

# Readington Township Public Schools

## Kindergarten Mathematics

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Readington Township Public Schools

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# Kindergarten Mathematics

## Overview

Readington Township Public Schools' K-5 mathematics curriculum provides students with a strong foundation in mathematics content while promoting and instilling the skills of problem-solving, communication in mathematics, making mathematical connections, and reasoning. Throughout the delivery of the K-5 mathematics program, various tools and technology are employed, including manipulatives, calculators, software, apps, videos, websites, and computing devices (computers, tablets, smartphones, interactive whiteboards, etc.). A strong focus of the program is on promoting high levels of mathematical thought through experiences which extend beyond traditional computation. The program is directly correlated to the Student Learning Standards for Mathematics, which the State of New Jersey has adopted and it is designed to prepare students for the New Jersey state assessments.

In Kindergarten, instructional time focuses on two critical areas: representing and comparing whole numbers, initially with sets of objects than with written numerals, and describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics (NJSL).

## STUDENT OUTCOMES

(Linked to [New Jersey Student Learning Standards for Mathematics 2016](#))

### Counting and Cardinality (K.CC)

#### A. Know number names and the count sequence.

1. Count to 100 by ones and by tens.
2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
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).

#### B. Count to tell the number of objects.

4. Understand the relationship between numbers and quantities; connect counting to cardinality.
  - a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.
  - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
  - c. Understand that each successive number name refers to a quantity that is one larger.
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.

#### C. Compare numbers.

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.
7. Compare two numbers between 1 and 10 presented as written numerals.

### Operations and Algebraic Thinking (K.OA)

#### A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

1. Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings<sup>2</sup>, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
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  $5 = 4 + 1$ ).
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.
5. Demonstrate fluency for addition and subtraction within 5.

### Number and Operations in Base Ten (K.NBT)

**A. Work with numbers 11–19 to gain foundations for place value.**

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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**Measurement and Data (K.MD)**

**A. Describe and compare measurable attributes.**

1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
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.*

**B. Classify objects and count the number of objects in each category.**

3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

**Geometry (K.G)**

**A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).**

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*.
2. Correctly name shapes regardless of their orientations or overall size.
3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

**B. Analyze, compare, create, and compose shapes.**

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).
5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
6. Compose simple shapes to form larger shapes. *For example, “Can you join these two triangles with full sides touching to make a rectangle?”*

**Mathematical Practices**

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

**Strategies**

- Teacher presentation
- Teacher read-aloud
- Group discussion
- Small Group instruction
- Group presentations
- Interactive Smartboard Lessons
- Partner work
- Museum walks
- Math talk (students explain their thinking)
- Small Group Work
- Daily 5 Math
- Centers/ stations

## Accommodations

### [Accommodations and Modification Addendum](#)

## Assessments

| Formative   | Summative  |
|---|--|
| <ul style="list-style-type: none"> <li>● Independent student work</li> <li>● Ready Classroom Lesson Quizzes</li> <li>● Teacher Observations</li> <li>● Class Participation</li> <li>● Class Discussions</li> <li>● Class Assignments</li> <li>● Homework Assignments</li> <li>● Notebooks</li> <li>● Anecdotal Records</li> </ul> | <ul style="list-style-type: none"> <li>● Mid-Unit Test</li> <li>● Unit Test</li> <li>● Quizzes</li> </ul>  |
| Benchmark   | Alternative  |
| <ul style="list-style-type: none"> <li>● I-Ready Diagnostic</li> <li>● Performance Assessments</li> </ul>   | <ul style="list-style-type: none"> <li>● Live Online Assessment Tools (Kahoot, Brainpop)</li> <li>● Student Projects</li> <li>● Student Presentations</li> <li>● Self-Assessments</li> </ul> |

## Resources

| Required/Primary  | Supplemental   |
|---|--|
| <ul style="list-style-type: none"> <li>● Ready Classroom Mathematics, Curriculum Associates, LLC                             <ul style="list-style-type: none"> <li>○ Teacher Manual Volumes 1 &amp; 2</li> <li>○ Student Books Volumes 1 &amp; 2</li> <li>○ Ready Classroom Teacher Toolbox</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>● Brain Pop</li> <li>● IXL</li> <li>● Reflex Math</li> <li>● Online Tutorials (Learnzillion, Khan Academy, Math Antics)</li> <li>● Online Math Games (Math is Fun, Funbrain, Cool Math Games, Math Playground)</li> </ul> |

