3	Saxon Math 4
Numbers and Operations, ***continued***					
Number Sense and Numeration, ***continued***					
Reads and writes whole numbers to 10,000 (4-digit numbers)				64, 104	51, 52
Reads and writes whole numbers to 100,000 (5-digit numbers)				103, 130-2	51, 52
Reads and writes whole numbers to 1,000,000 (6-digit numbers)				103, 130-2	51, 52
Reads and writes whole numbers to 1,000,000,000 (9-digit numbers)					51, 52
Identifies numbers before, after, and between	48, 75	17, 52, 92			
Identifies numbers on a hundred number chart	M3, 4A	16, 34, 43, 52	1, 2, 13, 36	3, 9, 14	
Compares 1- and/or 2-digit whole numbers	71, 99, 102	9, 40-1, 92, 108	8, 81	8, 13	25-1
Orders 1- and/or 2-digit whole numbers	21, 35, 74	4, 9, 17, 20-1, 32, 92	49, 94	8, 13	25-1, 33
Compares 3-digit or larger whole numbers			81	34, 130-2	25-1, 33
Orders 3-digit or larger whole numbers			74, 77	34, 130-2	25-1, 33
Rounds numbers to the nearest ten		115-2	94, 98	18, 19, 31, 52, 62	13, 33, 119
Rounds numbers to the nearest hundred or thousand				72, 130-2	33, 119
Identifies place value for each digit in numbers to 100		85-1, 131, 133	38, 42, 76, 84	3	25-1, 33
Identifies place value for each digit in numbers to 1,000		131, 133	76, 84, 109	27, 41, 64, 76	51, 53
Identifies place value for each digit in numbers to 1,000,000				134	59
Identifies place value for each digit in numbers to 100,000,000				134	95-1
Represents 2-digit whole numbers using concrete materials and/or pictures	80-1, 132	51, 85-1, 131, 133	53, 74	15-1, 22, 37, 63, 116	70-1
Represents 3-digit or larger whole numbers using concrete materials and/or pictures		131, 133	76, 77	64	66
Identifies and describes equivalent sets	117, 118	4, 9, 82	128		
Estimates and counts collections of objects	64; M17	55-2, 84, 85-1, 131	95-2	130-2, 135	90-1, 128
Represents equivalent forms of the same number	65, 92, 113	21, 94, 101	34, 41, 42	22, 76, 94, 119, 131	5, 22, 26, 30-1, 36, 53, 97
Compares sets of objects and identifies sets with more, fewer, and the same	17, 71	9, 38, 76, 82, 108	8, 77, 81	30-2, 40-2, 55-2, A	12, 51

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Numbers and Operations, *continued*					
Number Sense and Numeration, *continued*					
Identifies sets with the greatest and least number of objects	58, 98	7, 9, 38	49, 74, 81	30-2, 40-2, 55-2, A	
Renames numbers using regrouping		85-2, 86	61, 63, 68, 73	22, 52, 67, 76	11, 16
Identifies multiples of a number			103, 130-1, 130-2	M71–121	3, 6, 22, 26, 29, 30-1, 97
Identifies factors of a number			115-1, 120-1, 125-1	120-2	26, 61, 94, 107, 109
Identifies prime and composite numbers				120-2	94, 96
Identifies the least common multiple of two numbers				M121–135	29
Identifies the greatest common factor of two numbers					107, 109
Squares numbers				63, 81	116, 122
Identifies perfect squares				63	116
Identifies and simplifies expressions with exponents				63	116, 117, 128
Finds square roots of perfect squares				81, D	116
Identifies and approximates square roots					122
Identifies cube roots and perfect cubes					128
Identifies rational numbers from pictures and draws pictures to show rational numbers	17, 24, 50-2	18, 55-1, 87, 107, 122	19, 23, 24, 34, 41, 83	11, 37, 40-1, 56, 130-2	17, 68, 79, 91
Locates rational numbers on a number line	109	77	25-1, 56, 94	51, 54, 55-2, 99, 123	27, 33, 88, 93, 99
Identifies even and odd numbers	125	51, 56, 58, 64, 68	13, 96, 97, 128	9	26
