Course Title: $1^{\text {st }}$ grade Mathematics
Credit / Hours:

Board Approval Date: June 2018
Revisited: August 15, 2022 Reviewed Annually

## Course Description:

This course focuses on mastery of the PA Academic Standards for Mathematics. As students progress through this course they will participate in a systematic study of: counting, introducing addition, number stories, length and addition facts, place value and comparisons, addition fact strategies, subtraction fact strategies and attributes of shapes, geometry, and two-digit addition and subtraction.

## Learning Activities / Modes of Assessment:

- Large group instruction
- Checklists
- Teacher Observation
- Small group work- Games
- Computer simulations
- Tests and Quizzes


## Instructional Resources:

- Everyday Mathematics/ Common Core State Standards Edition (McGraw Hill, 2012)
- EM Online (Instructional Resources through Everyday Math)
- Discovery Education
- Brain Pop

Course: Math - Grade 1
Course Unit (Topic)
Length of Instruction (Days/Periods)

1. Counting 19 days
2. Introducing Addition

19 days
3. Number Stories

19 days
4. Length and Addition Facts 19 days
5. Place Value and Comparisons 20 days
6. Addition Fact Strategies 19 days
7. Subtraction Fact Strategies and Attributes of Shapes

19 days
8. Geometry

19 days
9. Two-Digit Addition and Subtraction and Review

19 days
Total Days 172 days

Curriculum: CCSD CURRICULUM
Course: $1^{\text {st }}$ Grade Math.
Topic: Unit 1 Counting Subject(s): $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022
Days: 19
Grade(s): $1^{\text {st }}$

| Know: | Understand: | Do: |
| :---: | :---: | :---: |
| $\frac{\text { Lesson } 1.1}{\text { estimate }}$count <br> quick looks$\frac{\text { Lesson } 1.2}{}$number line <br> skip counting$\underline{\text { Lesson } 1.3}$toolkit <br> pattern block template <br> side <br> vertex <br> cornersLesson 1.4 <br> (None)Lesson 1.5 <br> slateLesson 1.6 <br> compare$\underline{\text { Lesson } 1.7}$tally marks <br> tallies <br> tally chart$\underline{\text { Lesson } 1.8}$data <br> collect dataLesson 1.9 | We use different math tools and numbers to count, compare, record data, and solve number problems. | -Solve number stories by adding and subtracting. <br> -Relate counting to addition and subtraction. <br> -Add within 10 fluently. <br> -Count on from any number. <br> -Subtract within 10 fluently. <br> -Count on from any number. <br> -Read and write numbers. <br> -Count and represent collections of objects with numerals. <br> -Compare and order numbers <br> -Organize and represent data. <br> -Answer questions about data. <br> CC.2.2.1.A.1 - Represent and solve problems involving addition and subtraction within 20. <br> CC.2.1.1.B.1 - Extend the counting sequence to read and write numerals to represent objects. <br> CC.2.1.1.B. 2 - Use place value concepts to represent amounts of tens and ones and to compare two digit numbers. <br> CC.2.1.1.B.3 - Use place value concepts and properties of operations to add and subtract within 100. |


| explorations <br> pattern blocks <br> geoboards <br> base-10 bocks |  |  |
| :--- | :--- | :--- |
| Lesson 1.10 |  |  |
| solve |  |  |
| number story |  |  |
| Lesson 1.11 <br> number grid <br> count up <br> count back |  |  |
| Money <br> Know names and value of coins. |  |  |
| $\frac{\text { Time }}{\text { Tell and write time to the nearest }}$hour using both analog and digital <br> clocks. |  |  |
| Place Value <br> Know the ones and tens place. |  |  |
| Fact Fluency |  |  |
| Know addition and subtraction facts. |  |  |

Curriculum: CCSD CURRICULUM
Course: $1^{\text {th }}$ Grade Math
Topic: Unit 2 Introducing Addition
Subject(s): $1^{\text {th }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022

Days: 19
Grade(s): $1^{\text {th }}$

Know:

| $\underline{\text { Lesson 2-1 }}$ |
| :--- |
| count on |
| add |
| tool |
| sum |
| turn-around rule |
| strategy |
| Lesson 2-2 <br> pairs of numbers that add to 10 <br> ten frame <br> represent |
| Lesson 2-3 <br> math boxes |

Understand:
Do:
I can use strategies, patterns, and counting to solve addition problems
-Solve number stories by adding and subtracting.
-Model parts-and-total, change, and comparisons situations.
-Model and solve number stories involving the addition of 3 addends.
-Apply properties of operations to add or subtract.
-Relate counting to addition and subtraction.
-Recognize and decompose quantities up to 10 using visual patterns.
-Add within 10 fluently.


