## Boyd County Schools <br>  <br> 

Mathematics Curriculum Framework

First Grade

UNIT 1: Addition/Subtraction - To Ten

| Week 1 | Week 2 | Week 3 |
| :--- | :---: | :---: | :---: |
| Standards |  |  |
| 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, e.g. by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. |  |  |

### 1.0A. 3

Apply properties of operations as strategies to add and subtract (Note: students need to use formal terms for these properties).
Examples: If $8+3=11$ is known, then $3+8=11$ is also known. (Commutative property of addition). To add $2+6+4$, the second two numbers can be added to make ten, so $2+6+4=2+10=12$. (Associative Property of Addition).
1.OA. 4 Understand subtraction as an unknown/addend problem for example, subtract $10-8$ by finding the number that makes 10 when added to 8 .

## 1.OA. 5

Relate counting to addition and subtraction (e.g. by counting on 2 to add 2) - Skip Counting

## 1.OA. 6

Add and subtract within 20 , demonstrating fluency for addition and subtraction within 10 . Use strategies such as counting on; making 10 (e.g. 8+6= $8+2+4=10+4=14$; decomposing a number leading to ten (e.g. 13-4=13-3-1=10-1=9); Using the relationship between addition and subtraction (e.g. knowing that $8+4=12$, one knows $12-8=4$ ); and creating equivalent but easier or known sums (e.g. adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$ ).

## 1.NBT. 1

Count to 60, starting at any number less than 30 . In this range, read and write numerals and represent a number of objects with a written numeral.

## Learning Targets

## 1.OA. 1

- I can add and subtract within 10.
- I can create, model, and solve an addition problem within 10.
1.OA. 3
- I can change the order of addends to make equal equations
1.OA. 4
- I can solve addition and/or subtraction problems by finding the missing addend.
1.OA. 5
- I can relate counting to addition and subtraction


## 1.OA. 6

- I can use strategies such as making ten to add on
- I can use strategies to subtract within ten
1.OA. 7
- I can write a number sentence to model an addition problem.
- I can write a number sentence to model subtraction problems.
1.NBT. 1
- I can count, read, write, and represent numbers 1-30


## Vocabulary

Addition, commutative property of addition, addend, subtraction, difference, sum

Special Considerations:
At the end of week 4, benchmark 1 will be given.

Standard 1.NBT. 1 will be implemented during calendar throughout the school year

## Resources

Illustrative Mathematics

- 20 Tickets
- At the Park
- Boys and Girls, Variation 1
- Boys and Girls, Variation 2
- Field Day Scarcity
- Finding a Chair
- Growing Bean Plants
- Link-Cube Addition
- Maria's Marbles
- Measuring Blocks
- Measuring Blocks
- Peyton's Books
- School Supplies
- Sharing Markers

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- The Pet Snake
- Domino Addition
- Doubles?
- Cave Game Subtraction
- The Very Hungry Caterpillar
- $20 Dot Map
- Making a ten
- Choral Counting II
- "Crossing the Decade" Concentration
- Hundred Chart Digit Game
- Number of the Day
- Start/Stop Counting II
- Where DolGo?
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## Assessments

Benchmark \#1

UNIT 2: Addition/Subtraction - Base 10


## 1.OA. 5

Relate counting to addition and subtraction (e.g. by counting on 2 to add 2 ) - Skip Counting

## 1.OA. 6

Add and subtract within 20 , demonstrating fluency for addition and subtraction within 10 . Use strategies such as counting on; making 10 (e.g. 8+6= $8+2+4=10+4=14$; decomposing a number leading to ten (e.g. 13-4=13-3-1=10-1=9); Using the relationship between addition and subtraction (e.g. knowing that $8+4=12$, one knows $12-8=4$ ); and creating equivalent but easier or known sums (e.g. adding $6+7$ by creating the known equivalent $6+6+1=12+1=13$ ).

### 1.0A. 7

Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? 6=6, $7=8-1,5+2=2+5,4+1=5+2$.

## 1.OA. 8

Determine the unknown whole number in an addition or subtraction equation relating to three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8+?=11,5=?-3,6+6=$ ?

## 1.NBT. 1

Count to 60, starting at any number less than 30 . In this range, read and write numerals and represent a number of objects with a written numeral.

## Learning Targets

1.OA. 1

- I can add and subtract within 10.
- I can create, model, and solve an addition problem within 10.
1.OA. 3
- I can change the order of addends to make equal equations


## 1.OA. 4

- I can solve addition and/or subtraction problems by finding the missing addend.
1.OA. 5
- I can relate counting to addition and subtraction


## 1.OA. 6

- I can use strategies such as making ten to add on
- I can use strategies to subtract within ten


## 1.OA. 7

- I can write a number sentence to model an addition problem.
- I can write a number sentence to model subtraction problems.
1.NBT. 1
- I can count, read, write, and represent numbers 1-60


## Vocabulary

Addition, commutative property of addition, addend, subtraction, difference, sum

## Special Considerations

Standard 1.NBT. 1 will be implemented during calendar throughout the school year
At the end of week 9, benchmark 2 will be given.

