

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.G.1 Distinguish between defining attributes versus non-defining attributes; build and draw shapes to possess defining attributes.
SMP	MP.7

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

sides
vertices
attributes
closed figures
open figures

2. Key Implementation Questions and Answers:

What are the defining attributes of a shape?
What are non-defining attributes of a shape?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning to determine defining and non-defining attributes of shapes.
I am learning to build and draw shapes to show defining attributes.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

Logan County Schools Deconstructed Standards 1st Grade Math

I know that I learned it when I can identify sides and vertices of a shape.
I will know that I have learned it when I can build or draw shapes.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) ***"I am learning this because"***

I am learning this because I need to identify shapes in the world around me.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.G.2 Compose shapes.</p> <p>a. Compose two-dimensional shapes to create rectangles, squares, trapezoids, triangles, half-circles, quarter-circles and composite shapes to compose new shapes from the composite shapes.</p> <p>b. Use three-dimensional shapes (cubes, right rectangular prisms, right circular cones and right circular cylinders) to create a composite shape and compose new shapes from the composite shapes.</p>
SMP	MP.1, MP.4

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Compose
 Two dimensional
 Three dimensional
 rectangles, squares, trapezoids, triangles,
 half-circles, quarter-circles
 cubes, right rectangular prisms, right circular
 cones and right circular cylinders

2. Key Implementation Questions and Answers:

What are two dimensional shapes?
 What are three dimensional shapes?
 How can I use shapes to create new shapes?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

Logan County Schools Deconstructed Standards 1st Grade Math

I am learning to create two dimensional shapes.
I am learning to create three dimensional shapes.
I am learning to use shapes to create new shapes.

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. "I will know that I learned it when"*

I will know that I have learned it when I can create two dimensional shapes, three dimensional shapes, and use shapes to make new shapes.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this to understand shapes around me.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths and quarters, and use the phrases half of, fourth of and quarter of. Describe the whole as two of or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
SMP	MP.3, MP.6

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Equal shares
Partition
Halves, fourths, quarters

2. Key Implementation Questions and Answers:

What are equal shares?
How can I partition shapes into halves, fourths, or quarters?
How does the size of the shape change as it is partitioned?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning to divide shapes into equal shares.
I am learning how the size of a shape changes when shapes are divided.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common

Logan County Schools Deconstructed Standards 1st Grade Math

misconceptions. "I will know that I learned it when"

I will know that I learned it when I can divide shapes into equal parts.

I will know that I learned it when I can divide shapes into halves, fourths, and quarters.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will be able to understand equal shares.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths and quarters, and use the phrases half of, fourth of and quarter of. Describe the whole as two of or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.
SMP	MP.3, MP.6

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Equal shares
Partition
Halves, fourths, quarters

2. Key Implementation Questions and Answers:

What are equal shares?
How can I partition shapes into halves, fourths, or quarters?
How does the size of the shape change as it is partitioned?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning to divide shapes into equal shares.
I am learning how the size of a shape changes when shapes are divided.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common

Logan County Schools Deconstructed Standards 1st Grade Math

misconceptions. "I will know that I learned it when"

I will know that I learned it when I can divide shapes into equal parts.

I will know that I learned it when I can divide shapes into halves, fourths, and quarters.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will be able to understand equal shares.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.MD.2 Express the length of an object as a whole number of same size length units, by laying multiple copies of a shorter object (the length unit) end to end with no gaps or overlaps.
SMP	MP.2, MP.5

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Units
End to end (endpoint)
Gaps
Overlap
Non-standard measurement

2. Key Implementation Questions and Answers:

How can I express the length of an object using non-standard units of measurement?
How do I express the length of objects without gaps and overlaps?
How do I express the length of objects using endpoints?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to express the length of an object using non-standard units of measurement.
I am learning how to express the length of an object without using gaps and overlapping units.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common

Logan County Schools Deconstructed Standards 1st Grade Math

misconceptions. "I will know that I learned it when"

I will know that I learned it when I am able to properly express the length of objects.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will use measurement in real world situations.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.MD.3 Assign values to time and money. a. Tell and write time in hours and half-hours using analog and digital clocks. b. Identify the coins by values (penny, nickel, dime, quarter).
SMP	MP.6, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Hour
Half hour
Analog
Digital
Penny, nickel, dime, quarter

2. Key Implementation Questions and Answers:

How can I tell time to the hour and half hour using an analog clock?
How can I tell time to the hour and half hour on a digital clock?
How can I identify a penny, nickel, dime, quarter?
What is the value of a penny, nickel, dime, and quarter?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning how to tell time to the hour and half hour using both a digital and an analog clock.
I am learning to identify coins and their values.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics

Logan County Schools Deconstructed Standards 1st Grade Math

of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

I will know that I learned it when I can tell time to the hour and half hour on a digital and analog clock.