| Know: | Understand: | Do: |
| :---: | :---: | :---: |
| Lesson 3.1 <br> parts-and-total diagram <br> Lesson 3-2 <br> (none) <br> Lesson 3-3 <br> (none) <br> Lesson 3-4 <br> (none) <br> Lesson 3-5 <br> (none <br> Lesson 3-6 <br> (none) <br> Lesson 3-7 <br> (none) <br> Lesson 3-8 <br> column <br> row <br> Lesson 3-9 <br> math message <br> frames-and-arrows <br> arrow rule <br> Lesson 3-10 <br> (none) <br> Lesson 3-11 <br> Program <br> Money <br> Know names and value of coins. <br> Time <br> Tell and write time to the nearest hour using both analog and digital clocks. <br> Place Value <br> Know the ones and tens place. <br> Fact Fluency <br> Know addition and subtraction facts. | We can use counting or addition and subtraction to model and solve number stories. | - Solve number stories by adding and subtracting. <br> -Model parts-and-total, change, and comparison situations. <br> -Model and solve number stories involving the addition of 3 addends. <br> -Apply properties of operations to and/or subtract. <br> -Relate counting to addition and subtraction. <br> -Add within 10 fluently. <br> -Subtract within 10 fluently. <br> -Add and subtract within 20 using strategies. <br> -Find the unknown in addition and subtraction equations. <br> -Count on from any number. <br> -Read and write numbers. <br> -Compare and order numbers. <br> CC.2.2.1.A.1 - Represent and solve problems involving addition and subtraction within 20. <br> CC2.2.1.A. 2 - Understand and apply properties of operations and the relationship between addition and subtraction. <br> CC.2.1.1.B. 1 - Extend the counting sequence to read and write numerals to represent objects. <br> CC.2.1.1.B. 2 - Use place value concepts to represent amounts of tens and ones and to compare two digit numbers. |

Curriculum: CCSD CURRICULUM
Course: $1^{\text {st }}$ Grade Math
Topic: Unit 4 Length and Addition Facts
Subject(s): $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022

Days: 19
Grade(s): $1^{\text {st }}$


| Tell and write time to the <br> nearest half hour using both <br> analog and digital clocks. |  |
| :--- | :--- | :--- |
| Place Value |  |

Curriculum: CCSD CURRICULUM
Course: $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022
Days: 20
Grade(s): $1^{\text {st }}$

Topic: Unit 5 Place Value and Comparisons Subject(s): $1^{\text {st }}$ Grade Math

| Know: | Understand: | Do: |
| :---: | :---: | :---: |
| Lesson 5-1 long cube digits tens place ones place teen number exchange <br> Lesson 5-5 (none) <br> $\frac{\text { Lesson 5-9 }}{\text { (none) }}$ <br> Lesson 5-10 | We can use place value to compare and add numbers. | -Solve number stories by adding and subtracting. <br> -Apply properties of operations to add or subtract. <br> -Relate counting to addition and subtraction. <br> -Relate counting to addition and subtraction. <br> -Add within 10 fluently. <br> -Subtract within 10 fluently. <br> -Add and subtract within 20 using strategies. <br> -Understand the meaning of the equal sign. <br> -Determine whether equations involving addition or subtraction are true or false. <br> -Count on from any number. <br> -Understand place value. <br> -Represent whole numbers as tens and ones. <br> -Understand exchanging tens and ones. <br> -Understand 11 to 19 as ten and some ones. <br> -Understand 10, 20, . . , 90 as some tens and no ones. <br> -Compare and order numbers. |


| comparison diagram <br> addend <br> Lesson 5-11 <br> (none) <br> Lesson 5-12 <br> tool <br> Money <br> Count coins of the same value. <br> Time <br> Tell and write time to the nearest half hour using both analog and digital clocks. <br> Place Value <br> Know the role of place value in digits. <br> Fact Fluency <br> Know addition and subtraction facts. |  | -Record comparisons using $>$, $=$, or <. <br> -Understand adding 2-digit numbers and 1-digit numbers. <br> -Understand adding 2-digit numbers and multiples of 10. <br> -Measure length using same-size units with no gaps or overlaps. <br> -Express length as a whole number of units. <br> CC.2.2.1.A.1 - Represent and solve problems involving addition and subtraction within 20. <br> CC.2.2.1.A. 2 - Understand and apply properties of operations and the relationship between addition and subtraction. <br> CC.2.1.1.B. 1 - Extend the counting sequence to read and write numerals to represent objects. <br> CC.2.1.1.B. 2 - Use place value concepts to represent amounts of tens and ones and to compare two digit numbers. <br> CC.2.1.1.B.3 - Use place value concepts and properties of operations to add and subtract within 100. CC.2.4.1.A. 1 - Order lengths and measure them both indirectly and by repeating length units. |
| :---: | :---: | :---: |

Curriculum: CCSD CURRICULUM Course: $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022

