

# Mathletics

## Oklahoma Academic Standards

### Activities (Courses) and Skill Quests



**Grades K-2**

August, 2025

**Mathletics**

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Activities (Courses) & Skill Quests

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# Kindergarten

## K.N Numbers and Operations (N)

### K.N.1 Understand the relationship between quantities and whole numbers.

K.N.1.1	
Count aloud forward in sequence to 100 by 1s and 10s.	
Course Topics	Activities
N—Counting & comparing	1 to 30
	Count by tens
	Counting forwards
	Going up

K.N.1.2	
Recognize that a number can be used to represent how many objects are in a set up to 10.	
Course Topics	Activities
N—Counting & comparing	How many dots?

K.N.1.3	
Use ordinal numbers to represent the position of an object in a sequence up to 10.	
Course Topics	Activities
N—Counting & comparing	Ordinal numbers

K.N.1.4	
Recognize without counting (subitize) the quantity of a small group of objects in organized and random arrangements up to 10.	
Course Topics	Activities
N—Counting & comparing	How many?

K.N.1.5	
Count forward, with and without objects, from any given number up to 20.	
Course Topics	Activities
N—Counting & comparing	Count to 5
	Counting up to 20
	Order numbers to 20

K.N.1.6	
Read, write, discuss, and represent whole numbers from 0 to at least 20. Representations may include numerals, pictures, real-object and pictographs, spoken words, and manipulatives.	
Course Topics	Activities
N—Counting & comparing	Making teen numbers
	Matching numbers to 10
	Make numbers count

K.N.1.7	
Find a number that is 1 more or 1 less than a given number up to 10.	
Course Topics	Activities
N—Counting & comparing	Order numbers to 10

K.N.1.8	
Compare and order whole numbers from 0 to 10 with and without objects, using the vocabulary "more than," "less than," or "equal to."	
Course Topics	Activities
N—Counting & comparing	More, less or the same to 10

## K.N.2 Develop conceptual understanding with addition and subtraction (up to 10) using objects and pictures.

K.N.2.1	
Compose and decompose numbers up to 10 using objects and pictures.	
Course Topics	Activities
N—Quantities & money	Adding to make 5 and 10
	Adding to five
	Adding up to ten
	Doubles and halves to 10
	Balance numbers to 10

## K.N.3 Understand the relationship between whole numbers and fractions through fair share.

K.N.3.1	
Distribute a set of objects into at least two smaller equal sets.	
Course Topics	Activities
N—Quantities & money	Share the treasure

## K.N.4 Identify coins by name.

K.N.4.1	
Identify pennies, nickels, dimes, and quarters by name.	
Course Topics	Activities
N—Quantities & money	Everyday money

## K.A Algebraic Reasoning and Algebra (A)

### K.A.1 Duplicate patterns in a variety of contexts.

K.A.1.1	
Sort and group up to 10 objects into a set based upon characteristics such as color, size, and shape. Explain verbally what the objects have in common.	
Course Topics	Activities
A—Reasoning & patterns	Sort it

<b>K.A.1.2</b> Recognize, duplicate, complete, and extend repeating, increasing, and decreasing patterns in a variety of contexts (i.e., shape, color, size, objects, sounds, movement).	
<b>Course Topics</b>	<b>Activities</b>
A—Reasoning & patterns	Simple patterns
	Pattern error
	Color patterns

## **K.GM Geometry and Measurement (GM)**

**K.GM.1 Recognize and sort basic two-dimensional shapes; use two-dimensional and three-dimensional shapes to represent real-world objects.**

<b>K.GM.1.1</b> Recognize squares, circles, triangles, and rectangles.	
<b>Course Topics</b>	<b>Activities</b>
GM—Shapes	Collect simple shapes

<b>K.GM.1.2</b> Sort two-dimensional objects using characteristics such as shape and size.	
<b>Course Topics</b>	<b>Activities</b>
GM—Shapes	Collect the shapes

<b>K.GM.1.3</b> Identify attributes of two-dimensional shapes using informal and formal geometric language interchangeably, such as the number of corners/vertices and the number of sides/edges.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	

<b>K.GM.1.4</b> Use smaller two-dimensional shapes to fill in the outline of a larger two-dimensional shape.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	

<b>K.GM.1.5</b> Compose larger, undefined shapes and structures using three-dimensional objects.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	

