# Scope and Sequence

## Complete Math K-1

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Complete Math for Grade K-1 is a comprehensive (400+ activities) Mathematics program designed to give students all of the mathematical skills required for mastery to the end of Grade 1. Each component of the program uses hundreds of activities to build skills gradually and sequentially. Auditory instructions, help buttons and rule files ensure that students will navigate the activities easily, independently and at their own level of ability. A wide variety of reward and reinforcements keep the students engaged and motivated to succeed while they develop academic self confidence.

### Program Layout

1. Numeration
2. Patterning
3. Measurement
4. Geometry
5. Data Management
6. Probability

### Targeted Skills

Numeration

Measurement

Patterning

Geometry

Data Management

Probability

## Marks Manager

Using the new Version 5 Marks Manager a teacher can assign program pretests to individual students, or an entire class. Based on pretest results the Marks Manager will create an individualized program to target each student's skill deficits. It's completely automated and provides a highly efficient way to tailor instruction to meet specific learning needs. It provides individualized student instruction in a way that is not otherwise possible given limited time & resources.

- Pretests automatically assess the skill and ability levels of each student
- Automatic creation of an individualized program for each student's specific needs
- Teachers also retain the ability to customize all programs to meet instructional needs
- New "Hot Spots" report quickly identifies areas of student difficulty
- New "Skills" report relates all activities to specific curriculum outcomes
- Stores student marks and progress in one central location for all programs
- Creates and prints reports quickly and easily for sharing with parents and staff

# 1. NUMERATION

1 - Learning the Numbers

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| Learn the Numbers 1-10 | **Number Match** | Click on the matching numbers. | Read and print numerals.<br><br>Understand sounds of numerals. | CCSS.Math.Content.K.CC.A.1 Count to 100 by ones and by tens. |
| | **Hear and Find** | Click on the number you hear. | | |
| | **Type the Numbers** | Type the number you see. | | |
| | **Flash Cards** | Click on the number that matches the number you see. | | |
| | **Color the Objects** | Color the number of objects to match the number you hear. | Understand one-to-one correspondence between number and visual group of objects. | CCSS.Math.Content.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.<br><br>CCSS.Math.Content.K.CC.B.5 Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects. |
| | **Turn the Tiles** | Click on the correct number of tiles. | | |
| | **Learn to Count** | Click on the number of objects you see. | | |
| | **Count and Match** | Click on the group that has the number you hear. | | |
| | **Count the Pictures** | Count the objects and type the number. | | |
| | **Number Words** | Click the word and the number that match.<br><br>Type the number that matches the word.<br><br>Type each word in the list. | Read number words 0 -10.<br><br>Print number words 0 - 10. | CCSS.Math.Content.K.CC.A.3 Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). |

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| Learn the Numbers<br>10 to 20<br>20 to 30<br>30 to 50<br>50 to 70<br>70 to 100 | **Number Match** | Click on the matching numbers. | Read numerals. | CCSS.Math.Content.K.CC.A.1 Count to 100 by ones and by tens.<br>CCSS.Math.Content.K.CC.A.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).<br>CCSS.Math.Content.1.NBT.A.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. |
| | **Hear and Click** | Click on the number you hear. | Understand sound of numerals. | |
| | **Type the Numbers** | Type the number you see. | Read and print numerals. | |
| | **Abacus** | Click and count groups of up to 10 beads to count up to the designated number. | Count by 10's, 5's and 1's by using an abacus. | CCSS.Math.Content.1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.<br>CCSS.Math.Content.1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. |
| | **Click and Count** | Click on the number units to put the correct number in the tens or ones box for a given number. | Understand that two digit numbers are made up of tens and ones and identify how many of each for a given number. | CCSS.Math.Content.K.CC.B.4 Understand the relationship between numbers and quantities; connect counting to cardinality.<br>CCSS.Math.Content.K.CC.B.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.<br>CCSS.Math.Content.1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. |
| | **Paint a Pattern** | Color the number squares in order to make a pattern or picture. | Count by 1's. | |