Topic: Unit 6 Addition Fact Strategies
Days: 19
Subject(s): $1^{\text {st }}$ Grade Math
Grade(s): $1^{\text {st }}$

| Know: | Understand: | Do: |
| :---: | :---: | :---: |
| $\frac{\text { Lesson } 6.1}{\text { analog clock }}$ | We will have fluency with addition facts, telling time, and solving number stories. | -Solve number stories by adding and subtracting. |
| hour hand |  | -Apply properties of operations to add or subtract. |
| Lesson 6-2 |  | -Add within 10 fluently. |
| (none) |  | -Add doubles automatically. |
| Lesson 6-3 |  |  |
| (none) |  | -Add and subtract within 20 using strategies. |
| Lesson 6-4 |  | -Understand the meaning of the equal sing. |
| Near doubles |  | -Determine whether equations involving addition or |
| Lesson 6-5 |  | subtraction are true or false. |
| (none) |  | -Understand place value. |
| Lesson 6-6 |  |  |



Curriculum: CCSD CURRICULUM Course: $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022

Topic: Unit 7 Subtraction Fact Strategies and Attributes of Shapes Days: 19 Subject(s): $1^{\text {st }}$ Grade Math Grade(s): $1^{\text {st }}$



Curriculum: CCSD CURRICULUM
Course: $1^{\text {st }}$ Grade Math

PENNSYLVANIA
Date: June 20, 2022

Topic: Unit 8 Geometry
Days: 19
Subject(s): $1^{\text {st }}$ Grade Math
Grade(s): $1^{\text {st }}$

| Know: | Understand: | Do: |
| :---: | :---: | :---: |
| Lesson 8-1 | We use attributes of shapes, composite shapes, and fractional parts of shapes. We will tell and write time, work with bar graphs and add and subtract larger numbers. | -Understand place value |
| (none) |  | -Mentally find 10 more or 10 less than a 2 -digit number. |
| Lesson 8-2 |  |  |
| equal shares half |  | -Tell and write time using analog clocks. |
| whole |  | -Tell and write time using digital clocks. |
| Lesson 8-3 |  | -Organize and represent data. |
| fourth |  |  |
| quarter |  | -Ask questions about data. |
| Lesson 8-4 |  | -Answer questions about data. |
| mathematical model |  |  |
| Lesson 8-5 |  | -Distinguish between defining and non-defining attributes. |
| composite |  |  |
| Lesson 8-6 |  | -Build and draw shapes to possess defining attributes. |
| surface |  | -Build composite shapes. |
| edge |  | -Buld composite shapes. |
| face |  | -Partition shapes into equal shares. |
| vertex |  |  |
|  |  | Describe equal share using fraction words. |
| $\frac{\text { Lesson 8-7 }}{\text { (none) }}$ |  |  |
| (none) |  |  |
| Lesson 8-8 |  | CC.2.1.1.B. 2 - Use place value concepts to represent |
| half-hour |  | amounts of tens and ones and to compare two digit |
| half past |  | numbers. <br> CC.2.1.1.B. 3 - Use place value concepts and |
| $\frac{\text { Lesson 8-9 }}{(\text { none })}$ |  | properties of operations to add and subtract within 100. |


| Lesson 8-10 <br> number grid puzzle | CC.2.4.1.A.4 - Represent and interpret data using <br> tables/charts. <br> Cesson 8-11 <br> number grid <br> count up <br> count back <br> and three- dimensional shapes based on their <br> attributes. <br> CC.2.3.1.A.2 - Use the understanding of fractions to <br> partition shapes into halves and quarters. |  |
| :--- | :--- | :--- |
| Money <br> Count coins of mixed value. |  |  |
| Time <br> Introduce counting time to the 5 <br> minute interval. |  |  |
| Place Value <br> Master Number Grid Puzzles <br> $+/-10$. |  |  |
| Fact Fluency <br> Know addition and subtraction <br> facts. |  |  |

Curriculum: CCSD CURRICULUM
PENNSYLVANIA
Course: $1^{\text {st }}$ Grade Math Date: June 12, 2018

Topic: Unit 9 Two Digit Addition and Subtraction Review
Days: 19
Subject(s): $1^{\text {st }}$ Grade Math

Know:

| Lesson 9-1 <br> count on <br> add <br> tool <br> sum <br> turn-around rule <br> strategy | We can use strategies and <br> patterns. |
| :--- | :--- |
| Lesson 9-2 <br> pairs of numbers that add to 10 <br> ten frame <br> represent |  |
| Lesson 9-3 <br> math boxes |  |
| Lesson 9-4 <br> subtract <br> difference |  |
| Lesson 9-5 |  |

Do:
-Solve number stories by adding and subtracting.
-Model parts-and-total, change, comparison situations.
-Add doubles automatically.
-Add and subtract within 20 using strategies.
-Understand place value.
-Represent whole numbers as tens and ones.
-Compare and order numbers.
-Record comparisons using >, $=,<$.
-Understand adding 2-digit numbers and 1-digit numbers.
-Understand adding 2-digit numbers and multiples of 10.