<b>K.GM.1.6</b> Use basic shapes and spatial reasoning to represent objects in the real world.	
<b>Course Topics</b>	<b>Activities</b>
GM—Shapes	Match the object

**K.GM.2 Compare and order objects according to location and measurable attributes.**

<b>K.GM.2.1</b> Use words to compare objects according to length, size, weight, position, and location.	
<b>Course Topics</b>	<b>Activities</b>
GM—Measurement	Compare lengths

<b>K.GM.2.2</b> Order up to 6 objects using measurable attributes, such as length and weight.	
<b>Course Topics</b>	<b>Activities</b>
GM—Measurement	Everyday length

<b>K.GM.2.3</b> Identify more than one shared attribute between objects, and sort objects into sets.	
<b>Course Topics</b>	<b>Activities</b>
GM—Measurement	Everyday mass

<b>K.GM.2.4</b> Compare the number of objects needed to fill two different containers..	
<b>Course Topics</b>	<b>Activities</b>
GM—Measurement	How full?
	Which holds more?

**K.GM.3 Tell time as it relates to daily life.**

<b>K.GM.3.1</b> Develop an awareness of simple time concepts within daily life, using age-appropriate vocabulary (e.g., yesterday, today, tomorrow, morning, afternoon, night).	
<b>Course Topics</b>	<b>Activities</b>
GM—Measurement	Days after and before

**K.D Data and Probability (D)****K.D.1 Collect, organize, and interpret categorical data.**

<b>K.D.1.1</b> Collect and organize information about objects and events in the environment.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	

<b>K.D.1.2</b> Use categorical data to create real-object graphs and pictographs.	
<b>Course Topics</b>	<b>Activities</b>
D—Analyze data	Making graphs



<b>K.D.1.3</b> Draw conclusions from real-object graphs and pictographs.	
Course Topics	Activities
D—Analyze data	Who has the goods?

# Grade 1

## 1.N Numbers and Operations (N)

**1.N.1 Count, compare, and represent whole numbers up to 100, with an emphasis on grouping in terms of tens and ones.**

<b>1.N.1.1</b>	
Recognize numbers to 20 without counting (subitize) the quantity of structured arrangements.	
Course Topics	Activities
N—Counting & comparing	Count to 5
	How many?
Topics	Skill Quests
Teacher directed	

<b>1.N.1.2</b>	
Use concrete representations to describe whole numbers between 10 and 100 in terms of tens and ones. Know that 10 is equivalent to 10 ones and 100 is equivalent to 10 tens.	
Course Topics	Activities
N—Counting & comparing	Before, after and between to 100
Topics	Skill Quests
Place value of 2-digit numbers	Identifying place value up to 2 digits
	Solving problems using place value up to 2 digits

<b>1.N.1.3</b>	
Read, write, discuss, and represent whole numbers up to 100. Representations may include numerals, words, addition and subtraction, pictures, tally marks, number lines, and manipulatives.	
Course Topics	Activities
N—Counting & comparing	Make big numbers count
	Place value 1
	Making teen numbers
Topics	Skill Quests
Read & write numbers to 100	Reading & writing 2-digit numbers
Partition 2-digit numbers	Partitioning 2-digit numbers (standard)
	Partitioning 2-digit numbers (non-standard)

<b>1.N.1.4</b>	
Count forward, with objects, from any given number up to 100 by 1s, 2s, 5s and 10s.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Count forward by 1, 2, 5 & 10 (objects)	Counting forward by 2s with objects
	Counting forward by 5s with objects
	Counting forward by 10s with objects
	Skip counting by 2s, 5s & 10s

<b>1.N.1.5</b> Count forward, without objects, by multiples of 1s, 2s, 5s, and 10s, up to 100.	
<b>Course Topics</b>	<b>Activities</b>
N—Counting & comparing	Counting by twos
	Counting by fives
	Counting by tens
	Groups of ten
<b>Topics</b>	<b>Skill Quests</b>
Count forward by 1, 2, 5 & 10	Counting forward within 100 by 1s
	Counting forward within 100 by 2s
	Counting forward within 100 by 5s
	Counting forward within 100 by 10s

<b>1.N.1.6</b> Find a number that is 10 more or 10 less than a given number up to 100.	
<b>Course Topics</b>	<b>Activities</b>
N—Counting & comparing	10 More, 10 Less
<b>Topics</b>	<b>Skill Quests</b>
Find 10 more or 10 less	Finding 10 more or 10 less