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| Working with Numbers 0-10<br><br>Working with Numbers 10 - 20<br><br>Working with Numbers 20 - 30<br><br>Working with Numbers 30 - 50<br><br>Working with Numbers 0 - 100 | **Fill in the Blanks** | Type the missing numbers. | Count up by 1's. | CCSS.Math.Content.1.NBT.A.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. |
| | **Count to x** | Type the numbers in the correct order from x to x. | | |
| | **Counting by 1's** | Type the numbers in the correct order. | | |
| | **Counting Backwards** | Type the missing numbers in the backward sequence. | Count backwards by 1's. | |
| | **Abacus** | Click and count groups of up to 10 beads. Click the number when you have moved that many beads. | Count by 10's, 5's and 1's by using an abacus. | CCSS.Math.Content.K.NBT.A.1 Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as 18 = 10 + 8); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.<br><br>CCSS.Math.Content.1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. |
| | **Choose the Biggest Number** | Click on the biggest number. | Compare numbers and identify which number has the greatest or smallest value. | CCSS.Math.Content.K.CC.C.7 Compare two numbers between 1 and 10 presented as written numerals.<br><br>CCSS.Math.Content.1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. |
| | **Choose the Smallest Number** | Click on the smallest number. | | |
| | **Order the Numbers** | Type the numbers you see in their correct order. | Count up by 1's.<br><br>Reorder out of sequence numbers into their proper numerical sequence. | CCSS.Math.Content.2.OA.B.2 CCSS.Math.Content.K.CC.C.6 Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.<br><br>CCSS.Math.Content.1.NBT.A.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. |

3 - Addition

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Learn to Add 1 to 3**<br>**Learn to Add 4 to 6**<br>**Learn to Add 7 to 9** | Put the correct number of flowers (numbers x to x) into the boxes representing each term in the equation.<br>(3 activities) | Understand addition facts for two digit addition (#s 1-9). | CCSS.Math.Content.K.OA.A.1 Represent addition and subtraction with objects, fingers, mental images, drawings1, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.<br>CCSS.Math.Content.K.OA.A.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.<br>CCSS.Math.Content.K.OA.A.3 Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).<br>CCSS.Math.Content.K.OA.A.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.<br>CCSS.Math.Content.K.OA.A.5 Fluently add and subtract within 5. |
| **Number Sentences Row 1 to 3**<br>**Number Sentences Row 4 to 6**<br>**Number Sentences Row 7 to 9** | Solve simple row addition problems with numbers x to x.<br>(3 activities) | | CCSS.Math.Content.1.OA.A.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<br>CCSS.Math.Content.1.OA.B.3 Apply properties of operations as strategies to add and subtract.<br>CCSS.Math.Content.1.OA.C.5 Relate counting to addition and subtraction<br>CCSS.Math.Content.1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a 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). |
| **Number Sentences Column** | Solve simple column addition problems with numbers 0 to 9.<br>(3 activities) | | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Picture Addition** | Type the answer for how many objects are shown in the pictorial equation. | Understand concrete materials as a representation of an addition problem.<br><br>Understand addition facts for two digit addition (#s 1-9). | CCSS.Math.Content.1.OA.A.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. |
| **Extra Practice in Addition** | Various problems based on identifying the correct answer to simple addition problems. | Understand addition facts for two digit addition (#s 1-9). | CCSS.Math.Content.1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.<br><br>CCSS.Math.Content.1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.<br><br>CCSS.Math.Content.1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. |
| **Find the Problems** | Click on the problems that equal the number at the top. | | |
| **Adding More Than Two Numbers** (two activities) | Simple addition problems with 3 terms. | Understand basic addition problems with 3 terms. | |

4 - Subtraction

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Learn to Subtract 1 to 3**<br>**Learn to Subtract 4 to 6**<br>**Learn to Subtract 7 to 10**<br>**Learn to Subtract 1 to 10** | Take away the number of objects you hear by clicking on them.<br>(4 activities) | Understand subtraction facts for two digit subtraction (#s 1-9). | CCSS.Math.Content.1.OA.A.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 |
| **Number Sentences Row 1 to 3**<br>**Number Sentences Row 4 to 6**<br>**Number Sentences Row 7 to 10**<br>**Number Sentences Row 1 to 10** | Solve simple row subtraction problems with numbers 1 to 10.<br>(4 activities) | | CCSS.Math.Content.1.OA.B.3 Apply properties of operations as strategies to add and subtract.<br>CCSS.Math.Content.1.OA.C.5 Relate counting to addition and subtraction<br>CCSS.Math.Content.1.OA.C.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a 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). |
| **Extra Practice in Subtraction** | Various problems based on identifying the correct answer to simple subtraction problems. | | CCSS.Math.Content.1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. |
| **Subtraction Problems** | Pick the addition problem that shows another way of thinking about the subtraction problem shown. | Understand how addition and subtraction are opposites. | CCSS.Math.Content.1.OA.B.4 Understand subtraction as an unknown-addend problem. |