I will know that I learned it when I can identify coins and their value.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this because I will need to know how to tell time in order to schedule things in my daily life.

I am learning this because I will use money in the real world.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.MD.3 Assign values to time and money. a. Tell and write time in hours and half-hours using analog and digital clocks. b. Identify the coins by values (penny, nickel, dime, quarter).
SMP	MP.6, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Hour
Half hour
Analog
Digital
Penny, nickel, dime, quarter

2. Key Implementation Questions and Answers:

How can I tell time to the hour and half hour using an analog clock?
How can I tell time to the hour and half hour on a digital clock?
How can I identify a penny, nickel, dime, quarter?
What is the value of a penny, nickel, dime, and quarter?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to tell time to the hour and half hour using both a digital and an analog clock.
I am learning to identify coins and their values.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics

Logan County Schools Deconstructed Standards 1st Grade Math

of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

I will know that I learned it when I can tell time to the hour and half hour on a digital and analog clock.

I will know that I learned it when I can identify coins and their value.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this because I will need to know how to tell time in order to schedule things in my daily life.

I am learning this because I will use money in the real world.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.NBT.1 Count and represent numbers. a. Count forward to and backward from 120, starting at any number less than 120. b. In this range, read and write numerals and represent a number of objects with a written numeral.
SMP	MP.2, MP.5, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Forward
Backward
Numerals
Place value
Tens
Ones
hundreds

2. Key Implementation Questions and Answers:

How can I count forward and backward from any given number 0-120?
How can I write numerals to represent a number of objects?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning how to count forward and backward from any given number 0-120.
I am learning how to write numbers to represent a number of objects.

Logan County Schools Deconstructed Standards 1st Grade Math

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”*

I will know that I learned it when I can count forward and backward to 120 from any given number.
I will know that I learned it when I can represent a group of objects with a numeral.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this because I will count in the real world.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.NBT.2 Understand the two-digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <p>a. 10 can be thought of as a bundle of ten ones — called a “ten.”</p> <p>b. The numbers from 11 to 19 are composed of ten and one, two, three, four, five, six, seven, eight or nine ones.</p> <p>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones).</p>
SMP	MP.5, MP.7

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Tens
One
Two digit
Place value

2. Key Implementation Questions and Answers:

How can I represent a two digit number with tens and ones?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to represent a number with tens and ones.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common

Logan County Schools Deconstructed Standards 1st Grade Math

misconceptions. "I will know that I learned it when"

I will know that I learned it when I can compose a number using tens and ones.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will need to understand the value of numbers.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.NBT.2 Understand the two-digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:</p> <p>a. 10 can be thought of as a bundle of ten ones — called a “ten.”</p> <p>b. The numbers from 11 to 19 are composed of ten and one, two, three, four, five, six, seven, eight or nine ones.</p> <p>c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight or nine tens (and 0 ones).</p>
SMP	MP.5, MP.7

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Tens
One
Two digit
Place value

2. Key Implementation Questions and Answers:

How can I represent a two digit number with tens and ones?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to represent a number with tens and ones.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common

Logan County Schools Deconstructed Standards 1st Grade Math

misconceptions. "I will know that I learned it when"

I will know that I learned it when I can compose a number using tens and ones.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will need to understand the value of numbers.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.NBT.4 Add within 100 including adding a two-digit number and a one-digit number. Add a two-digit number and a multiple of 10.</p> <p>a. Add within 100 using...</p> <ul style="list-style-type: none"> • concrete models or drawings; • strategies based on place value; • properties of operations; • the relationship between addition and subtraction. <p>b. Relate the addition strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p>
SMP	MP.7, MP.2, MP.3

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Place value
 Strategy
 Tens
 Ones
 Hundreds
 Digit
 Multiple of 10

2. Key Implementation Questions and Answers:

How can I add a 2-digit and a 1-digit number using various strategies?
 How can I add a 2-digit number and a multiple of 10 using various strategies?

Logan County Schools Deconstructed Standards 1st Grade Math

3. Develop “Learning Intention” statements. *Describe the standard and/or element(s) as statements of intended learning. “I am learning”*

I am learning how to add a 2-digit and a 1-digit number.
I am learning how to add a 2-digit number and a multiple of 10.
I am learning how to write an addition sentence and explain the strategy I used to solve it.