## Essential Questions And Content

|   |
|---|
| <ul style="list-style-type: none"> <li>● <b>Counting and Cardinality</b> <ul style="list-style-type: none"> <li>○ <b>Understanding Numbers</b> <ul style="list-style-type: none"> <li>■ What are the names of numbers?</li> <li>■ How can I count in sequence?</li> <li>■ How can I count to tell the numbers of objects?</li> </ul> </li> </ul> </li> <li>● <b>Geometry</b> <ul style="list-style-type: none"> <li>○ <b>Identify, Describe, and Create Shapes</b> <ul style="list-style-type: none"> <li>■ What terms can I use to describe a shape?</li> <li>■ How can I describe and identify the relative position of a shape?</li> <li>■ What are the similarities and differences between two shapes?</li> </ul> </li> </ul> </li> <li>● <b>Operations and Algebraic Thinking</b> <ul style="list-style-type: none"> <li>○ <b>Groups in Numbers</b> <ul style="list-style-type: none"> <li>■ What are addition and subtraction?</li> <li>■ What ways can I use to show addition or subtraction?</li> <li>■ What groups of numbers can I find in other numbers (decomposition)?</li> </ul> </li> </ul> </li> <li>● <b>Number and Operations in Base Ten</b> <ul style="list-style-type: none"> <li>○ <b>Teen Numbers</b> <ul style="list-style-type: none"> <li>■ How can I show that a teen number is a group of ten and some ones?</li> </ul> </li> <li>○ <b>Partners, Problem-Solving, and Tens</b> <ul style="list-style-type: none"> <li>■ How can I understand, solve, and retell problems that use math?</li> </ul> </li> </ul> </li> </ul> |
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- How are teen numbers created?
    - How can I use drawings and objects to represent teen numbers?
  - **Teen Numbers and Problem-Solving**
    - What is place value?
    - How can I use what I know about teen numbers to solve math problems?
- **Measurement and Data**
  - **Describe, Compare, and Classify**
    - What are measurable attributes?
    - How do I sort objects into a category?
    - What words do I use to describe and identify objects?

## Pacing and Interdisciplinary Connections

### COUNTING AND CARDINALITY

#### Understand Numbers 0-5

##### Lessons 1-5 (25 days)

- Understand Counting
- Count and Write to 5
- Compare Within 5

#### *Interdisciplinary Connections:*

##### *Literacy/ Math*

- **K.CC.B.4** Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**SL.K.5.** Add drawings or other visual displays to descriptions as desired to provide additional detail.

**Activity:** Students will draw pictures to represent objects from 0-5.

##### *Science/ Math*

- **K.CC.B.4. A** When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.

**K-PS2-2.** Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.\*

**Activity:** Students will create different types of ramps. The students will roll objects down the ramp. The students will count out more than one to roll at times, deciding if having more objects slows or speeds up the push.

#### Understand Numbers 6-10, Teen Numbers, and Counting to 100

##### Lessons 6-9, 27, 29, 30 (30 days)

- Count and Write to 10
- Understand 1 More
- Compare Within 10
- Sort and Count Objects

#### *Interdisciplinary Connections:*

##### *Literacy/ Math*

- **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.

**SL.K.1** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.

**Activity:** Students will work with a peer. They will group objects and discuss “how many?”, adding and subtracting to become more familiar with math vocabulary.

##### *Science/ Math*

- **K.CC.A.** Know number names and the count sequence.

**K-ESS2-1.** Use and share observations of local weather conditions to describe patterns over time.

**Activity:** The students will keep a weather calendar. At the end of the month, they will count the different types of weather. “How many cloudy days?” for example.

### GEOMETRY

#### Shapes

##### Lessons 12-15 (21 days)

- Name Shapes

- See Position
- Compare Shapes
- Build Shapes

**Interdisciplinary Connections:**

**Literacy/ Math**

- **K.GO.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.  
**W.K.2.** Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.  
**Activity:** Students will draw a picture using various shapes in their journal. Then label the shapes describing where it is.

**Math/ Science**

- **K-PS2-2.** Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.\*  
**K.G.B.5** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.  
**Activity:** The students will use 3-D shapes to create a ramp and test other 3- D objects. The students will record their observations.

**OPERATIONS AND ALGEBRAIC THINKING**

**Addition and Subtraction**

**Lessons 10-11, 16-25 (50 days)**

- Understand the Process of Addition and Subtraction Within 5
- Add and Subtract Within 10
- Find Missing Parts of 10
- Solve Word Problems

**Interdisciplinary Connections:**

**Literacy/ Math**

- **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  $5 = 4 + 1$ ).  
**W.K.8.** With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.  
**Activity:** Each lesson begins with a **Start** question that helps students connect to prior learning experiences. They may draw, write, or use words or symbols to communicate information they recall.