## 5 - Calculator Practice

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Calculator 0 to 10**<br>**Calculator 10 to 20**<br>**Calculator 20 to 30**<br>**Calculator 30 to 50** | Use the calculator to answer the questions above the calculator. | Basic understanding of single digit addition and subtraction.<br><br>Basic calculator skills. | CCSS.Math.Content.1.OA.A.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.<br><br>CCSS.Math.Content.1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, 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. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. |

## 6 - Coins

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Match the Coins** | Click on the coins that match. | Basic understanding of the appearance of different coins. | |
| **Show me the Coins** | Click on the coin you hear. | Basic understanding of the appearance and spoken name of different coins. | |
| **Counting Pennies** | Click on the group of pennies that has the same value as the coin above. | Basic understanding of the appearance, spoken name and value of different coins. | |
| **How Many Cents?** | Click on the written amount that is the same as the coin you see. | Basic understanding of the appearance, spoken name and value of different coins. | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Working with Coins: Counting Pennies and Nickels** | Click on the pennies to count them, then click on the answer. | Basic understanding of the appearance, spoken name and value of different coins.<br><br>Counting up by 1's. | CCSS.Math.Content. 2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have? |
| **Working with Coins: Counting Nickels** | Click on the nickels to count them, then click on the answer. | Basic understanding of the appearance, spoken name and value of different coins.<br><br>Counting up by 5's. | |
| **Working with Coins: How much is left?** | Take away the amount that you hear from the group of pennies. | Basic understanding of the appearance, spoken name and value of different coins.<br><br>Counting up by 1's. | |
| **Working with Coins: Counting Change** | Take away the amount that you hear, then press enter. | Basic understanding of the appearance, spoken name and value of different coins.<br><br>Counting up by 1's.<br><br>Solve simple single digit addition problems. | |

7 - Mixed Practice

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Job 1**<br>**Job 2**<br>**Job 3**<br>**Job 4**<br>**Job 5**<br>**Job 6** | Click on the correct answer for each addition or subtraction question.<br>(5 activities) | Understand addition facts for two digit addition (#s 1-9).<br>Understand subtraction facts for two digit subtraction (#s 1-9). | CCSS.Math.Content.1.OA.A.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. |
| **The Equal Sign I** | Click true or false to determine whether the two equations shown are equal. | Understand the meaning of the equal sign.<br>Understand addition facts for two digit addition (#s 1-9).<br>Understand subtraction facts for two digit subtraction (#s 1-9). | CCSS.Math.Content.1.OA.D.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. |
| **The Equal Sign II** | | | |

# 2. PATTERNING

1. Attributes

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Are They the Same Color?** | Click on the checkmark if the two shapes that you see are the same color, click on the X if they are different. | Identify whether or not two given objects have similar properties. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.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. |
| **Are They the Same Shape?** | Click on the checkmark if the two shapes that you see are the same shape, click on the X if they are different. | | |
| **Are They the Same Size?** | Click on the checkmark if the two shapes that you see are the same size, click on the X if they are different. | | |
| **Fruit Loops** | How many fruit loops are there?<br>How many fruit loops are yellow? etc. | Sort objects based on color | |
| **Parking Lot** | Various questions about the numbers of colored cars in the parking lot. | | |
| **What do the Letters Have in Common?** | Look at the letters above. What do they have in common - same letter or same color? | Determine whether given objects are the same color or same shape. | |
| **What do the Shapes Have in Common? (2 activities)** | Look at the shapes above. What do they have in common - same shape or same color? | | |

2. What Comes Next?

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Suns and Clouds** | Which comes next in the pattern - a sun or a cloud? | Determine the next entry in a basic pictoral pattern. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask |
| **Next Letter (2 activities)** | Look at the pattern and type which letter comes next. | Determine the next entry in a basic letter pattern. | |
| **Next Number (2 activities)** | Look at the pattern and type which number comes next. | Determine the next entry in a basic number pattern. | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Next 3 Numbers** | Look at the pattern of numbers and click on the rest of the pattern. | Continue a basic arithmetic pattern going up or down by ones. | 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. |