## Resources

Illustrative Mathematics

- 20 Tickets
- At the Park
- Boys and Girls, Variation 1
- Boys and Girls, Variation 2
- Field Day Scarcity
- Finding a Chair
- Growing Bean Plants
- Link-Cube Addition
- Maria's Marbles
- Measuring Blocks
- Measuring Blocks
- Peyton's Books
- School Supplies
- Sharing Markers
- The Pet Snake
- Cave Game Subtraction
- The Very Hungry Caterpillar
- \$20 Dot Map
- Making a ten
- Equality Number Sentences
- Using lengths to represent equality
- Valid Equalities?

Achieve the Core

## Assessments

KDE Formative Assessment Lessons (FALS)

- Number Relationships (Equal or Not?)
- Greater Than, Less Than, Equal To in Range up to 10

Benchmark \#2
Unit 3 - Place Value - Base 10

| Week 1-2 | Week 3-4 | Week 5-6 |
| :--- | :--- | :--- |
| Standards |  |  |

## Standards

1.NBT. 2 - Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:
a. 10 can be thought of as a bundle of 10 ones - called a "ten"
b. The numbers from 11 to 19 are composed of a ten and/or 1-9 ones.
c. The numbers $10,20,30,40,50,60,70,80,90$ refer to 1-9 tens (and 0 ones)

## 1.NBT. 3

Compare two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with symbols $>,<,=$.

## 1.NBT. 4

Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and multiple of 10 , using concrete models or drawings and strategies based on pace value, properties of operations, and/or the relations between addition and subtraction; relate the 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.

## 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.

## 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), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

## 1.NBT. 1

Count to 90 , starting at any number less than 90 . In this range, read and write numerals and represent a number of objects with a written numeral.


- Where DolGo?
- Roll \& Build
- The Very Hungry Caterpillar
- Comparing Numbers
- Ordering Numbers
- Where DolGo?
- Ford and Logan Add 45+36
- Number Square

Achieve the Core

- Building Tens at the Lego Factory

3-Act Math

- The Cookie Monster
- The Pringle Ringle
- The Juggler
- Graham Cracker
- Bright Idea


## Assessments

KDE Formative Assessment Lesson (FALS)

- Pieces of Hundred Chart

Unit 4 - Measurement/Data

| Week 1 |
| :--- | :--- |
| Standards |
| 1.MD.1 |
| Order three objects by length; compare the lengths of two objects indirectly by a third object. |
| 1.MD.2 |
| Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that |
| the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the objects being |
| measured is spanned by a whole number of length units with no gaps or overlaps. |

## 1.MD. 3

Tell and write time in hours and half-hours using analog and digital clocks

## 1.MD. 4

Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.

## 1.NBT. 1

Count to 120 , starting at any number less than 120 . In this range, read and write numerals and represent a number of objects with a written numeral.

## Learning Targets

1.MD. 1

I can order three objects based on their lengths.
I can compare the lengths of two objects based on the length of a third object
1.MD. 2

I can accurately measure and express the length of an object
1.MD. 3

I can tell and write time to the hour and half-hour using digital and analog clocks.
1.MD. 4

I can organize and represent data with up to three categories
I can ask and answer questions about data

## 1.NBT. 1

I can count to 120 , starting at any number less than 120.
I can read and write numerals within 120.
I can represent number with objects.

## Vocabulary

Analog, digital, length, data, hour, half-hour, minute

## Special Considerations

Standard 1.NBT. 1 will be implemented during calendar throughout the school year.
Time can implanted during Calendar at an earlier time within the school year.

## Resources

Illustrative Mathematics

- Growing Bean Plants
- How Long?
- Measure Me!
- Measuring Blocks
- Making a clock
- Favorite Ice Cream Flavor
- Weather Graph Data

Assessments

Unit 5 -Geometry

| Week 1 | Week $\mathbf{2}$ |
| :--- | :--- |
| Standards |  |
| 1.G.1 |  |
| Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color, orientation, overall size); build a |  |
| draw shapes to possess defining attributes. |  |

## 1.G. 2

Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. (Note: Students do not need to learn formal names such as "right rectangular prism.")

## 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.
1.NBT. 1

Count to 120 , starting at any number less than 30 . In this range, read and write numerals and represent a number of objects with a written numeral.

## Learning Targets

1.G. 1

I can describe, build, and draw a shape by using its properties
I can explain which attributes make a shape what it is.
1.G. 2

I can create a different two- or three- dimensional shape using other two- or three- dimensional shapes.
1.G. 3

I can partition circles and rectangles into two equal shares
I can partition circles and rectangles into four equal shares.
I can describe equal shares using appropriate vocabulary.
I can explain what happens to equal shares when I partition them into smaller shares.

## Vocabulary

Closed shapes, open shapes, 2-dimensional, rectangle, square, trapezoid, triangles, half-circle, quarter-circle, 3-dimensional shapes, cone, cube, cylinder, sphere, halves, fourths, quarters

## Special Considerations

Standard 1.NBT. 1 will be implemented during calendar throughout the school year.
Time can implanted during Calendar at an earlier time within the school year.

## Resources

Illustrative Math

- 3-D Shape Sort
- All vs. Only some
- Counting Squares
- Grandfather Tang's Story
- Make Your Own Puzzle
- Overlapping Rectangles
- Equal Shares

Assessments

Benchmark \#3