Course/Subject: First Grade Mathematics Unit 1 Length of instruction: 19 Days

Unit Essential Question:
How do we count and use numbers?

| Concept: | Concept: | Concept: | Concept: |
| :---: | :---: | :---: | :---: |


| Lesson Essential Question/s: <br> Lesson 1-1: (CC.2.1.1.B.1) <br> How do we identify dot patterns on quick look cards? <br> Lesson 1-2: (CC.2.1.1.B.1) <br> How do we compare numbers on a number line? <br> Lesson 1-3: (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.3.1.A.1) <br> What tools can we use for counting and reasoning about shapes? <br> How do we count pennies to match numbers represented by a die? <br> Lesson 1-4: (CC.2.1.1.B.1) (2-day lesson) What are some new counting strategies? | Lesson Essential Question/s: <br> Lesson 1-5: <br> (CC.2.1.1.B.1, CC.2.2.1.A.1) <br> How do we count up and back on a number line? <br> Lesson 1-6: <br> (CC.2.1.1.B.1, <br> (CC.2.1.1.B.2) <br> How do we compare and order numbers up to 15 ? <br> Lesson 1-7: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.4.1.A.4) <br> How can we represent counts with tally marks? <br> Lesson 1-8: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.4.1.A.4) <br> How can we represent counts with tally marks? | Lesson Essential Question/s: <br> Lesson 1-9: <br> (CC.2.1.1.B.1, CC.2.3.1.A.1) <br> Exploration A: How can we explore pattern blocks to learn more about shapes? <br> Exploration B: How can we explore base-10 blocks to learn more about shapes? <br> Exploration C: How can we explore geoboards to prepare to learn more about shapes? <br> Lesson 1-10: <br> (CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How can we solve simple number stories? <br> Lesson 1-11: <br> (CC.2.1.1.B.1, CC.2.2.1.A.1) <br> How do we count up and back on a number grid? <br> Lesson 1-12: <br> (Unit Assessment) <br> (2-day lesson) <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2, <br> CC.2.4.1.A.4) <br> How do we count and use numbers? | Lesson Essential Question/s: <br> Money: (CC.2.1.1.B.1) How do we identify coins by their specific characteristics? <br> Place Value: (CC.2.1.1.B.2) How do we use place-value concepts to represent amounts of tens and ones when counting the number of days in school? |
| :---: | :---: | :---: | :---: |



Course/Subject: First Grade Mathematics Unit 2 Length of instruction: 19 Days

## Unit Essential Question: <br> How do we solve addition problems?

| Concept: | Concept: | Concept: | Concept: |
| :---: | :---: | :---: | :---: |
| $\sqrt{7}$ |  |  | 5 |
| $\frac{\text { Lesson Essential }}{\frac{\text { Question/s: }}{}}$ <br> Lesson 2-1: (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How can we use counting <br> strategies to find sums? <br> Lesson 2-2: (CC.2.1.1.B.1, <br> CC.2.2.1.A.1) <br> How can we use addition to <br> recognize quantities? | Lesson Essential Question/s: <br> Lesson 2-5: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> (2-day lesson) <br> How do we find pairs of numbers that add to 10 ? <br> Lesson 2-6: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, | Lesson Essential Question/s: Lesson 2-9: (CC.2.1.1.B.1, CC.2.2.1.A.1, CC.2.2.1.A.2) <br> How can we solve change-to-more number stories with sums to 10 ? <br> Lesson 2-10: <br> (CC.2.1.1.B.1, CC.2.1.1.B.2, | Lesson Essential Question/s: <br> Money: (CC.2.1.1.B.1) How do we identify coins by their specific characteristics? <br> Place Value: <br> (CC.2.1.1.B.2) <br> How do we use place-value concepts to represent amounts of tens and ones |


| $\begin{aligned} & \text { Lesson 2-3: (CC.2.1.1.B.1, } \\ & \text { CC.2.2.1.A.1) } \end{aligned}$ | $\begin{aligned} & \hline \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ | $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ | when counting the number of days in school? |
| :---: | :---: | :---: | :---: |
| What are some pairs of numbers that add to equal 10 ? | How can we count objects and correctly label counts? | How do we write number models to represent number stories? | Fact Fluency: <br> (CC.2.2.1.A.1) <br> How can we quickly solve |
| $\begin{aligned} & \text { Lesson 2-4: (CC.2.1.1.B.1, } \\ & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2, } \\ & \text { CC.2.4.1.A.4) } \end{aligned}$ | Lesson 2-7: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) | Lesson 2-11: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, | addition facts? |
| Exploration A: How can we find pairs of numbers that add to 10 ? | How can we use unit boxes to label objects as I count? | CC.2.2.1.A.2) <br> How do we write number models to represent number |  |
| Exploration B: How do I collect data using a tally chart? | Lesson 2-8: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, | stories? <br> Lesson 2-12: <br> (Unit Assessment) |  |
| Exploration C: How do I solve number stories by subtracting? | CC.2.2.1.A.2) <br> How can I solve change-to-more number stories with sums to 10 ? | (2-day lesson) (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.2.1.A.2) How do we solve addition problems? |  |
| 1 | V | $\square$ | $\square$ |
| Vocabulary: | Vocabulary: | Vocabulary: | Vocabulary: |
| - 2-1 - count on, add, tool, sum, turn-around rule, strategy <br> - 2-2 - pairs of numbers that add to 10 , ten frame, represent <br> - 2-3-subtract, difference <br> - 2-4- | - 2-5 - order, pattern, table <br> - 2-6- <br> - 2-7 - unit, unit box <br> - 2-8-change-to-more diagram | - 2-9-change-to-less diagram <br> - 2-10 - plus, is equal to, number model, number sentence, minus <br> - 2-11unknown, equation <br> - 2-12 - | - Money - penny, nickel, dime, quarter <br> - Place Value - ones, tens, exchange <br> - Fact Fluency math fact |