Identifies ordinal position	28, 37, 46, 59	11, 22, 65-2	7, 14, 16, 20-1	77	2
Identifies and creates pairs		64	37, 108	9	
Identifies dozen and half dozen		103	67	26	
Reads and writes Roman numerals				75-2	98
Identifies the approximate value of π					132
Concepts of Whole Number Operations					
Shows the meaning of addition	18, 27, 50-2, 89, 119	12, 15-1, 19, 21, 25-1, 36, 94, 114	5, 10-1, 29, 44	5, 11, 15-1, 52, 53, 126	5
Acts out to show addition situations	18, 27, 50-2, 89, 119	12, 15-1, 19, 25-1	8, 10-1	11	45-1

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Numbers and Operations, ***continued***					
Concepts of Whole Number Operations, ***continued***					
Uses manipulatives to model and solve addition problems	18, 27, 50-2, 89, 119	23, 32, 58, 76, 94	20-1, 61, 104, A	15-1, 73, 74, 93	45-1
Draws pictures to model and solve addition problems	50-2, 121, 122, 126	15-1, 21, 25-1	22	11	45-1
Creates addition problem situations	27, 73, 89, 119	15-1, 25-1	8, 22	11, 35-2, 66	45-1
Writes number sentences to show addition	117	21, 25-1	22	11, 35-2, 66	45-1
Identifies addends and sums		21, 40-1, 94	10-1	5, 15-1, 20-1	5
Identifies and uses the commutative and associative properties of addition		94, 114	10-1, 58	5	5
Shows the meaning of subtraction	18, 27, 80-2, 89, 127	12, 15-1, 33, 34, 44, 101	11, 22, 29, 60-1	10-1, 11, 20-1, 35-2, 91, 92, 126	23
Acts out to show subtraction situations	18, 27, 80-2, 89, 127	12, 15-1, 33, 101	11	11	59
Uses manipulatives to model and solve subtraction problems	18, 27, 80-2, 89, 127	49, 68, 101, 121, 132	87, 88, 127	73, 74, 91, 93	45-1
Draws pictures to model and solve subtraction problems	100-2, 128, 130-2	15-1, 33	22	11, 67	59
Creates subtraction problem situations	27, 89, 127	15-1, 33	11, 22	35-2	45-1
Writes number sentences to show subtraction		33, 101	22, 89, 91	11, 35-2	45-1
Identifies differences		125-1	75-1, 119	10-1, 60-1, 65-1, 75-1	11, 21
Uses the inverse relationship between subtraction and addition to check answers		101, 121, 125-1	29, 75-1, 80-1, 91	10-1, 20-1, 67, 92	62, 66
Writes addition and subtraction fact families		132, 134	29; M50-1, 53	15-1, 20-1, 25-1, 30-1, 35-1, 40-1	
Shows the meaning of multiplication		46, 93	92, 110-1, 116, 121, 130-2	45-1, 56, 57, 87, 116, 126	22
Acts out to show multiplication situations		46, 93	116	56	23, 31, 45-1, 60-1
Uses manipulatives to model and solve multiplication problems		46, 93	116	70-1, 87, 88	60-1, 61
Draws pictures to model and solve multiplication problems		79	110-1, 116	56, 57	23
Writes number sentences to show multiplication			92, 110-1, 117	56, 57	23
Identifies factors and products			115-1, 120-1, 125-1	45-1, 120-2	26

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Numbers and Operations, *continued*					
Concepts of Whole Number Operations, *continued*					
Makes, labels, and writes number sentences for an array			121, 122	87, 88	60-1, 61
Identifies and uses the commutative and associative properties of multiplication			115-1	85-1, 118, 120-1	26, 94, 97
Shows the meaning of division	70-1, 97, 102, 115, 125	109	96, 97, 120-1, 128	37, 107, 108	70-1, 83
Acts out to show division situations	70-1, 97, 102, 115, 125	109	128, 133	107	70-1
Uses manipulatives to model and solve division problems	70-1, 97, 102, 115, 125	109	120-1, 125-1	37, 107	70-1
Draws pictures to model and solve division problems			96, 97	37, 107	70-1