3. What is Missing?

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Animals (2 activities)** | Click on which animal should replace the checkmark for each pattern. | Fill in a missing entry for a basic pictoral pattern. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br>CCSS.Math.Content.1.MD.C.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. |
| **Money** | Click on whether a coin or bill is missing in each pattern. | | |
| **Shapes** | Look at the pattern and click the shape that belongs in the red X. | | |
| **Letters** | Click on one of three letters at the end of each row to replace the missing letter in each pattern. | Fill in a missing entry for a basic letter pattern. | |
| **Numbers** | Click on one of three numbers at the end of each row to replace the missing number in each pattern. | Fill in a missing entry for a basic numerical pattern. | |

4. Make a Pattern

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Fruit** | Listen to the pattern and click on what comes next in the pattern. | Continue a pictoral pattern by choosing the correct set of items. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. |
| **Shapes** | | | |
| **Shirts** | | | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Pattern Matching** | Click on the pattern of shapes that matches the pattern at the top of the screen. | Recognize similarities in given patterns. | CCSS.Math.Content.1.MD.C.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. |

5. Talking About Patterns

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Up and Down Patterns** | Do the numbers in this pattern go up or down? | Discuss whether an arithmetic pattern gets larger or smaller. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.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. |
| **Talking About Number Patterns** | Match the arithmetic patterns on the left with the printed descriptions on the right. | Determine printed description of basic arithmetic patterns. | |
| **Talking About Number Patterns 2** | Choose the correct arithmetic pattern that matches the printed description at the top. | | |
| **Talking About Shape Patterns** | Look at each pattern of shapes. Is the printed description correct? | Determine printed description of basic geometric patterns. | |

6. Number Charts

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Number Charts** | Click on the next three numbers for the pattern on each number chart. | Use a number chart to continue simple arithmetic patterns, going up and down by ones. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.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. |
| **Number Charts II** | | | |
| **Number Charts Backwards** | | | |

# 3. MEASUREMENT

2. Days, Months, Seasons

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| Days / Months | **Word Match (Days)**<br>**Word Match (Months)** | Click on the days of the week / months that match from each column. | Understand the days of the week and place them in order.<br><br>Understand the months of the year and place them in order.<br><br>Understand how to read a calendar. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br><br>CCSS.Math.Content.2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. |
| | **Type the Days**<br>**Type the Months** | Type the day of the week / month you see. | | |
| | **Flash Cards (Days)**<br>**Flash Cards (Months)** | Click on the day of the week /month that matches the day /month you see. | | |
| | **Word Games (Days)**<br>**Word Games (Months)** | 1. Find the matching words to see a hidden picture.<br>2. Match the jumbled days of the week / months with the words on the left. | | |
| | **Find the Day**<br>**Find the Month** | Click on the correct day of the week / month that you hear. | | |
| | **Number the Days**<br>**Number the Months** | Click on the number for the day of the week / month you hear. | | |
| | **Match the Days**<br>**Match the Months** | Click on the day of the week / month that answers each question you hear. | | |
| | **Order the Days**<br>**Order the Months** | Put the days of the week / months in order. | | |
| | **Calendar Games** | Type the answer for each question about calendars. | | |

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| | **Which Month** | Type the answer for each question. | | |

| UNIT | ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|---|
| Seasons | **Match Season I** | Click on the season which matches the picture. | Understand names and order of seasons.<br><br>Understand basic properties of seasons (eg. winter is cold, summer is hot). | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br><br>CCSS.Math.Content.2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. |
| | **Match Season II** | | | |
| | **Pick the Season** | Click on the picture that matches the season that you hear. | | |
| | **Match the Seasons** | Click on the season that answers each question. | | |
| | **Which Season is the Best Match?** | Click on the season that would best match the words you hear. | | |
| | **Concentration** | Match the words with their pictures. | | |