## Course/Subject: First Grade Mathematics Unit 3 Length of instruction: 19 Days

Unit Essential Question:
How do we solve number stories?


| Lesson Essential Question/s: | $\frac{\text { Lesson Essential }}{\text { Question/s: }}$ | Lesson Essential Question/s: | Lesson Essential Question/s: |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Lesson 3-1: (CC.2.1.1.B.1, } \\ & \text { CC.2.1.1.B.2, } \end{aligned}$ | $\begin{aligned} & \text { Lesson 3-5: } \\ & \text { (CC.2.1.1.B.1, } \end{aligned}$ | $\begin{aligned} & \text { Lesson 3-9: } \\ & \text { (CC.2.1.1.B.1, } \end{aligned}$ | Money: (CC.2.1.1.B.1) How do we identify coins |
| CC.2.2.1.A.1, | CC.2.2.1.A.1, | CC.2.2.1.A.1, | by their specific |
| CC.2.2.1.A.2) | CC.2.2.1.A.2) | CC.2.2.1.A.2) | characteristics? |
| How do we use diagrams and number models to represent and solve parts-and-total situations? | How do we count up and back on the number line? | How do I use Frames-and-Arrows diagram to solve problems using counting, addition, and subtraction? | Place Value: <br> (CC.2.1.1.B.2) <br> How do we use place-value |
| Lesson 3-2: (CC.2.1.1.B.1, | (CC.2.1.1.B.1, |  | amounts of tens and ones |
| $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ | $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ | $\begin{aligned} & \text { Lesson 3-10: } \\ & \text { (CC.2.1.1.B.1, } \end{aligned}$ | when counting the number of days in school? |
| How do we represent number stories with number | How do I count up and back on the number | $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ |  |
| number stories with number models and solve them? | back on the number line to add or subtract? | How do we find the arrow rule in Frames- | Fact Fluency: <br> (CC.2.2.1.A.1) <br> How can we quickly solve |
| Lesson 3-3: (CC.2.1.1.B.1, CC.2.2.1.A.1, | Lesson 3-7: <br> (CC.2.1.1.B.1, | and-Arrows problems and find unknown | addition facts? |
| CC.2.4.1.A.1) | CC.2.2.1.A.1, | numbers in addition |  |
| Exploration A: How do we count large collections of objects? | CC.2.2.1.A.2) <br> How do we count up and back on the number line and use it to solve | and subtraction equations? |  |
| Exploration B: How do we write number models to | equations with unknown numbers? |  |  |
| represent pictures with paired features? | Lesson 3-8: | Lesson 3-11: <br> (CC.2.2.1.A.1) |  |
| Explorations C: How do we compare lengths? | (CC.2.1.1.B.1, | How do we program |  |
|  | $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2) } \end{aligned}$ | calculators to extend a counting sequence? |  |
|  | How do we use the number grid to count | Lesson 3-12: <br> (Unit Assessment) |  |


| Lesson 3-4: (CC.2.1.1.B.1, CC.2.2.1.A.1, CC.2.2.1.A.2) (2-day lesson) How do we solve open response problems about representing a number story? | and discuss patterns in counts? | (2-day lesson) (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.2.1.A.2) How do we solve number stories? |  |
| :---: | :---: | :---: | :---: |
|  |  |  |  |
|  |  |  | Vocabulary: <br> - Money - penny, nickel, dime, quarter <br> - Place Value ones, tens, exchange <br> - Fact Fluency math fact |

Course/Subject: First Grade Mathematics Unit 4 Length of instruction: 19 Days

Unit Essential Question:
How do we measure using nonstandard units?
How can we improve our fact fluency?