Writes number sentences to show division			128	107, 108	62, 76
Identifies the properties of 0 or 1 in multiplication and/or division			130-1	45-1, 59, 85-1	26
Uses the inverse relationship between division and multiplication to check answers			128	59, 105-1, 122	62, 76, 77, 83, 87, 101
Writes multiplication and division fact families				105-1	
Identifies quotients, dividends, and/or divisors				59	76
Uses a calculator to explore mathematical operations		B	A	D	90-1, 120-1, 122, 130-1, 132
Whole Number Computation					
Addition					
Uses concrete objects or pictures to model and solve addition problems	18, 27, 50-2, 89, 119	23, 32, 58, 76, 94	28, 61, 115-1	15-1, 73, 74, 76, 93	45-1
Identifies one more than a number	109	32, 34, 36, 37	2, 10-1		
Identifies ten more than a number		89, 90-1, 91	20-1, 36, 44	14, 31	
Masters addition facts to 18		27, 36, 41, 76, 94, 105-1	5, 10-1, 35-1, 55-1	5, 20-1, 25-1, 30-1, 35-1, 40-1	20-2, 25-2, 30-2, 35-2, 40-2
Identifies missing addends		94	35-1	5, 66, 101	55-1, 63
Estimates a sum		111, 115-1	98, 109	31, 52, 53, 73	13, 33, 41
Adds using mental computation		M41, 45-2, 66–70-1	20-1, 36, 44, 98	14, 31, 33, 42, 69	6, 11, 16

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Numbers and Operations, *continued*					
Whole Number Computation, *continued*					
Addition, continued					
Adds three or more single-digit numbers		114	58	38, 133	8
Adds 2-digit numbers without regrouping		73–75-1, 81, 91	44, 53, 54, 73	31, 33	11, 13
Adds two 2- or 3-digit numbers		73–75-1, 81, 86, 91	36, 53, 54, 61–64, 68, 73, 79, 109	52, 53, 69, 76	11, 13, 16, 33
Adds 3-digit numbers and money amounts (decimals)			109	82, 89, 106	13, 41, 42, 95-1
Adds three or more multidigit numbers			68	89	16
Adds two 4-digit or larger numbers				106	41
Adds whole numbers and money amounts (decimals) to $99,999.99				82, 89, 106	6, 8, 12, 13, 41, 95-1
Uses addition to check subtraction problems		101, 121, 125-1	29, 91	10-1, 20-1, 67, 92	66
Uses estimation to check the reasonableness of calculated results			109, B	52, 53	13, 33, 41
Identifies a missing digit in an addition problem			35-1, 40-1, 45-1, 50-1, 55-1	44	9, 55-1, 63
Solves problems involving addition	18, 50-2, 89, 119, 121	12, 15-1, 25-1	8, 22	11, 35-2, 49, 50-1, 52, 53, 90-1	45-1, 55-1, 59, 63
Writes story problems for addition number sentences				11, 35-2, 93, 126	45-1
Subtraction					
Uses concrete objects or pictures to model and solve subtraction problems	18, 27, 80-2, 89, 127	49, 68, 101, 121, 132	85-1, 87	73, 74, 91, 93	45-1
Identifies one less than a number	109	44, 45-1	2, 65-1		
Identifies ten less than a number		123	71	14, 62	
Masters subtraction facts with minuends to 10		68, 101, 102, 121, 132	29, 60-1, 65-1, 70-1, 75-1, 80-1, 85-1, 90-1, 95-1, 100-1, 105-1	10-1, 50-1	50-2, 55-2, 60-2, 65-2, 130-1
Masters subtraction facts with minuends of 11 to 18		A	60-1, 65-1, 70-1, 75-1, 80-1, 85-1, 90-1, 95-1, 100-1, 105-1	60-1, 65-1, 75-1, 80-1	50-2, 55-2, 60-2, 65-2, 130-1
Checks subtraction answers using addition		101, 121, 125-1	29, 91	10-1, 20-1, 67, 92	66
Estimates a difference			119	62, 72	58

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Numbers and Operations, ***continued***					
Whole Number Computation, ***continued***					
Subtraction, continued					
Subtracts using mental computation			71	14, 62, 69	58
Subtracts 2-digit numbers without regrouping		127	71	14, 62	