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”*

I will know that I learned it when I can add a 2-digit and a 1-digit number.
I will know that I learned it when I can add a 2-digit number and a multiple of 10.
I will know that I learned it when I can write an addition sentence and explain the strategy I used to solve it.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this in order to mentally solve addition problems.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.NBT.4 Add within 100 including adding a two-digit number and a one-digit number. Add a two-digit number and a multiple of 10.</p> <p>a. Add within 100 using...</p> <ul style="list-style-type: none"> • concrete models or drawings; • strategies based on place value; • properties of operations; • the relationship between addition and subtraction. <p>b. Relate the addition strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.</p>
SMP	MP.7, MP.2, MP.3

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Place value
 Strategy
 Tens
 Ones
 Hundreds
 Digit
 Multiple of 10

2. Key Implementation Questions and Answers:

How can I add a 2-digit and a 1-digit number using various strategies?
 How can I add a 2-digit number and a multiple of 10 using various strategies?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. *“I am learning”*

Logan County Schools Deconstructed Standards 1st Grade Math

I am learning how to add a 2-digit and a 1-digit number.
I am learning how to add a 2-digit number and a multiple of 10.
I am learning how to write an addition sentence and explain the strategy I used to solve it.

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. "I will know that I learned it when"*

I will know that I learned it when I can add a 2-digit and a 1-digit number.
I will know that I learned it when I can add a 2-digit number and a multiple of 10.
I will know that I learned it when I can write an addition sentence and explain the strategy I used to solve it.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this in order to mental solve addition problems.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.
SMP	MP.2, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

2 digit number
mentally

2. Key Implementation Questions and Answers:

How can I mentally find 10 more or 10 less than a two digit number?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning to mentally find 10 more and 10 less than a two digit number.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

I will know that I learned it when I can mentally find 10 more and 10 less than a two digit number.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) “I am learning this because”

Logan County Schools Deconstructed Standards 1st Grade Math

I am learning this in order to be able to add and subtract mentally.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences).</p> <p>a. Subtract using:</p> <ul style="list-style-type: none"> • concrete models or drawings; • strategies based on place value; • properties of operations; • the relationship between addition and subtraction <p>b. Relate the subtraction strategy to a written method and explain the reasoning used.</p>
SMP	MP.3, MP.5

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Multiple of 10
 Strategy
 Place value

2. Key Implementation Questions and Answers:

How can I subtract multiples of 10 using a strategy?
 How can I write a subtraction sentence and explain the strategy I used to solve it?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to subtract multiples of 10 using different strategies.

Logan County Schools Deconstructed Standards 1st Grade Math

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”*

I will know that I learned it when I am able to subtract multiples of ten.

I will know that I learned it when I am able to write subtraction sentences and explain the strategy I used to solve it.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this because I will be able to use strategies to problem solve.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart and comparing, with unknowns in all positions.
SMP	MP. 1, MP.2

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Word problems
Adding to
Taking from
Putting together
Taking apart
Unknowns
Comparing
Addend
Subtrahend

2. Key Implementation Questions and Answers:

How can I solve addition and subtraction word problems with unknowns in all positions?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning how to solve various addition and subtraction word problems.
I am learning how to determine the relationship between addition and subtraction.
I am learning how to determine the unknown number within a word problem.
I am learning how to solve for the unknown number within a word problem.

Logan County Schools Deconstructed Standards 1st Grade Math

4. Establish success criteria by identifying strong and weak work. *Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. "I will know that I learned it when"*

I will know that I learned it when I can solve various addition and subtraction word problems.
I will know that I learned it when I can determine the relationship between addition and subtraction.
I will know that I learned it when I can determine the unknown number within a word problem.
I will know that I learned it when I can solve for the unknown number within a word problem.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *"I am learning this because"*

I am learning this because I will need to determine the unknown numbers within real world problems.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings and equations with a symbol for one unknown number to represent the problem.
SMP	MP. 1, MP.4, MP.5

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Whole number
Sum
Equations
Symbol
Unknown number

2. Key Implementation Questions and Answers:

How can I solve addition word problems using different strategies?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning to use different strategies to solve addition word problems with three whole numbers. I am learning to write an equation and use a symbol for the unknown number to solve a word problem.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

Logan County Schools Deconstructed Standards 1st Grade Math

I will know that I learned it when I can use strategies to solve addition word problems with three whole numbers.