3 - Telling Time

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Which Takes Longer?** | Name the activity which takes longer to complete. | Understand the passage of time and relate it to the duration of certain familiar activities. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br>CCSS.Math.Content.1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks. |
| **Order the Events** | Put these events in order. | Order pictorial sequences of events. | |
| **Building a Clock** | Type the numbers in the order they appear on the face of a clock. | Read analog clocks to the hour and half-hour. | |
| **By the Hour** | Click on the correct time to match the clock. | | |
| **By the Half-Hour** | | | |
| **What Time is It?** | | | |
| **What Time Do You Hear?** | Click on the clock that matches the time you hear. | | |
| **Match the Clock** | Click on the clock that matches the time on the left. | | |
| **Match the Time** | Match the written time with its digital notation. | Read time when written digitally and as “o’clock.” | |
| **Concentration** | Match the written times with the clocks. | | |

## 4 - Temperature

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Temperature & You** | Various questions relating to concepts like warmer, colder and appropriate activities for these conditions. | Understand concepts like warmer, colder, hot, cold.<br><br>Relate these concepts to daily activities and common hobbies. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. |
| **Coldest to Hottest** | Put the pictures in order from coldest to hottest. | | |
| **Hot Or Cold Items** | Click on the objects that would be used in winter and summer. | | |
| **Is It Hot or Cold?** | Listen to the word you hear and decide whether it belongs in the Hot or Cold category. | | |
| **Hot Times, Cold Times** | Various questions about which clothing items would be appropriate at different temperatures. | | |

## 5 - Length & Height

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **True or False?** | Answer the following questions by clicking on the check or the x. | Compare height of objects.<br><br>Understand concepts like bigger, biggest, shorter and shortest. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br><br>CCSS.Math.Content.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children |
| **Tallest or Shortest** | Click on the tallest or shortest. | | |
| **Order the Pictures** | Click on the pictures from shortest to tallest. | | |
| **What is the Height** | | | |
| **Measure the Height** | | | |
| **What is the Length** | | | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Measure the Length** | Measure objects using non standard units. | Measure the height and length of objects by using non-standard units. | and describe one child as taller/ shorter.<br><br>CCSS.Math.Content.1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.<br><br>CCSS.Math.Content.1.MD.A.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 object being measured is spanned by a whole number of length units with no gaps or overlaps. |

6 - Perimeter, Distance & Area

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Count the Perimeter in Objects** | Count the number of objects around each shape. | Measure perimeter in non-standard units. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br><br>CCSS.Math.Content.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/ shorter.<br><br>CCSS.Math.Content.1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. |
| **Count the Perimeter in Squares** | Count the number of units around each shape. | | |
| **Fill the Picture** | How many squares would you need to color in to cover up this object? | Measure area in non-standard units. | |
| **Count the Squares** | How many squares does this shape cover? | | |
| **Area or Perimeter** | Click on the correct shape that shows area or perimeter. | Understand difference between perimeter and area. | |
| **Count Your Goodies** | How many objects does it take to get from point A to point B. | Measure distance in non-standard units. | |
| **Count the Distance** | Following the red path, how many sides does it take to get from point A to point B? | | |

7. Capacity, Volume & Mass

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Fill it Up** | Click the objects on the left to fill the containers on the right. How many did it take to fill? | Measure capacity using non-standard units. | CCSS.Math.Content.K.MD.A.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.<br><br>CCSS.Math.Content.K.MD.A.2 Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/ shorter. |
| **Water Jugs** | Click on the water jug that has the most / least / is full / is empty? | Compare capacities of various objects. | |
| **Order the Water Jugs** | Click on jugs in order from the least water to the most water. | | |
| **Yes or No** | Various questions about real life applications of capacity, volume and mass. | Apply concepts of capacity, volume and mass to basic real life situations. | |
| **Use the Scale** | Which object on the scale weighs more? | Use a tipping scale to measure which object weighs more. | |
| **Which Weighs More?** | Which of these objects weighs more? | Estimate and compare the masses of various familiar objects. | |
| **Heavy and Light Items** | Click on the lightest and heaviest objects. | | |
| **Order the Weight** | Click on the objects in order from the lightest to the heaviest. | Estimate and order the masses of various familiar objects. | |