Subtracts 2- or 3-digit numbers			87–89, 91, 119	67, 69, 72, 91, 92	66
Subtracts 3-digit numbers and money amounts (decimals)			119	92	66
Subtracts 4-digit or larger numbers					66
Solves problems involving subtraction	18, 27, 89, 127, 128	12, 15-1, 33	11, 22, 89	11, 35-2, 67, 86, 93, 96, 120-1	45-1, 55-1, 59, 63
Writes story problems for subtraction number sentences				35-2, 67, 75-1	45-1
Multiplication					
Doubles a number			132	70-1	125-1
Masters multiplying by 0, 1, 2, 3, 4, and 5			103, 110-1, 115-1, 120-1, 125-1, 130-1	45-1, 70-1, 85-1, 95-1, 100-1	55-1, 60-1, 65-1, 105-2, 110-2
Masters multiplying by 6, 7, 8, and 9				55-1, 110-1, 115-1, 120-1	55-1, 60-1, 65-1, 105-2, 110-2
Multiplies by 10, 100, 1,000, and/or 10,000			36, 103	45-1, 103	36
Multiplies by multiples of 10, 100, 1,000, and/or 10,000			92, 103	109, 122	97
Multiplies using mental computation			92, 103, 110-1, 115-1, 120-1, 125-1, 130-1	112	36, 38, 49, 73, 97
Multiplies a 2-digit number by a 1-digit number			103, A	116	38, 49, 73
Multiplies a 3-digit or larger number by a 1-digit number			103	116	54
Multiplies a 2-digit or larger number by a 2-digit number					73, 80-1
Makes and uses a multiplication table			130-2	120-1	43
Uses multiplication to check division problems				105-1, 124, 132	62, 76, 77, 83, 87, 101
Multiplies using the multiplication algorithm				116	49, 54, 73, 80-1
Solves problems involving multiplication			92, 103, 110-1, 116, 117	40-1, 56, 57, 63, 88, 125-1, 135	73, 80-1, 123

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Numbers and Operations, ***continued***					
Whole Number Computation, ***continued***					
Division					
Divides sets of objects into equal groups	97, 102, 125	109	120-1, 125-1, 133	9, 56, 57	
Divides by 2	70-1, 125, 134	18, 67	128	37	62
Masters division facts				59, 90-1	105-1, 110-1, 115-2, 120-2, 135
Writes division problems in three ways				59, 90-1, 105-1	62, 76
Divides using mental computation				122	104
Divides 2- and/or 3-digit multiples of 10 by a 1-digit number				122	87, 101
Divides a 2-, 3-, and/or 4-digit number by a 1-digit number				122, 124, 132	76, 77, 83, 84, 87, 90-1, 101, 123
Checks division answers using multipication				105-1, 124, 132	62, 76, 77, 83, 87, 101
Divides using the division algorithm				132	77, 87, 101
Solves problems involving division	70-1, 97, 115, 132, 134	109	128, 133	37, 107, 108, 124, 125-1	70-1, 76, 83, 123
Fractions and Decimals					
Identifies one half and/or one fourth of a whole	70-1, 115, 132, 134	18, 55-1, 67, 88	19, 23, 24, 34, 39, 41	17, 24, 25-2	17, 40-1
Identifies a fractional part of a whole	70-1, 115, 132, 134	18, 55-1, 67, 88, 107, 117	19, 23, 24, 39	17, 21, 24, 25-2, 93, 94	17, 40-1
Writes a fraction to show a part of a whole		55-1	59, 83	24, 25-2, 74, 93, 94	17, 40-1
Represents and writes mixed numbers			111, 112	98, 99, 119	78, 79, 84
Finds half of a set of objects	97	109	83, 96, 97	37, 111	106
Indentifies a fractional part of a set		122	59, 83, 96, 97, 128	26, 61, 111	106
Writes a fraction to show a part of a set			59, 83	26, 61	106
Compares fractions	134	67, 107	34, 41	73, 74, 93, 94	27, 28, 68, 69, 88
Recognizes and identifies equivalent fractions			41	94	68, 96
Orders fractions				73, 74, 93, 94	27, 28, 68, 69, 88
Simplifies fractions					98, 109
Writes fraction number sentences that equal 1				25-2	