<b>1.N.1.7</b> Compare and order whole numbers from 0 to 100.	
<b>Course Topics</b>	<b>Activities</b>
N—Counting & comparing	Greater or less to 100
<b>Topics</b>	<b>Skill Quests</b>
Compare & order numbers to 100	Comparing numbers to 100
	Ordering numbers to 100

<b>1.N.1.8</b> Use knowledge of number relationships to locate the position of a given whole number, up to 20, on an open number line.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	
<b>Topics</b>	<b>Skill Quests</b>
Teacher directed	

<b>1.N.1.9</b> Use words such as “more than,” “less than,” and “equal to” to describe the relative value of numbers.	
<b>Course Topics</b>	<b>Activities</b>
N—Counting & comparing	Compare numbers to 50
	Compare numbers to 100
<b>Topics</b>	<b>Skill Quests</b>
Describe relative value of numbers	Describing relative value of numbers

**1.N.2 Solve addition and subtraction problems with sums and minuends of up to 10 in real-world and mathematical contexts.**

<b>1.N.2.1</b>	
Represent and solve problems using addition and subtraction with sums and minuends of up to 10.	
<b>Course Topics</b>	<b>Activities</b>
N—Addition & subtraction	Adding to five
	Subtracting from five
	Adding up to ten
	Adding to make 5 and 10
	Adding to ten word problems
	Doubles and halves to 10
<b>Topics</b>	<b>Skill Quests</b>
Addition/subtraction up to 10	Modelling & recording combinations to 5
	Modelling & recording combinations to 6
	Modelling & recording combinations to 7
	Modelling & recording combinations to 8
	Modelling & recording combinations to 9
	Recognizing & recalling bonds to 10

<b>1.N.2.2</b>	
Determine if equations involving addition and subtraction are true.	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	
<b>Topics</b>	<b>Skill Quests</b>
Introduce commutative law of addition	Introducing the commutative law of addition
Determine if equations are true to 10	Determining if equations are true to 10

<b>1.N.2.3</b>	
Demonstrate fluency with basic facts of addition and subtraction with sums and minuends of up to 10.	
<b>Course Topics</b>	<b>Activities</b>
N—Addition & subtraction	Balance numbers to 10
<b>Topics</b>	<b>Skill Quests</b>
Add & subtract within 10 fluently	Adding & subtracting within 10 fluently

**1.N.3 Develop foundational ideas for fractions.**

<b>1.N.3.1</b>	
Partition a regular polygon using physical models and recognize when those parts are equal.	
<b>Course Topics</b>	<b>Activities</b>
N—Fractions	Halves and fourths
	Fractions
<b>Topics</b>	<b>Skill Quests</b>

Partition polygons into equal parts	Partitioning polygons into equal parts
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1.N.3.2	
Partition (fair share) sets of objects into two and three equal groups.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Partition objects into equal groups	Partitioning objects into two equal groups
	Partitioning objects into three equal groups

## 1.N.4 Identify coins and their values.

1.N.4.1	
Identify pennies, nickels, dimes, and quarters by name and value.	
Course Topics	Activities
N—Money	Everyday money
Topics	Skill Quests
Identify coins by name & value	Identifying coins by name & value

1.N.4.2	
Write a number with the cent symbol to describe the value of a coin.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

1.N.4.3	
Determine the value of a collection of pennies, nickels, or dimes up to one dollar, counting by 1s, 5s, and 10s.	
Course Topics	Activities
N—Money	Who's got the money?
	How much money?
Topics	Skill Quests
Determine value of coins to one dollar	Determine the value of coins up to one dollar

## 1.A Algebraic Reasoning and Algebra (A)

### 1.A.1 Identify patterns found in real-world and mathematical problems.

1.A.1.1	
Identify, create, complete, and extend repeating, increasing, and decreasing patterns in a variety of contexts (e.g., quantity, numbers, or shapes).	
Course Topics	Activities
A—Patterns	Counting on a 100 grid

	Simple patterns
	Pattern error
Topics	Skill Quests
Work with repeating patterns	Working with repeating patterns
Increasing & decreasing patterns	Working with increasing & decreasing patterns

## 1.G Geometry and Measurement (GM)

### 1.GM.1 Recognize and compose two- and three-dimensional shapes.

1.GM.1.1	
Identify regular and irregular trapezoids and hexagons by pointing to the shape when given the name.	
Course Topics	Activities
GM—Shapes	Collect the polygons
Topics	Skill Quests
Identify hexagons	Identifying hexagons