# 4. GEOMETRY

Geometry - 1 - 2D Naming

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Pick the Shape (2 activities)** | Click on the shape that matches the shape you hear. | Identify 2D shapes (circle, rectangle, square, triangle). | CCSS.Math.Content.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.<br>CCSS.Math.Content.K.G.A.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").<br>CCSS.Math.Content.K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).<br>CCSS.Math.Content.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. |
| **Shape Matching (2 activities)** | Match the shape with its name. | | |
| **What Shape is This? (2 activities)** | Click on the name of the shape that you hear. | | |
| **Shape Hunt** | Find and click on all the shapes that match the shape that you hear. | | |
| **Shape Hunt Counting** | Count the number of shapes that match the shape that you hear and press enter. | | |

Geometry - 2 - 3D Naming

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Pick the Figure (2 activities)** | Click on the figure that matches the figure that you hear. | Identify 3D shapes (cube, cone, cylinder, sphere). | CCSS.Math.Content.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.<br>CCSS.Math.Content.K.G.A.3 Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").<br>CCSS.Math.Content.K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length). |
| **Figure Matching (2 activities)** | Match the figure with its name. | | |
| **What Figure is This? (2 activities)** | Click on the name of the figure that you hear. | | |
| **Figure Hunt** | Find and click on all the figures that match the shape that you hear. | | |
| **Figure Hunt Counting** | Count the number of figures that match the figure that you hear and press enter. | | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Click the Prism** | Click on the shape that is a prism. | Basic identification of a prism. | CCSS.Math.Content.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. |

Geometry - 3 - 2D Properties

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Count the Sides** | Type the number of sides that each shape has. | Count the number of sides of 2D shapes. | CCSS.Math.Content.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.<br>CCSS.Math.Content.K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).<br>CCSS.Math.Content.K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).<br>CCSS.Math.Content.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. |
| **Count the Corners** | Type the number of corners that each shape has. | Count the number of corners of 2D shapes. | |
| **Find the Sides** | Click on the shapes that have the number of sides that you hear. | Count the number of sides of 2D shapes. | |
| **Biggest** | Click on the biggest shape. | Compare 2D shapes based on size. | CCSS.Math.Content.1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. |
| **Smallest** | Click on the smallest shape. | | |
| **Order the Shapes** | Click on the shapes in order from the smallest to the biggest. | | |
| **Same Size Shapes** | Click on the two shapes that are the same size. | | |
| **Shapes and Colors** | Match each shape with its description. | Classify shapes based on color. | |

Geometry - 4 - 3D Properties

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Biggest** | Click on the biggest figure. | Compare 3D figures based on size. | CCSS.Math.Content.1.G.A.1 Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size) ; build and draw shapes to possess defining attributes. |
| **Smallest** | Click on the smallest figure. | | |
| **Order the Figures** | Click on the figures in order from the smallest to the biggest. | | |
| **Same Size Figures** | Click on the two figures that are the same size. | | |
| **Figures & Colors** | Match each figure with its description. | Classify figures based on color. | |
| **Riddles** | Click on the figure that answers each riddle. | Understand basic properties of 3D figures - # corners, sides, etc. | CCSS.Math.Content.K.G.A.2 Correctly name shapes regardless of their orientations or overall size.<br>CCSS.Math.Content.K.G.A.3 Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).<br>CCSS.Math.Content.K.G.B.4 Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).<br>CCSS.Math.Content.K.G.B.5 Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. |
| **Riddles 2** | | | |
| **What is the Shaded Shape?** | Click on the shape that matches the red shape. | Identify a 2D shape within a 3D figure. | CCSS.Math.Content.1.G.A.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, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.<br>CCSS.Math.Content.K.G.B.6 Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?” |

## Geometry - 5 - Symmetry

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Is it a Line of Symmetry** | Is this shape divided symmetrically? | Identify whether a picture is divided symmetrically or not. | CCSS.Math.Content.1.G.A.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. |
| **Is it Symmetrical?** | Is this picture symmetrical? | | |
| **Find the Match** | On the left there is one half of a picture. Click on the shape from the right that is the matching other half. | Determine whether given halves of an object are symmetrical or not. | |
| **Pick the Line** | Look at the picture you see. If you wanted to divide it into two symmetrical parts, would you use a line that goes up & down or a line that goes left & right? | Basic understanding of how to divide a picture symmetrically. | |