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Numbers and Operations, *continued*					
Fractions and Decimals, *continued*					
Adds and subtracts fractions				73, 74, 93, 94	91, 95-1, 102, 127
Uses pictures to represent decimal fractions				131	91, 95-1
Writes tenths or hundredths using common and decimal fractions				78, 119, 131	88, 95-1, 118
Identifies fraction, decimal, and/or percent equivalents				78, 119, 131	118
Finds the percent of a number					120-1
Adds money amounts (decimals)			53, 54, 61, 62, 109	82, 89, 106	6, 8, 12, 13, 41, 95-1
Subtracts money amounts (decimals)			87, 88, 119	96	66, 95-1
Multiplies and/or divides money amounts (decimals)				M127	38, 54, 77, 87, 101, 120-1, 123
Money					
Identifies and counts pennies	41, 42, 44, 51, 130-1	16, 51, 53, 85-1, 116	28, 51, 107	23, 36	12
Identifies and counts dimes	65, 67, 68, 113	46, 53, 66, 85-1, 116	28, 51, 107	13, 23, 36	12
Identifies and counts nickels	91, 92, 94, 96, 113	98, 99, 116, 126	46, 51, 107	13, 23, 36	12
Identifies and/or counts quarters	113, 116	126	93, 107	36	12
Identifies one-dollar bills	113	105-2, 113	127	36	
Finds the value of a set of coins	51, 67, 92, 113, 116	46, 66, 99, 116, 126	46	13, 23, 36	12
Trades pennies for dimes and nickels	65, 91	53, 85-2, 86, 98	42, 61–63, 87–89	22, 96	41
Compares the values of sets of coins			46	13	12
Finds the value of a set of coins and bills					63
Reads and writes money amounts to $1.00 using dollar and cent symbols	49, 51	16, 66, 105-2, 113	86, 109, 119	28, 36	13
Reads and writes money amounts to $10.00			86, 109, 119	28, 36	14, 123
Reads and writes money amounts to $99,999.99				78, 106	66
Selects coins for a given amount	116	66, 126	28	22, 79	12
Pays for items and/or makes change using coins	51, 68, 94, 116	66, 73–75-1, 86	127	22, 79	12
Makes change from $1.00, $5.00, and/or $10.00			127	102; M121–135	55-1, 63
Counts bills		105-2, 113		76, 91	63
Pays for items using bills		113	127	76, 91	63

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Numbers and Operations, ***continued***					
Money, ***continued***					
Adds and subtracts money amounts (decimals)		73–75-1, 86, 127	53, 54, 61–64, 109, 119	82, 89, 96, 106	13, 41, 95-1, 66, 67
Writes checks				78, 106	32, 42
Balances a checkbook register					67
Completes a catalog order form					42
Determines unit cost				125-1	
Estimates and finds amount of sales tax				M127	130-1
Measurement					
Calendar and Time					
Identifies seasons	82, 135				2
Identifies today's date	M1–25	1	M1–135	M1–11	1
Identifies dates on a calendar	M1–25	M1–135	M1–135	1	1, 2, 24
Solves problems using a calendar	M19, 21, 23, 25	M18–135	M12	84	24; M1–135
Writes the date using digits			47; M48, 49	16	1
Identifies yesterday, today, and tomorrow	M19	M1–135	M1	M1–5	
Identifies days of the week and/or months of the year	M1–25	M1–135	16	M1–35	1, 24
Identifies weekdays and days of the weekend			16	M1–11	
Identifies morning, afternoon, evening, and night	124	11, 35-1	67	39	7
Identifies a.m., p.m., noon, and midnight			67	39	7
Uses digital and analog clocks to tell and show time	45, 47	48, 57, 87	3, 12, 26, 78, 106, 123	1, 4, 39, 71, 97	7
Tells and shows time to the hour	45, 47	48, 57	3, 12; M4–26	1	7
Tells and shows time to the half hour		87	26	4	7
Tells and shows time to the quarter hour			123	97	34
Tells and shows time to the 5-minute interval and/or minute			78	39, 71	7
Tells and shows time to the second					7, 34