| Concept: | Concept: | Concept: | Concept: |
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| Lesson Essential Question/s: <br> Lesson 4-1: (CC.2.4.1.A.1) <br> How do we compare lengths of objects? <br> Lesson 4-2: (CC.2.4.1.A.1) How do we measure length with nonstandard units? <br> Lesson 4-3: (CC.2.4.1.A.1) | Lesson Essential Question/s: <br> Lesson 4-5: (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.2.1.A.2, CC.2.3.1.A.1, CC.2.4.1.A.4) Exploration A: How can we collect data and | Lesson Essential Question/s: <br> Lesson 4-9: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we develop strategies to add three numbers? | Lesson Essential Question/s: <br> Money: (CC.2.1.1.B.1) How do we count coins of the same value? <br> Place Value: (CC.2.1.1.B.2) <br> How do we use place-value concepts to represent amounts of tens and ones |


| How do we estimate and measure lengths of objects? <br> Lesson 4-4: (CC.2.4.1.A.1) (2-day lesson) How do we measure length with a nonstandard unit and identify the best measurement? | display it on a tally chart? <br> Exploration B: How can we create shapes with different attributes on a geoboard? <br> Exploration C: How do we build and count base-10 blocks? <br> Lesson 4-6: <br> (CC.2.4.1.A.4) <br> How do we create, compare, and answer questions about tally charts and bar graphs? <br> Lesson 4-7: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do I use doubles as a strategy for adding and subtracting? <br> Lesson 4-8: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we record addition facts we know and use combination of 10 as a strategy for adding and subtracting? | Lesson 4-10: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we apply <br> strategies to add three numbers? <br> Lesson 4-11: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we find numbers that are 10 more or 10 less than a given number? <br> Lesson 4-12: <br> (Unit Assessment) (2-day lesson) (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.1.1.B.3, CC.2.2.1.A.1, CC.2.2.1.A.2, CC.2.4.1.A.1, CC.2.4.1.A.4) How do we measure using nonstandard units? <br> How can we improve our fact fluency? | when counting the number of days in school? <br> Fact Fluency: <br> (CC.2.2.1.A.1) How can we quickly solve addition facts? |
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| Vocabulary: | Vocabulary: | Vocabulary: | Vocabulary: |
| :---: | :---: | :---: | :---: |
| - 4-1 - measure, | - 4-5 - title, label, | - 4-9 - helper fact | - Money - cents |
| length, edge | flat, long, cube | - 4-10 - | - Place Value - |
| - 4-2 - estimates | - 4-6 - bar graph | - 4-11- | - Fact Fluency - |
| - 4-3- <br> - 4-4 - argument | - 4-7 - double ten frame doubles | - 4-12 - |  |


|  | • $\frac{4-8}{\text { fact, } \text { addition }}$ <br> of 10 |  |  |
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Course/Subject: First Grade Mathematics Unit 5 Length of instruction: 20 Days Unit Essential Question:
How do we investigate place value, use place value to compare and add numbers, and explore measurement?

| Concept: | Concept: | Concept: | Concept: |
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| Lesson Essential Question/s: <br> Lesson 5-1: (CC.2.1.1.B.1 | Lesson Essential Question/s: <br> Lesson 5-5: | Lesson Essential Question/s: <br> Lesson 5-9: | Lesson Essential Question/s: Lesson 5-13: |
| :---: | :---: | :---: | :---: |
| CC.2.1.1.B.2) | (CC.2.1.1.B.1 | (CC.2.1.1.B.1 | (Unit Assessment) |
| How do we use base-10 | CC.2.1.1.B.2, | CC.2.1.1.B.2) | (2-day lesson) |
| blocks to practice place- | CC.2.2.1.A.1 | How can we us | (CC.2.1.1.B.1, |
| value concepts and solve | CC.2.2.1.A.2) | relation symbols | CC.2.1.1.B.2, CC.2.1.1.B.3, |
| place value riddles? | How do we determine whether addition and | number models to compare 1 and 2 digit | $\begin{aligned} & \text { CC.2.2.1.A.1, } \\ & \text { CC.2.2.1.A.2, } \end{aligned}$ |
| $\begin{aligned} & \text { Lesson 5-2: (CC.2.1.1.B.1, } \\ & \text { CC.2.1.1.B.2) } \end{aligned}$ | subtraction equations are true or false? | numbers? | CC.2.4.1.A.1) |
| How do we use base-10 blocks and calculators to identify digits in 2-digit numbers? |  | Lesson | place value, use place value |
|  | Lesson 5-6: | (CC.2.1.1.B.1, | to compare and add |
|  | $\begin{aligned} & \text { CC.2.1.1.B. } \\ & \text { CC.2.1.1.B. } \end{aligned}$ | CC.2.2.1.A.1, | measurement? |
|  | CC.2.1.1.B.3) | CC.2.2.1.A.2) |  |
| $\begin{aligned} & \text { Lesson 5-3: (CC.2.1.1.B.1, } \\ & \text { CC.2.1.1.B.2) } \end{aligned}$ | How do we apply place value understanding | How do we solve a comparison number | Money: (CC.2.1.1.B.1) <br> How do we count coins of |
| How do make place value exchanges between tens and ones by exchanging pennies and dimes? | and write numbers to at least 120 on number | story? | the same value? <br> How do we make place |
|  | scrolls? | $\begin{aligned} & \text { Lesson 5-11: } \\ & \text { (CC.2.1.1.B.1, } \end{aligned}$ | value exchanges between tens and ones by |
|  | Lesson 5-7: <br> (CC.2.4.1.A.1) | CC.2.1.1.B.2, | exchanging pennies and dimes? |


