

Unit:Mathematics-4.1

Content Area: **Mathematics**
Course(s):
Time Period: **Trimester 1**
Length: **Ongoing**
Status: **Published**

Brief Summary of Unit

Students will develop number recognition skills and begin to count.

In this course, students are provided with opportunities to develop skills that pertain to a variety of careers. When completing this course, students can make informed choices and pursue electives that further their study and contribute toward the formation of career interest.

Standards

The standards in this unit reflect a developmental progression across grades/ levels and make interdisciplinary connections across content areas including social sciences, technology, career readiness, cultural awareness and global citizenship.

MA.K-12.1: Make sense of problems and persevere in solving them.

MA.K-12.5: Use appropriate tools strategically.

LA.RST.6-8.3: Follow precisely a multistep procedure when carrying out experiments, taking measurements, or performing technical tasks.

MA.PK.4.1	Children begin to demonstrate an understanding of number and counting.
MA.PK.4.1.1	Count to 20 by ones with minimal prompting.
MA.PK.4.1.2	Recognize and name one-digit written numbers up to 10 with minimal prompting.
MA.PK.4.1.3	Know that written numbers are symbols for number quantities and, with support, begin to write numbers from 0 to 10.
MA.PK.4.1.4	Understand the relationship between numbers and quantities (i.e., the last word stated when counting tells “how many”):
MA.PK.4.1.4.a	Accurately count quantities of objects up to 10, using one-to one-correspondence, and

	accurately count as many as 5 objects in a scattered configuration.
MA.PK.4.1.4.b	Arrange and count different kinds of objects to demonstrate understanding of the consistency of quantities (i.e., “5” is constant, whether it is a group of 5 people, 5 blocks or 5 pencils).
MA.PK.4.1.4.c	Instantly recognize, without counting, small quantities of up to 3 or 4 objects (i.e., subitize).
MA.PK.4.1.5	Use one to one correspondence to solve problems by matching sets (e.g., getting just enough straws to distribute for each juice container on the table) and comparing amounts (e.g., collecting the number of cubes needed to fill the spaces in a muffin tin with one cube each).
MA.PK.4.1.6	Compare groups of up to 5 objects (e.g., beginning to use terms such as “more,” “less,” “same”).

Transfer

Essential Questions

- What can I count?
- What do numbers look like?
- What is a number?
- What strategies can be used to develop one to one correspondence?

Essential Understandings

- Numbers can be recognized and labeled
- Numbers can be used to represent an amount
- Numbers have a sequential order
- Objects in the environment can be counted

Students Will Know

- Numbers are used to count
- Numbers look different than letters
- Numbers represent an amount
- There are symbols to represent numbers.
- They can count objects

Students Will Be Skilled At

- Counting a specific number of objects out of a larger group
- Counting concrete objects
- Counting with fingers
- Demonstrating one to one correspondence
- Identifying written/printed numbers
- Pointing and counting objects

Evidence/Performance Tasks

This course is designed to promote skill attainment. Student progression and pace through which they proceed through the performance tasks is based on their affinity for and ability to reach skill attainment. The teacher will determine formative and summative skill attainment; alternative assessments will be incorporated for each student based on their strengths and challenges.

- Counting 1-20 on the calendar
- Counting friends at circle time.
- Counting objects in environment
- Demonstrate an understanding of one to one correspondence (e.g. handing out one napkin to each friend)
- Showing a number amount using their fingers

Learning Plan

- Provide manipulatives and materials (e.g., print and digital material, tactile numeral cards, puzzles, counting books, interactive whiteboards) and activities (e.g. tracing numbers in sand, forming numbers with clay, etc.) that feature number names and number quantities.
- Encourage and support attempts to learn to count numbers to 20 or higher.
- Encourage children to compare numbers frequently through questions (e.g., “Are there more people riding in the bus or in the airplane?”) and graphing the question of the day (e.g., favorite colors, pets).
- Encourage children to count using fingers
- Include and refer by name to written numbers in the classroom environment during daily routines and in the context of large and small group experiences.
- Increase understanding of one to one correspondence during natural situations (i.e. pass one crayon out to each friend during art activity)
- Intentionally refer to the symbol and number name when discussing numbers (quantities) of objects.
- Introduce counting in meaningful ways (e.g. counting friends during circle time, counting blocks while building, etc)
- Introduce written/printed numbers during calendar time
- Make counting books to reinforce skills
- Model how to represent and describe data using the question of the day chart.

- Play board games that involve arranging and counting objects and identifying small quantities of objects with small groups of children.
- Provide a wide variety of writing materials for children to informally explore writing numbers along with meaningful contexts for children to write numbers on charts and graphs.
- Sing songs about numbers (i.e. “Miss Tracy Number 1-10” on youtube.com)

Materials

The materials used in this course allow for integration of a variety of instructional, supplemental, and intervention materials that support student learners at all levels in the school and home environments. In addition to the materials below, the link connects to district approved textbooks and resources utilized in this course: [CORE BOOK LIST](#)

- Blocks, counting bears and other manipulatives used for counting
- Calendar numbers
- Ipad to reinforce number recognition and counting skills
- Number board games
- Question of the Day chart and picture cards.
- SMARTBoard to introduce number songs and videos

Suggested Strategies for Modifications

This link includes content specific accommodations and modifications for all populations:

https://docs.google.com/spreadsheets/d/1vp4_sVkiJIcevefjdpDEpUQYy5Jja39vzPvk-fFJrjE/edit

- Allow for extra time and practice
- Incorporate multi-sensory strategies
- Provide 1:1 time and assistance
- Repeat directions and provide multiple examples
- Use visuals