Estimates time to the nearest half hour				4	
Identifies days of the week when regularly scheduled events occur	40-1				
Sequences daily events	30-1, 124	11, 35-1			
Compares events according to duration	65, 91, 113	100-1			

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Measurement, *continued*					
Calendar and Time, *continued*					
Orders events by time		11, 35-1, 100-1			
Identifies activities that take one hour, one minute, and one second			106		
Identifies equivalent units of time			106	39, 84	7, 22, 24, 36
Finds elapsed time			12	1, 4, 65-2	44
Identifies United States time zones					37
Temperature					
Identifies cold, cool, warm, and/or hot	100-1	128, C	M1–14		
Compares differences in hourly, daily, and/or seasonal temperature	82, 124, 135	128; M2–135	M1–135	70-2	
Compares situations and objects by relative temperature	100-1	C		46	
Reads a Fahrenheit thermometer		128, C	27, 69	18, 29, 46	74, 75-1
Estimates temperature			27	46, 84	74
Identifies common temperatures			69	18, 29, 46	74
Reads a Celsius thermometer				83	74, 75-1
Linear Measure					
Compares the length or height of objects	83, 120-2, 131	4, 7, 62, 104	8, 55-2, 99, 102	85-2	18, 19, 43, 88, 126
Orders objects by length or height	84, 87, 93	9, 62	99		
Creates a measuring tool	126	104			
Estimates and measures length or distance using nonstandard units	87, 106, 126	35-2, 62, 95-2	40-2	85-2	
Estimates length or distance	106	35-2, 95-2, 104	55-2	6, 32, 85-2	39, 88, 103
Selects and/or uses appropriate tools for measuring length	133	71, 97, 104, 119	102	6, 54, 85-2	39
Measures length using customary units (inch, foot, and yard)	133	97, 104	40-2, 43, 55-2, 72, 99, 102, 104	6, 85-2	14, 15-1, 18, 28, 39, 69, 103, 126
Draws line segments using customary units (inch)		97	56, 72	6	15-1, 19, 28, 69, 126
Measures length using metric units (centimeter, millimeter, and meter)		119	102, 104	32, 85-2, 114	14, 15-1, 39, 88
Draws line segments using metric units (centimeter and millimeter)		119	102	32, 43, 114, 119	15-1
Compares the size of the unit and the number of units used to measure an object		95-2	40-2		56
Identifies equivalent units of linear measure				85-2, 114	14, 22, 28, 29
Uses a scale to find distance on a map				125-2, 127	43

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Measurement, continued					
Weight (Mass)					
Compares and orders objects by weight (mass)	53, 72	29, 39	35-2, 110-2, 131	95-2	72
Weighs objects using nonstandard units	72	39, 135	35-2, 40-2		
Estimates weight (mass)	72, 106	29, 39, 135	35-2, 131	95-2	72
Selects and/or uses appropriate tools for measuring weight	53, 72	135	131	95-2	72
Identifies customary and/or metric units of mass		135	110-2, 131	95-2	72
Weighs objects using customary or metric units			110-2, 131	95-2	72
Capacity (Volume)					
Compares and/or orders containers by capacity	90-1, 120-1	50-1	75-2	45-2, 60-2	92
Identifies customary and/or metric units of capacity (cup, quart, gallon, and liter)	78	50-1, 110-1	45-2, 50-2, 75-2	45-2, 60-2, 65-2	92, 125-1
Selects and/or uses appropriate tools for measuring capacity	77, 78	50-1, 55-2, 110-1	50-2	45-2, 60-2	92, 125-1
Estimates capacity	78, 90-1, 120-1	50-1, 55-2, 110-1	75-2	45-2, 55-2	92
Measures capacity	77, 78, 90-1, 120-1	50-1, 55-2, 110-1	45-2, 50-2, 75-2	45-2, 60-2	92
Identifies and uses measuring cups	77	50-1, 110-1	45-2, 50-2, 75-2	45-2, 60-2, 65-2	125-1