| Lesson 5-4: (CC.2.1.1.B.1, CC.2.1.1.B.2) <br> How do we use relation symbols to compare twodigit numbers? | How do we find the length of a crooked path by using nonstandard units? <br> Lesson 5-8: <br> (CC.2.1.1.B.2, <br> CC.2.4.1.A.1) <br> Exploration A: How do we play a game exploring the relationship between tens and ones? <br> Exploration B: How do we compare the lengths of two objects? <br> Exploration C: How do we measure a path? | CC.2.2.1.A.1, CC.2.2.1.A.2) <br> How do we use a variety of strategies to add and subtract 2-digit numbers? <br> Lesson 5-12: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.1.1.B.3, <br> CC.2.2.1.A.2) <br> (2-day lesson) <br> How do we find the sum of a 1 -digit and 2 digit number problem about adding animal weights? How can we discuss our solutions and revise our work? | Place Value: <br> (CC.2.1.1.B.2) <br> How do we use place-value concepts to represent amounts of tens and ones when counting the number of days in school? How do we apply place value understanding and write numbers to at least 200 on a number scroll? <br> Fact Fluency: (CC.2.2.1.A.1) How can we quickly solve addition facts? |
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| Vocabulary: <br> - 5-1 - long, cube, digits, tens place, ones place, teen number, exchange <br> - 5-2 - <br> - 5-3- <br> - 5-4 - | Vocabulary: <br> - <br> - $5-5-1$ <br> - <br> - $5-7-$ | Vocabulary: <br> - 5-9- <br> - 5-10comparison diagram, addend <br> - 5-11 - <br> - 5-12-tool | Vocabulary: <br> - 5-13- <br> - Money - cents <br> - Place Value number scroll <br> - Fact Fluency - |

Course/Subject: First Grade Mathematics Unit 6 Length of instruction: 19 Days
Unit Essential Question:
How do we gain addition fact fluency and solve number stories?

| Concept: | Concept: | Concept: | Concept: |
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| Lesson Essential Question/s: <br> Lesson 6-1: (CC.2.4.1.A.2) <br> How do we read time to the hour on an hour-hand-onlyclock? <br> Lesson 6-2: (CC.2.1.1.B.1, CC.2.2.1.A.1, CC.2.2.1.A.2) <br> How do we use tools, strategies, and properties of operations to solve number stories? <br> Lesson 6-3: (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.2.1.A.2, CC.2.3.1.A.1) <br> Exploration A: How do we determine whether number sentences are true or false? <br> Exploration B: How do we solve double addition facts? <br> Exploration C: How do we create shapes with given attributes? <br> Lesson 6-4: (CC.2.1.1.B.1, CC.2.1.1.B.2, CC.2.2.1.A.1, CC.2.2.1.A.2) <br> How do we use neardoubles strategies to solve addition facts? | Lesson Essential <br> Question/s: <br> Lesson 6-5: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we solve facts <br> and represent solution <br> strategies with pictures, <br> words, and symbols? <br> Lesson 6-6: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we use the <br> making 10 strategy <br> when adding? <br> Lesson 6-7: <br> (CC.2.2.1.A.2) <br> How do we use the $\underline{\text { My }}$ <br> Reference Book to find <br> helpful information? <br>  <br> Lesson 6-8: <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> (2-day lesson) <br> How do we solve a <br> multi-step number <br> story? | Lesson Essential <br> Luestion/s: <br> Lesson 6-9: <br> (CC.2.1.1.B.1, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2) <br> How do we use <br> addition and <br> subtraction facts to <br> complete name- <br> collection boxes? <br> Lesson 6-10: <br> (CC.2.1.1.B.2, <br> CC.2.1.1.B.3, <br> CC.2.2.1.A.2) <br> How do we use base-10 <br> blocks to solve place- <br> value riddles? <br> Lesson 6-11: <br> (CC.2.1.1.B.2, <br> CC.2.1.1.B.3, <br> CC.2.2.1.A.2) <br> How do we apply our <br> understanding of place <br> value to make <br> exchanges between <br> pennies, dimes, and <br> dollars? <br> Lesson 6-12: <br> (Unit Assessment) <br> (2-day lesson) <br> (CC.2.1.1.B.1, <br> CC.2.1.1.B.2, <br> CC.2.1.1.B.3, <br> CC.2.2.1.A.1, <br> CC.2.2.1.A.2, <br> CC.2.4.1.A.1, <br> CC.2.4.1.A.2) <br> How do we gain <br> addition fact fluency <br> and solve number <br> stories? | Lesson Essential Question/s: <br> Money: (CC.2.1.1.B.1) <br> How do we count coins of the same value? <br> How do we make place value exchanges between tens and ones by making exchanges between pennies, dimes, and dollars? <br> Place Value: <br> (CC.2.1.1.B.2) <br> How do we use place-value concepts to represent amounts of tens and ones when counting the number of days in school? <br> How do we apply place value understanding and write numbers to at least 200 on a number scroll? <br> Fact Fluency: (CC.2.2.1.A.1) How can we quickly solve addition facts? <br> Time: (CC.2.4.1.A.2) <br> How do we read time to the hour on an hour-hand-onlyclock? |
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| Vocabulary: | Vocabulary: | Vocabulary: | Vocabulary: |
| :---: | :---: | :---: | :---: |
| - 6-1-analog clock, hour hand <br> - 6-2 - <br> - 6-3- <br> - 6-4-near doubles | - 6-5 - <br> - 6-6 - making 10 <br> - 6-7-My <br> Reference Book <br> - 6-8 - | - 6-9 - Equivalent names, namecollection boxes <br> - 6-10 - flat, hundreds place <br> - 6-11 - <br> - 6-12 - | - Money - cents, dollars <br> - Place Value number scroll <br> - Fact Fluency - <br> - Time - |