## Geometry - 6 - Directions

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Fun with Directions** | Listen carefully and answer each question about the picture you see (questions based on comparing objects shown by using concepts like “to the right/left of” and “behind/in front of” etc). | Describe an object in relation to another object - behind, in front, to the left, to the right, above, below, inside, outside. | CCSS.Math.Content.K.G.A.1 Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. |
| **Fruit Salad** | | | |
| **Positioning 1** | | | |
| **Positioning 2** | | | |
| **Positioning 3** | | | |
| **Crossroads** | Look at this map of a town and click on the direction that answers the question you hear. | Read a map and apply directional language to move between two given points - turn right, turn left. | |

# 5. DATA MANAGEMENT

## Data Management - 1.1 - Counting

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Fruit** | Various questions about how many apples or bananas there are, as well as comparing these numbers. | Sort, count and compare objects based on one characteristic. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.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. |
| **Stars** | Various questions about how many yellow or blue stars there are, as well as comparing these numbers. | | |
| **Skateboards** | How many skateboards are there? How many skateboards are red? How many skateboards are not red or green? etc. | | |
| **Water Jugs** | Click the jug with the most / least / 2nd most / 2nd least amount of water. | Sort pictoral objects based on one characteristic. | |

## Data Management - 1.2 - Sorting

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Hats** | Various questions about the properties of a group of hats. | Recognize basic properties of pictoral items. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.<br><br>CCSS.Math.Content.1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the |
| **Triangles** | Click on each triangle and place them in two different groups so that are the triangles in each group are the same. | Sort geometric objects based on one attribute. | |
| **Shapes** | Look at the picture of sorted shapes. Are the shapes sorted by shape or color? | Determine how three groups of shapes have been sorted - by color or shape. | |
| **What Do They Have in Common?** | Look at these shapes. What do they have in common? | | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **What Do They Have in Common? II** | Look at these letters. What do they have in common - same letter or same color? | Determine what two given shapes have in common - same shape or same color. | total number of data points, how many in each category, and how many more or less are in one category than in another. |
| **What Do They Have in Common? III** | Look at these numbers. What do they have in common - same number or same color? | | |

Data Management - 1.3 - Surveying

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Pick the Question** | Students must pick the best question from a list given to get a desired result. | Choose an appropriate question to get a desired result from a survey. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. |
| **Good and Bad Questions** | Is the given question a “yes and no” question? | Determine whether a given question is a “yes and no” question. | |
| **Do a Survey** | Look at the picture and tell me -<br>How many people like red / blue balloons?<br>How many more people liked red balloons over blue balloons?<br>How many people did you ask in total? | Collect first-hand data by performing basic surveys. | CCSS.Math.Content.1.MD.C.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. |
| **Do a Survey II** | Look at the ballots and keep track of how many votes each person received to be class president. | | |

Data Management - 1.4 - Graphing

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Cafeteria Food** | Various questions about reading data from a basic bar graph. | Read data from bar graphs with one-to-one correspondence. | CCSS.Math.Content.K.MD.B.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. |
| **Number of Coins** | Does the graph match the number of coins you see? | Compare one-to-one bar graphs with a pictoral representation of the data. | |

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Rainy Days** | Various questions about reading data from a basic pictograph. | Read data from pictographs with one-to-one correspondence. | CCSS.Math.Content.1.MD.C.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. |
| **Getting to School** | Your teacher did a survey on how the students in your class got to school each day. Click on the squares in the graph to fill them in. | Complete a one-to-one bar graph from basic data. | |
| **Getting to School (Activity 2)** | Various questions about reading data from a basic bar graph. | Read data from bar graphs with one-to-one correspondence. | |

Data Management - 2.1 - Probability

| ACTIVITY NAME | INSTRUCTION | SKILLS | COMMON CORE STANDARDS |
|---|---|---|---|
| **Animals** | Various questions about real world probability problems involving animals - eg. “Is there a good chance the next dog you will see will have a tail?” | Understand that certain events may or may not occur.<br><br>Use real world experience to predict the probability of certain events.<br><br>Understand meaning of never, sometimes, always, certain, good chance. | CCSS.Math.Content.1.OA.A.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. |
| **Days** | Various questions about real world probability problems involving days - eg. “Will Friday ever be the day right after Wednesday?” | | |
| **Weather** | Various questions about real world probability problems involving weather - eg. “Will it always snow on Christmas?” | | |
| **Fun and Games** | Various questions about real world probability problems - eg. “The next time you play baseball, is it certain that you will get a hit?” | | |