1.GM.1.2	
Compose larger, defined shapes using smaller two-dimensional shapes.	
Course Topics	Activities
GM—Shapes	What prism am I?
	Prisms and pyramids
	Relate shapes and solids
Topics	Skill Quests
Compose shapes using smaller shapes	Composing larger shapes using smaller shapes

1.GM.1.3	
Compose structures with three-dimensional shapes.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Compose structures with 3D shapes	Composing structures with 3D shapes

1.GM.1.4	
Recognize three-dimensional shapes such as cubes, cones, cylinders, pyramids, and spheres.	
Course Topics	Activities
GM—Shapes	Match the solid 2
Topics	Skill Quests
Recognize 3D shapes	Exploring surfaces & faces
	Recognizing spheres
	Recognizing cones
	Recognizing cubes
	Recognizing cylinders
	Recognizing, sorting & naming 3D objects

	Recognizing prisms
	Recognizing pyramids

## 1.GM.2 Select and use nonstandard and standard units to describe length and volume/capacity.

<b>1.GM.2.1</b> Use nonstandard and standard measuring tools to measure the length of objects.	
Course Topics	Activities
GM—Measurement & time	Compare lengths
	Measuring length with blocks
Topics	Skill Quests
Measure the length of objects	Measuring length of objects - nonstandard tools

<b>1.GM.2.2</b> Illustrate that the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Measure length using same size units	Measuring length using same size units

<b>1.GM.2.3</b> Measure the same object/distance with units of two different lengths, and describe how and why the measurements differ.	
Course Topics	Activities
GM—Measurement & time	Everyday length
Topics	Skill Quests
Compare lengths	Comparing lengths

<b>1.GM.2.4</b> Describe a length to the nearest whole unit using a number with standard and nonstandard units.	
Course Topics	Activities
GM—Measurement & time	How long is that? (Customary)
Topics	Skill Quests
Teacher directed	

<b>1.GM.2.5</b> Use standard and nonstandard tools to identify volume/capacity. Compare and sort containers that hold more, less, or the same amount.	
Course Topics	Activities
GM—Measurement & time	How full?
Topics	Skill Quests
Volume & capacity	Exploring volume & capacity
	Measuring volume & capacity

	Compare & order volume/capacity
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### 1.GM.3 Describe and measure concepts of time.

1.GM.3.1	
Tell time to the hour and half-hour (analog and digital).	
Course Topics	Activities
GM—Measurement & time	Hour times
	Half hour times
	Tell time to the half hour
Topics	Skill Quests
Tell time to hour and half-hour	Telling time to the hour & half hour (analogue)
	Telling time to the hour & half hour (digital)

1.GM.3.2	
Describe and measure calendar time by days, weeks, months, and years.	
Course Topics	Activities
GM—Measurement & time	Using a calendar
Topics	Skill Quests
Describe & measure calendar time	Introducing days of the week
	Introducing months of the year
	Using a calendar to identify the date
	Using calendars to solve simple problems

### 1.D Data and Probability (D)

#### 1.D.1 Collect, organize, and interpret categorical and numerical data.

1.D.1.1	
Collect, sort, and organize data in up to three categories using representations (e.g., tally marks, tables, Venn diagrams).	
Course Topics	Activities
D—Analyze data	Bar graphs 1
Topics	Skill Quests
Collect, sort & organize data	Collecting, sorting & organizing data
	Introducing & reading data in tables
	Using tally marks
	Introducing Venn diagrams

1.D.1.2	
Use data to create pictographs and bar graphs that demonstrate one-to-one correspondence.	
Course Topics	Activities
D—Analyze data	Making graphs
Topics	Skill Quests
Create pictographs & bar graphs	Using data to create pictographs & bar graphs



<b>1.D.1.3</b> Draw conclusions from pictographs and bar graphs.	
Course Topics	Activities
D—Analyze data	Pictographs
Topics	Skill Quests
Draw conclusions from data	Drawing conclusions from data

# Grade 2

## 2.N Numbers and Operations (N)

**2.N.1 Compare and represent whole numbers up to 1,000 with an emphasis on place value and equality.**

<b>2.N.1.1</b>	
Read, write, discuss, and represent whole numbers up to 1,000. Representations should include, but are not limited to, numerals, words, pictures, tally marks, number lines, and manipulatives.	
Course Topics	Activities
N—Counting & comparing	Model numbers
	Place value 1
	Place value 2
Topics	Skill Quests
Read, write & represent numbers to 1000	Reading & writing 3-digit numbers
	Counting in ones up to 1000
	Identifying numbers before & after up to 1000
Partition 2- & 3-digit numbers	Partitioning 3-digit numbers (standard)
	Partitioning 3-digit numbers (non-standard)