**Science/ Math**

- **K.OA.A.5.** Demonstrate fluency for addition and subtraction within 5.  
**K-2-ETS1-2.** Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.  
**Activity:** The students will draw and create a number story. The students will then write words to help explain their word problem. They can choose an addition or subtraction word problem.

**NUMBER AND OPERATIONS IN BASE TEN**

**Teen Numbers and Counting by 1s and 10s**

**Lessons 26, 28, (25 days)**

- Understand Concept of Teen Numbers
- Count and Make Teen Numbers
- Count to 100 by Ones and Tens

**Interdisciplinary Connections:**

**Literacy/ Math**

- **SL.K.1.** Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.  
**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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.  
**Activity:** The students will be given various math problems. They will then talk through their understanding as a class.

**Social Studies/ Math**

- **6.1.2.CivicsCM.2:** Use examples from a variety of sources to describe how certain characteristics can help individuals collaborate and solve problems (e.g., open-mindedness, compassion, civility, persistence).
  - **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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
- Activity:** The students will be given various math problems. They will then talk through their understanding as a class.

## MEASUREMENT AND DATA

### Describe, Compare, and Classify

#### Lessons 31-32 (11 days)

- Describing objects with measurable attributes (length, height, weight)
- Comparing objects using measurable attributes

#### Interdisciplinary Connections:

##### Science/ Math

- **K-PS2.2** Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull.
  - **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.
- Activity:** The students will be asked to create a ramp system. The students will then measure how far an object rolled. The students will compare the objects, for example the marble rolled farther than the tennis ball.

##### Literacy/ Math

- **SL.K.4.** Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
  - **K.MD.A.1** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. 2. Directly compare two objects with a measurable.
- Activity:** Students will work with a peer to discuss the similarities and differences among objects. Giving as much detailed information as possible.

## Career, Computer Science, and Key Skills

### Counting and Cardinality

- **Career Ready Practices**
  - Utilize critical thinking to make sense of problems and persevere in solving them.
  - **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).
  - **Activity:** The students will be given various objects in a brown bag. The students will count out the different objects and record in their math journal.
  - Utilize critical thinking to make sense of problems and persevere in solving them.
  - **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).
  - **Activity:** Students will fill out a daily calendar and school day count. Each day adding one more. During that time students will discuss patterns in the calendar and the school day count.
- **9.2 Career Awareness, Exploration, and Preparation**
  - **9.2.2.CAP.1:** Make a list of different types of jobs and describe the skills associated with each job.
  - **K.CC.A.1** Know number names and the count sequence. 1. Count to 100 by ones and by tens.
  - **Activity:** Students will be given an assignment to be a bank teller. The students will count out pennies and dimes to practice counting by 1’s and 10’s. They will then record their answers in their journals.
- **9.4 Life Literacies and Key Skills**
  - **9.4.2.TL.1:** Identify the basic features of a digital tool and explain the purpose of the tool.
  - **9.4.2.DC.6:** Identify respectful and responsible ways to communicate in digital environments.
  - **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).
  - **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. Students will use other digital tools to help solve the math problems.

**Activity:** Students will be given a homework assignment to count out different items at home. Students will be asked to answer questions about how many do you need in your house, what happens if you run out? Where do you go to buy the items? Students will record their answers using a digital tool or their choice paper and share out with their peers the next day.

- **Computer Science**

- **8.1.2.CS.1:** Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.

**K.CC.C.6** Compare numbers. 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.

**Activity:** The students will make a document by pasting in pictures and then typing the correlating number to the pictures.

## Geometry

- **Career Ready Practices**

- Utilize critical thinking to make sense of problems and persevere in solving them.

**K.G.B.4** Analyze, compare, create, and compose shapes. 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).

**Activity:** Students will sort 3- D shapes by their attributes. Students will then do another sort to show another way. Students will then explain to their partners how and why they sorted the shapes.

- **9.2 Career Awareness, Exploration, and Preparation**

- **9.2.4.A.2** Identify various life roles and civic and work-related activities in the school, home, and community.

**K.G.B.5.** Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.

**Activity:** The students will be assigned to work with a partner and create a structure using at least 4 different shapes that would be able to hold a small wooden block. Students will then share out what was created and what they learned.

- **9.4 Life Literacies and Key Skills**

- **9.4.2.TL.2:** Create a document using a word processing application.

- **9.4.2.DC.3:** Explain how to be safe online and follow safe practices when using the internet (e.g., 8.1.2.NI.3, 8.1.2.NI.4).

- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

**K.G.A.3.** Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

**Activity:** Students will create a sort for their partner using digital platform. The partner will then determine how the shapes were sorted.