Identifies and uses measuring spoons (tablespoon, teaspoon, and ½ teaspoon)			45-2	60-2	125-1
Follows a recipe and measures ingredients	77		45-2, 50-2	60-2, 65-2	125-1
Identifies equivalent units of capacity			75-2	45-2, 60-2	92
Area, Perimeter, and Volume					
Compares and orders objects by size (area)	105, 112, 115	75-2	9	10-2, 15-2, 63	82
Finds area using nonstandard units		75-2	100-2, 115-2, 129	88	82
Estimates area		75-2	115-2	88	82
Finds area of a rectangle			115-2, 129	88	56, 57
Finds the length of a side of a square given the area				81	
Finds perimeter of a polygon			104	49, 50-2	103
Uses perimeter formulas			104	49, 50-2, 88	134
Compares, estimates, and measures circumference					132

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Measurement, *continued*					
Area, Perimeter, and Volume, *continued*					
Finds volume of a rectangular prism				121	129
Finds volume of a cube				121	128
Geometry					
Spatial Relationships and Geometric Shapes					
Identifies right and left	103	7	1, 2		
Identifies first, last, between, and middle	28, 37, 46, 48, 75	2, 3, 5, 8, 11	7, 16		
Describes, compares, and orders concrete objects by relative position and attributes	12, 23, 32, 43, 53, 72, 83, 84, 87, 93	7, 11, 14, 17, 52	6, 9, 21, 25-2, 30-2		
Gives and follows directions about location	12, 48, 75	7, 19, 38	1, 2, 7		
Arranges and describes objects in relative space	12	7, 19, 38	124		
Makes and covers designs with pattern blocks or tangrams	14, 15, 29, 79, 105, 108, 114	31, 42, 60-1, 65-1	7, 10-2, 15-2, 85-2, 90-2, 100-2	10-2, 15-2	71
Makes and copies designs on a geoboard	56, 57, 63, 86, 100-2	14, 83, 96	57, 60-2, 65-2, 70-2		65-1, 81, 85-1, 86
Creates, identifies, and/or draws congruent shapes, designs, and/or line segments	63, 86	45-2, 83, 96	60-2, 65-2, 108, 118	6, 12, 17, 32, 58	71
Creates and/or identifies similar shapes	105		60-2, 65-2		71
Combines geometric shapes to make new shapes		75-2	24, 70-2, 80-2	50-2	56
Identifies, describes, sorts, and/or compares two-dimensional geometric shapes	19, 23, 31, 57	6, 13, 24, 26, 124	18, 60-2, 65-2	7, 10-2, 100-2, 115-2	64, 71, 81, 82, 85-1, 86
Identifies, describes, and classifies polygons	19, 23, 31, 54, 85, 105	6, 13, 24, 26, 124	6, 18, 21, 25-2, 30-2, 57	7, 10-2, 20-2, 50-2, 100-2	64, 71, 81, 82, 85-1, 86
Identifies angles and sides		6, 13, 14, 24	57, 114, 118, C	7, 20-2, 43, 100-2	81, 114
Identifies parallel lines and line segments			108, 118	48, 100-2, 105-2	65-1
Identifies intersecting and perpendicular lines and line segments			118	105-2, 129	65-1
Identifies horizontal, vertical, and oblique line segments			33, 43, 104	48, 105-2	15-1
Names line segments				43	14, 15-1, 28, 69, 126

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Geometry, *continued*					
Spatial Relationships and Geometric Shapes, *continued*					
Identifies right angles			114, 118, C	7, 100-2, 113	65-1, 85-1, 108, 111, 121, 124
Identifies acute and obtuse angles			C	113	124, 131, 135
Identifies straight angles					108, 111
Identifies supplementary angles					135
Identifies right triangles			114	113	108, 124, 135
Names triangles by angle size (acute, obtuse, or right)			C	113	124, 131
Identifies and classifies triangles by lengths of sides (scalene, isosceles, and equilateral)				43	131
Constructs scalene, isosceles, and equilateral triangles				43	131
Identifies and sorts concrete objects by attribute	23, 32, 43, 54	6, 13, 24, 26	6, 9, 21, 25-2, 30-2		113