<b>2.N.1.2</b>	
Use knowledge of number relationships to locate the position of a given whole number, up to 100, on an open number line.	
Course Topics	Activities
N—Counting & comparing	Number Line Order
Topics	Skill Quests
Teacher directed	

<b>2.N.1.3</b>	
Use place value to describe whole numbers between 10 and 1,000 in terms of hundreds, tens, and ones, including written, standard, and expanded forms. Know that 10 is equivalent to 10 ones and 100 is equivalent to 10 tens.	
Course Topics	Activities
N—Counting & comparing	Decompose numbers
	Partition and rename 1
	Repartition 2-digit numbers
Topics	Skill Quests
Place value up to 3 digits	Identifying place value in 3-digit numbers

<b>2.N.1.4</b>	
Find 10 more or 10 less than a given three-digit number. Find 100 more or 100 less than a given three-digit number.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests

Find 10 more or 10 less to 3-digits	Finding numbers 10 before & 10 after, up to 1000
	Counting in tens with 2- & 3-digit numbers
Find 100 more or 100 less to 3-digits	Counting in hundreds, tens & ones

<b>2.N.1.5</b>	
Use objects to determine whether a number is even or odd.	
Course Topics	Activities
N—Counting & comparing	Odd or even?
Topics	Skill Quests
Odd & even numbers	Odd & even numbers up to 20

<b>2.N.1.6</b>	
Use place value understanding to round numbers to the nearest ten and nearest hundred (up to 1,000). Recognize when to round in real-world situations.	
Course Topics	Activities
N—Counting & comparing	Nearest ten
	Nearest hundred
Topics	Skill Quests
Round numbers up to 1000	Rounding numbers to the nearest ten
	Rounding numbers to the nearest hundred

<b>2.N.1.7</b>	
Use place value to compare and order whole numbers up to 1,000 using comparative language, numbers, and symbols (e.g., $425 > 276$ , $73 < 107$ , page 351 comes after page 350, 753 is between 700 and 800).	
Course Topics	Activities
N—Counting & comparing	Which is bigger?
	Which is smaller?
	Compare numbers to 20
	Compare numbers to 50
Topics	Skill Quests
Compare & order numbers to 1000	Comparing numbers to 1000
	Ordering numbers to 1000

## 2.N.2 Add and subtract one- and two-digit numbers in real-world and mathematical problems.

<b>2.N.2.1</b>	
Use the relationship between addition and subtraction to generate basic facts with sums and minuends of up to 20.	
Course Topics	Activities
N—Addition & Subtraction	Related facts 1
Topics	Skill Quests
Addition & subtraction facts to 20	Finding fact families for addition & subtraction
	Addition & subtraction facts to 20
	Number bonds to 20

<b>2.N.2.2</b> Demonstrate fluency with basic facts of addition and subtraction with sums and minuends of up to 20.	
Course Topics	Activities
N—Addition & Subtraction	Fact families: add and subtract
Topics	Skill Quests
Add & subtract to 20 with fluency	Fluency with addition & subtraction facts to 20

<b>2.N.2.3</b> Estimate sums and differences up to 100.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Estimate sums & differences	Estimating sums & differences to 100

<b>2.N.2.4</b> Use strategies and algorithms based on knowledge of place value and equality to add and subtract two-digit numbers.	
Course Topics	Activities
N—Addition & Subtraction	Bar models 1
Topics	Skill Quests
Add & subtract mental strategies to 100	Add & subtract by counting on/back up to 100
	Add & subtract using bridging to 10 up to 100
	Add & subtract using jump strategy
	Adding using place value up to 100
	Using mental strategies to add & subtract (to 100)
Add & subtract strategies over 100	Adding using place value (no crossing tens)
	Adding & subtracting using place value
	Adding using place value (crossing a ten)
	Subtracting using addition
	Adding & subtracting using rounding & compensating
Add & subtract algorithms	Adding using algorithms
	Subtraction using algorithms