- **Computer Science**

- **8.2.2.ED.3:** Select and use appropriate tools and materials to build a product using the design process.

**K.G.A.3.** Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).

**Activity:** Students will create a new three- dimensional object. Students will work in a small group. Students will then explain their process.

## Operations and Algebraic Thinking

- **Career Ready Practices**

- Demonstrate creativity and innovation.

**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.

**Activity:** Students will work with a partner. Each student will create number stories using manipulatives from the classroom. The partner will solve the problem on their whiteboards.

- **9.2 Career Awareness, Exploration, and Preparation**

- **9.2.2.CAP.1:** Make a list of different types of jobs and describe the skills associated with each job.

**K.OA.A.1.** Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

**Activity:** Students will be given an assignment for homework to ask their parents, grandparents, and/ or neighbors how do they solve number problems. Are number problems part of their job?



- **9.4 Life Literacies and Key Skills**

- **9.4.2.DC.6:** Identify respectful and responsible ways to communicate in digital environments.
- **9.4.2.TL.4:** Navigate a virtual space to build context and describe the visual content.
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

**K.OA.A.1.** Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

**Activity:** Students will solve basic addition problems using an online platform. After they are completed students will share with their partner how they solved the problem.

- **Computer Science**

- **8.1.2.CS.1:** Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.

**K.OA.A.1.** Represent addition and subtraction up to 10 with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.

**Activity:** Students will use a technology device to help solve word problems.

### Number and Operations in Base Ten

- **Career Ready Practices**

- Demonstrate creativity and innovation.

**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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**Activity:** Students will be given a homework assignment to collect objects from around the house. The students will then create equations representing, for example,  $17+10+7$ , then try another way. Students will then share out with their peers their collection and equations.

- **9.2 Career Awareness, Exploration, and Preparation**

- **9.2.2.CAP.1:** Make a list of different types of jobs and describe the skills associated with each job.

**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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**Activity:** Students will work in small groups. They will use base tens and ones to create and solve various equations. Discuss how these basic skills will help later in life.

- **9.4 Life Literacies and Key Skills**

- **9.4.2.TL.2:** Create a document using a word processing application.
- **9.4.2.DC.4:** Compare information that should be kept private to information that might be made public.
- **9.4.2.IML.1:** Identify a simple search term to find information in a search engine or digital resource
- **9.4.2.CI.1:** Demonstrate openness to new ideas and perspectives.

**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 (e.g.,  $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**Activity:** Students will create a picture drawing of teen numbers. Students will then go on a museum walk to see how their classmates created their work.

- **Computer Science**

- **8.1.2.CS.1:** Select and operate computing devices that perform a variety of tasks accurately and quickly based on user needs and preferences.

**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 (e.g.,  $18 = 10 + 8$ );

understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

**Activity:** Students will use the computer to show teen numbers represented with groups of tens and ones.

## Measurement and Data

- **Career Ready Practices**

- Utilize critical thinking to make sense of problems and persevere in solving them.

**K.MD.B.3.** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.

**Activity:** The students will be given a tray of 15 different objects. Students will work with a partner to sort their objects; shape, size, color, or any other way. Students will record their answers in their math journals. They will then try another sort.

- **9.2 Career Awareness, Exploration, and Preparation**

- **9.2.2.CAP.2:** Explain why employers are willing to pay individuals to work. There are benefits and drawbacks to being an entrepreneur.

**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.

**Activity:** Students will be given a homework assignment to ask family members a question about what they like or dislike, for example, pizza versus hamburgers. Students will record the data and then be asked to share key information about their findings. How many people liked pizza? How many more people liked hamburgers than pizza? Students will discuss how owning a restaurant, based on how many people come in, that has a correlation to how many people work there.

- **9.4 Life Literacies and Key Skills**

- **9.4.2.DC.6:** Identify respectful and responsible ways to communicate in digital environments.
- **9.4.2.IML.1:** Identify a simple search term to find information in a search engine or digital resource.
- **9.4.2.TL.6:** Illustrate and communicate ideas and stories using multiple digital tools (e.g., SL.2.5.).
- **9.4.2.CT.3:** Use a variety of types of thinking to solve problems (e.g., inductive, deductive).

**K.MD.A.1:** Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

**Activity:** The students will input various objects in a document changing their size, to show different measurements and weight.

- **Computer Science**

- **8.1.2.DA.4:** Make predictions based on data using charts or graphs.

**K.MD.B.3.** Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.3

**Activity:** Students will collect information from another kindergarten classroom. They will input their results in a spreadsheet that will generate a graph. They will then discuss their findings with the other students.