Course/Subject: First Grade Mathematics Unit 7 Length of instruction: 19 Days

> Unit Essential Question:
> How can we build subtraction fact fluency?
> How can we compare and contrast the attributes of shapes?



Course/Subject: First Grade Mathematics Unit 8 Length of instruction: 19 Days
Unit Essential Question:
How can we use attributes of shapes, composite shapes, and fractional parts of shapes?
How can we tell time and understand data from graphs?
How can we add and subtract by tens?
How can


## Lesson Essential Question/s:

Lesson 8-1: (CC.2.3.1.A.1)
How do we construct 2dimensional shapes and identify their attributes?

Lesson 8-2: (CC.2.3.1.A.2)
How do we divide shapes into 2 equal halves?

Lesson 8-3: (CC.2.3.1.A.2)
How can we divide shapes into 4 equal parts?

Lesson 8-4: (CC.2.3.1.A.2)
(2-day lesson)
How can we use drawings to answer questions about sharing paper squares?

## Lesson Essential Question/s:

## Lesson 8-5:

(CC.2.3.1.A.1)

How can we combine 2-dimensional shapes to create composite shapes?

## Lesson 8-6:

(CC.2.3.1.A.1)

How do we identify defining attributes of 3 dimensional shapes?

Lesson 8-7:
(CC.2.2.1.A.1, CC.2.3.1.A.1)
(2-day lesson) Exploration A: How can we create a composite shape from 2 and 3 dimensional shapes?

Exploration B: How can we solve addition facts with fact strategies?

Lesson 8-8:
(CC.2.4.1.A.2)

Lesson Essential Question/s:
Money: (CC.2.1.1.B.1)
How do we count coins of mixed values?

Place Value:
(CC.2.1.1.B.2)

How do we use place-value concepts to represent amounts of tens and ones when counting the number of days in school?
How can I solve simple number grid puzzles?

## Fact Fluency:

(CC.2.2.1.A.1) How can we quickly solve addition facts?

Time: (CC.2.4.1.A.2) How do we read time to the half-hour?

|  | How can we tell and write time to the hour? | How can we use attributes of shapes, composite shapes, and fractional parts of shapes? <br> How can we tell time and understand data from graphs? <br> How can we add and subtract by tens? |  |
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| Vocabulary: <br> - 8-1 - <br> - 8-2 -equal shares, half, whole <br> - 8-3-fourth, quarter <br> - 8-4 mathematical model | Vocabulary: <br> - 8-5-composite <br> - 8-6-surface, edge, face <br> - 8-7 - <br> - 8-8 - half hour, half past | Vocabulary: <br> - 8-9 - <br> - 8-10 - number grid puzzle <br> - 8-11 - number grid, count up, count back <br> - 8-12 - | Vocabulary: <br> - Money- <br> - Place Value - <br> - Fact Fluency - <br> - Time - |

Course/Subject: First Grade Mathematics Unit 9 Length of instruction: 19 Days

How do I add and subtract 2-digit numbers?



| - 9-1 - count on, add, tool sum, turn-around rule, strategy <br> - 9-2 - pairs of numbers that add to 10 , ten frame, represent <br> - 9-3 - Math Boxes <br> - 9-4 - subtract, difference | - 9-5 - <br> - 9-6 - <br> - 9-7 - unit box <br> - 9-8 - | - 9-9 - <br> - 9-10 - change-tomore diagram <br> - 9-11 - change-toless diagram <br> - 9-12 - | - Money - <br> - Place Value - <br> - Fact Fluency - <br> - Time - |
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