<b>2.N.2.5</b> Solve addition and subtraction problems involving whole numbers up to two digits.	
Course Topics	Activities
2.N.2.5	Simple subtraction
	Add to 18
	Addition facts to 18
	Subtraction facts to 18
Topics	Skill Quests
Solve addition & subtraction problems	Solving add/sub problems up to 2-digits

<b>2.N.2.6</b> Use concrete models and structured arrangements, such as repeated addition, arrays, and ten frames to develop an understanding of multiplication.	
<b>Course Topics</b>	<b>Activities</b>
N—Addition & Subtraction	Count by twos
	Counting by twos
	Groups of two
	Groups of three
	Groups of four
	Groups of five
<b>Topics</b>	<b>Skill Quests</b>
Understand multiplication	Grouping & skip counting to multiply
	Using arrays & repeated addition to multiply
	Using the commutative property of multiplication

## 2.N.3 Explore the foundational ideas of fractions.

<b>2.N.3.1</b> Identify the parts of a set and area that represent fractions for halves, thirds, and fourths.	
<b>Course Topics</b>	<b>Activities</b>
N—Fractions	Halves
	Halves and fourths
	Fractions
<b>Topics</b>	<b>Skill Quests</b>
Identify parts of a set & area	Exploring the meaning of fraction symbols
	Finding fourths of sets or shapes (no symbols)
	Finding fourths of sets or shapes (symbols)
	Finding halves & fourths (no symbols)
	Finding halves & fourths (symbols)
	Finding thirds of sets or shapes
	Finding halves, thirds or fourths of shapes

<b>2.N.3.2</b> Construct equal-sized portions through fair sharing (length, set, and area models for halves, thirds, and fourths).	
<b>Course Topics</b>	<b>Activities</b>
N—Fractions	Halve it!
<b>Topics</b>	<b>Skill Quests</b>
Fair share halves, thirds & fourths	Fair sharing halves, thirds & fourths

## 2.N.4 Determine the value of a set of coins.

<b>2.N.4.1</b> Determine the value of a collection of coins up to one dollar using the cent symbol.	
<b>Course Topics</b>	<b>Activities</b>
N—Money	Who's got the money?

Topics	Skill Quests
Determine value of collection of coins	Determining the value of coins to one dollar

2.N.4.2	
Use a combination of coins to represent a given amount of money up to one dollar.	
Course Topics	Activities
N—Money	Money
Topics	Skill Quests
Use coins to represent a given amount	Using coins to represent amounts up to one dollar

## 2.A Algebraic Reasoning and Algebra (A)

### 2.A.1 Describe the relationship found in patterns to solve real-world and mathematical problems.

2.A.1.1	
Represent, create, describe, complete, and extend increasing and decreasing patterns with quantity and numbers in a variety of contexts.	
Course Topics	Activities
A—Patterns & properties	Missing it!
	Increasing patterns
	Count forward patterns
Topics	Skill Quests
Increasing & decreasing patterns	Working with increasing & decreasing patterns

2.A.1.2	
Represent and describe repeating patterns involving shapes in a variety of contexts.	
Course Topics	Activities
A—Patterns & properties	Simple patterns
	Pattern error
Topics	Skill Quests
Work with repeating patterns - shapes	Repeating patterns with attribute changes
	Repeating patterns using objects & symbols

### 2.A.2 Use number sentences involving unknowns to represent and solve real-world and mathematical problems.

2.A.2.1	
Use objects and number lines to represent number sentences.	
Course Topics	Activities
A—Patterns & properties	All about ten
	All about twenty
	Subtracting up to ten
Topics	Skill Quests

Represent number sentences	Representing number sentences
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<b>2.A.2.2</b>	
Generate models and situations to represent number sentences and vice versa.	
Course Topics	Activities
A—Patterns & properties	Adding to ten word problems
	Problems: add and subtract
Topics	Skill Quests
Generate models & situations	Generating models & situations

<b>2.A.2.3</b>	
Apply the commutative property, identity property, and number sense to find values for unknowns that make addition and subtraction number sentences true or false.	
Course Topics	Activities
A—Patterns & properties	Addition properties
	Commutative property of addition
Topics	Skill Quests
Find values for unknowns in add/sub	Finding values for unknowns in add/sub

## 2.G Geometry and Measurement (GM)

**2.GM.1 Analyze attributes of two- and three-dimensional figures and develop generalizations about their properties.**

<b>2.GM.1.1</b>	
Recognize regular and irregular trapezoids and hexagons.	
Course Topics	Activities
GM—Shapes	Shapes
	Collect the polygons
Topics	Skill Quests
Recognize hexagons	Recognizing hexagons