Identifies, describes, sorts, compares, and/or constructs three-dimensional geometric solids	93, 112, 123	112, 120-1, 125-2	101	15-2, 115-2	113
Identifies faces, vertices, and edges of a geometric solid				115-2	113, 114
Transformations and Symmetry					
Identifies and draws a line of symmetry and/or creates symmetrical designs	129	54, 55-1	52	58	46
Explores, identifies, and/or shows transformations: translations (slides), rotations (turns), and reflections (flips)	108, 114	D	124	110-2	47, 89
Patterns, Algebra, and Functions					
Patterns and Sequences					
Identifies, reads, and extends patterns in shapes, colors, designs, and/or numbers	9, 25, 33, 52, 55, 66, 88, 101	26, 58, 59	7, 15-2, 20-2, 30-1	M1–135	20-2
Identifies the missing shape or design in a repeating pattern	M3–25	26	15-2, 20-2	M101–106	
Identifies the missing number in a sequence	21, 35, 38	52	M18	5	9
Identifies the missing item(s) in an array or matrix	23, 32, 54	52	36	M91–100-2	61
Makes, labels, and writes number sentences for an array			121, 122	87	60-1, 61
Readiness for Algebraic Reasoning					
Constructs a number line and/or locates points on a number line	48, 75, 109	77, 80-1, 92	56, 94	51, 54, 55-2, 123	27, 33, 88

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Patterns, Algebra, and Functions, *continued*					
Readiness for Algebraic Reasoning, *continued*					
Graphs large numbers on a number line				55-2	33
Shows addition, subtraction, and/or multiplication on a number line				126	93
Locates and graphs points (ordered pairs) on a coordinate graph			126	129, 130-1	110-1, 133
Graphs linear functions on a coordinate plane					133
Simplifies expressions containing addition, subtraction, multiplication, and division				118, 133	117
Uses the order of operations to simplify expressions				38, 118, 133	117
Simplifies expressions containing parentheses				38, 118, 133	117, 134
Simplifies expressions containing exponents				63	116, 117, 128
Adds positive and negative numbers				128	93, 99
Relations and Functions					
Writes and solves number sentences for problems involving addition or subtraction		21, 25-1, 33, 132, 134	22, 89	11, 35-2, 52, 53, 66, 93, 126	45-1
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Writes and solves number sentences for problems involving multiplication or division			117, 128	56, 57, 107, 108	23, 70-1
Creates problems for multiplication and division number sentences					31
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Represents an unknown using a symbol		94	30-1, 35-1, 40-1, 45-1, 50-1, 55-1	5	9
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Uses a function rule to complete a table				117	105-1, 133
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Data and Statistics					
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Data and Statistics, *continued*					
Identifies a sorting rule	34, 60-2	13, 15-2, 38, 60-1, 122	21, 25-2, 30-2, 46, 85-2		71
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Conducts a survey and/or records data	122		125-2	40-2	3, 35-1
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Graphs a picture on a pictograph	5, 82, 107, 135	7, 9, 38, 82	17, 82, 105-2	40-2	2, 50-1
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Statistics, Data Analysis, and Probability, continued					
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