I will know that I learned it when I can write an equation and use symbols to represent the unknown number.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) ***"I am learning this because"***

I am learning this because I will be able to use strategies to problem solve.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.3 Apply properties of operations as strategies to add and subtract.
SMP	MP. 2, MP.7

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Properties of operations
Commutative property
Associative property

2. Key Implementation Questions and Answers:

How can I apply properties of operations to add and subtract?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. *“I am learning”*

I am learning to use properties of operations as a strategy to add and subtract.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. *“I will know that I learned it when”*

I will know that I learned it when I can apply properties of operations to add and subtract.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

Logan County Schools Deconstructed Standards 1st Grade Math

I am learning this because I will be able to use properties of operations to problem solve.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.4 Understand subtraction as an unknown-addend problem.
SMP	MP. 2, MP.7

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Addend
unknown

2. Key Implementation Questions and Answers:

How can I use addition to solve a subtraction problem?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to use an unknown addend to solve a subtraction problem.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

I will know that I learned it when I can write an addition equation with an unknown addend.
I will know that I learned it when I can solve for the unknown addend.
I will know that I learned it when I can relate the unknown addend to the subtraction equation.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) “I am learning this

Logan County Schools Deconstructed Standards 1st Grade Math

because”

I am learning this because I will be able to understand the relationship between numbers.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.5 Relate counting to addition and subtraction.
SMP	MP.5, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Counting all
Counting on

2. Key Implementation Questions and Answers:

How can I relate counting all objects and counting on to addition and subtraction.

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning how to count to find the total number of objects.
I am learning how to count on from a given number to find the total number of objects.
I am learning how to remove the appropriate number of items and count the remaining items.
I am learning how to start with the total and count backwards to subtract.
I am learning how to start with the change number and count on to reach the total.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

Logan County Schools Deconstructed Standards 1st Grade Math

I will know that I learned it when I can relate counting to addition and subtraction.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) ***“I am learning this because”***

I am learning this because I need to know how to add and subtract.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	<p>KY.1.OA.6 Add and subtract within 20.</p> <p>a. Fluently add and subtract within 10.</p> <p>b. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making 10; decomposing a number leading to a 10; using the relationship between addition and subtraction; creating equivalent but easier or known sums.</p>
SMP	MP.2, MP.7, MP.8

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Strategy
Counting on
Make 10
fluent

2. Key Implementation Questions and Answers:

How can I fluently add and subtract within 10?
How can I use different strategies to add and subtract within 20?

3. Develop “Learning Intention” statements. Describe the standard and/or element(s) as statements of intended learning. “I am learning”

I am learning to fluently add and subtract within 10.
I am learning to use different strategies to add and subtract within 20.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics

Logan County Schools Deconstructed Standards 1st Grade Math

of strong and weak work related to the standard and/or element(s). Identify common misconceptions. “I will know that I learned it when”

I will know that I learned it when I can fluently add and subtract within 20.

I will know that I learned it when I can use different strategies to add and subtract within 20.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) *“I am learning this because”*

I am learning this because I will be able to add and subtract numbers.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.7 Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false.
SMP	MP. 2, MP.3

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

True
False

2. Key Implementation Questions and Answers:

How can I determine if a given equation is true or false?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning to determine if an equation is true or false.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. "I will know that I learned it when"

I will know that I have learned it when I can determine if an equation is true or false.

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) "I am learning this"

Logan County Schools Deconstructed Standards 1st Grade Math

because”

I am learning this so that I am prepared for 2nd grade.

Logan County Schools Deconstructed Standards 1st Grade Math

Grade Level:	1
Standard	KY.1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers
SMP	MP. 1, MP.2

Standard for Mathematical Practice (select and highlight)

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of the structure
8. Look for and express regularity in repeated reasoning

1. Critical vocabulary and questions as it relates to the standard.

Unknown
Whole number
equation

2. Key Implementation Questions and Answers:

How can I find the unknown whole number in an addition or subtraction equation?

3. Develop "Learning Intention" statements. Describe the standard and/or element(s) as statements of intended learning. "I am learning"

I am learning how to find the unknown whole number in an addition or subtraction equation.

4. Establish success criteria by identifying strong and weak work. Identify the characteristics of strong and weak work related to the standard and/or element(s). Identify common misconceptions. "I will know that I learned it when"

I will know that I learned it when I can determine the unknown number in an addition and subtraction problem.

Logan County Schools Deconstructed Standards 1st Grade Math

5. Ideas for Relevance (Authentic Work with a Connection to Real-World) ***“I am learning this because”***

I am learning this because I will be able to add and subtract numbers.