<b>2.GM.1.2</b>	
Describe, compare, and classify two-dimensional figures according to their geometric attributes.	
Course Topics	Activities
GM—Shapes	Collect the shapes 1
	Collect the shapes 2
Topics	Skill Quests
Describe, compare & classify 2D figures	Identifying & describing octagons
	Identifying & describing pentagons
	Identifying & naming simple 2D shapes
	Comparing & describing simple 2D shapes
	Representing & describing regular polygons

<b>2.GM.1.3</b> Compose and decompose two-dimensional shapes using triangles, squares, hexagons, trapezoids, and rhombi.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Compose & decompose 2D shapes	Composing & decomposing 2D shapes

<b>2.GM.1.4</b> Sort three-dimensional shapes based on attributes such as number of faces, vertices, and edges.	
Course Topics	Activities
GM—Shapes	How many faces?
	How many edges?
	How many corners?
Topics	Skill Quests
Sort 3D shapes based on attributes	Exploring surfaces & faces
	Recognizing, sorting & naming 3D objects
	Recognizing & describing prisms
	Comparing 2D shapes & 3D objects
	Identifying faces, edges & vertices on 3D objects
	Faces, edges, vertices & surfaces of 3D objects

<b>2.GM.1.5</b> Recognize right angles and classify angles as smaller or larger than a right angle.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Compare right angles to other angles	Comparing right angles to other angles

## 2.GM.2 Understand length as a measurable attribute and explore capacity.

<b>2.GM.2.1</b> Explain the relationship between the size of the unit of measurement and the number of units needed to measure the length of an object.	
Course Topics	Activities
GM—Measurement & Time	Measuring length with blocks
Topics	Skill Quests
Measure lengths using informal units	Exploring uniform informal units of length

<b>2.GM.2.2</b> Explain the relationship between length and the numbers on a ruler by using a ruler to measure lengths to the nearest whole unit.	
Course Topics	Activities
GM—Measurement & Time	How long is that? (customary)



	Measuring length
Topics	Skill Quests
Measure lengths using formal units	Introducing formal units for length: meters
	Introducing formal units for length: centimeters

2.GM.2.3	
Explore how varying shapes and styles of containers can have the same capacity.	
Course Topics	Activities
GM—Measurement & Time	How full?
	Which holds more?
Topics	Skill Quests
Explore & measure capacity	Exploring capacity
	Measuring capacity
	Comparing & ordering capacity

## 2.GM.3 Tell time to the quarter hour.

2.GM.3.1	
Distinguish between a.m. and p.m.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Understanding a.m. and p.m.	Understanding a.m. & p.m. notation

2.GM.3.2	
Read and write time to the quarter hour on an analog and digital clock.	
Course Topics	Activities
GM—Measurement & Time	Half hour times
	Tell time to the half hour
Topics	Skill Quests
Read & write time to quarter hour	Telling time to the hour and half hour
	Telling time to the quarter hour, analog & digital

## 2.D Data and Probability (D)

### 2.D.1 Collect, organize, and interpret data.

2.D.1.1	
Explain that the length of a bar in a bar graph and the number of objects in a pictograph represents the number of data points for a given category.	
Course Topics	Activities
D—Analyze data	Bar graphs 1
Topics	Skill Quests
Understand pictographs & bar graphs	Understanding pictographs
	Understanding bar graphs

<b>2.D.1.2</b>	
Organize a collection of data with up to four categories using pictographs and bar graphs in intervals of 1s, 2s, 5s or 10s.	
Course Topics	Activities
D—Analyze data	Making graphs
Topics	Skill Quests
Organize data - pictographs & bar graphs	Organizing data using pictographs
	Organizing data using bar graphs

<b>2.D.1.3</b>	
Write and solve one-step word problems involving addition or subtraction using data represented within pictographs and bar graphs with intervals of one.	
Course Topics	Activities
D—Analyze data	Pictographs
	Bar graphs 2
Topics	Skill Quests
Teacher directed	

<b>2.D.1.4</b>	
Draw conclusions and make predictions from information in a pictograph and bar graph.	
Course Topics	Activities
D—Analyze data	Who has the goods?
Topics	Skill Quests
Use data in pictographs & bar graphs	Using data in pictographs & bar graphs
	Drawing conclusions from bar graphs



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