Kindergarten
Mathematics

Key Instructional Activities

In Kindergarten, students focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; (2) describing shapes and space. More learning time in Kindergarten should be devoted to understanding numbers than to other topics. Activities in these areas will include:

- Rote counting up to 100 by ones and tens
- Counting how many objects are in a group and comparing the quantities of two groups of objects
- Comparing two numbers to identify which is greater or less than the other
- Understanding addition as putting together and subtraction as taking away from
- Adding and subtracting very small numbers quickly and accurately
- Decomposing numbers less than or equal to 10 in more than one way (for example, 9=6+3, 9=5+4)
- For any number from 1 to 9, finding the missing quantity that is needed to reach 10
- Representing addition and subtraction word problems using objects or by drawing pictures
- Solving addition and subtraction word problems involving numbers that add up to 10 or less or by subtracting from a number 10 or less

Elementary Math Wakelet
Additional Online Resources

HOUSTON COUNTY BOARD OF EDUCATION
HIGH-ACHIEVING STUDENTS

What resources are available for students and parents?

https://hcbemath.weebly.com/

Helping Your Student in Kindergarten Mathematics

Learning does not end in the classroom. Students need help and support at home to succeed in their studies. Try to create a quiet place for your student to study, and carve out time every day when your student can concentrate uninterrupted by friends, brothers or sisters, or other distractions. Sit down with your student at least once a week for 15 to 30 minutes while he or she works on homework. This will keep you informed about what your student is working on, and it will help you be the first to know if your student needs help with specific topics. By taking these small steps, you will be helping your student become successful both in and outside the classroom.

Partnering with your child's teacher

- Get to know your child's math teacher! Your child will thank you (someday) for being involved in his or her learning. Also – know about the online resources that are available!
- Don't be afraid to reach out to your child's teacher—you are an important part of your child's education. Ask to see a sample of your child's work or bring a sample with you.
- Talk with your child's teacher about difficulties he/she may be experiencing. When teachers and parents work together, children benefit.
- Ask the teacher questions like:
  - Where is my child excelling? How can I support this success?
  - What do you think is giving my child the most trouble? How can I help my child improve in this area?
  - What can I do to help my child with upcoming work?

Helping your child learn outside of school

- Talk about math in a positive way. A positive attitude about math is infectious. Encourage your child to stick with it whenever a problem seems difficult. This will help your child see that everyone can learn math.
- Use everyday objects to allow your child to count and group a collection of objects.
- Have your child create story problems to represent addition and subtraction of small numbers. For example, "Tim had six toy cars balloons. Then he gave four away, so he only had two left."
- Encourage persistence. Some problems take time to solve. Praise your child when he or she makes an effort, and share in the excitement when he or she solves a problem or understands something for the first time.
- Encourage your child to talk about and show a math problem in a way that makes sense.
- When your child is solving math problems ask questions such as: Why did you...? What can you do next? Do you see any patterns? Does the answer make sense? How do you know? This helps to encourage thinking about mathematics.
- Connect math to everyday life and help your child understand how math influences them (i.e. shapes of traffic signs, walking distance to school, telling time).
- Computers + math = fun! There are great computer math games available on the internet that you can discover with your child.

Kindergarten Mathematics System Pacing Overview

This guide provides an overview of what your student will learn in his or her Kindergarten Mathematics course. It focuses on the key skills your student will learn, which will build a strong foundation for success. This guide is based on the state-adopted Georgia Standards of Excellence.

August - October

1st Nine Weeks

During the 1st Nine Weeks, students will practice the count sequence and start to develop understanding of cardinality and one-to-one correspondence. Counting is started early and practiced often throughout the year in order to help students become fluent in the counting sequence.

- Rote count to 45.
- Answer "how many?" questions about as many as 10 objects arranged in a line.
- Count objects up to 10 arranged in a line.
- One to one correspondence when counting.
- Understand numbers and the relationships between quantities.
- Write numbers 0 – 10 in relationship to a quantity.
- Classify objects by attributes.
- Identify and begin to describe shapes.
- Identify location and position of shapes in the environment.

October - December

2nd Nine Weeks

During the 2nd Nine Weeks, students will continue to rote count and develop their understanding of numbers. We will begin using story or word problems to teach the concept of addition and subtraction. Students will continue to learn about the attributes of shapes and classify objects.

- Using positional terms, students will be able to identify two-dimensional and three-dimensional geometric shapes and their location.
- Rote count to 89.
- Count to 80 by 10's.
- From 0 - 89, start from any number and count up to 89.
- Count to tell the number of objects up to 20.
- Write numbers 0 - 10 to represent a quantity.
- Decompose numbers less than or equal to five.
- Model and understand the concept of part-part whole addition.
- Model addition and subtraction of numbers to five using actions, objects, and drawings.
- Represent addition and subtraction of numbers to five using pictorial and numeric number bonds.
- Classify and sort shapes.

January - March

3rd Nine Weeks

During the 3rd Nine Weeks, students will continue to rote count and develop their understanding of numbers. In addition to counting, students will write numerals up to 20 in relationship to a quantity. Students will explore the following shapes: rectangle, square, circle, triangle, hexagon, sphere, cylinder, cube, and cone in depth. They will describe two-dimensional and three-dimensional figures by their attributes (sides, square corners, faces, etc.). Students will also work on fluency to 5 and solving addition and subtraction word problems within 10 by modeling.

- Say number names while counting to 100 by 1's and 10's.
- Count to tell the number of objects up to 20.
- Write numbers 0 - 2 0.
- Decompose numbers less than or equal to ten.
- Model and understand the concept of part-part whole addition.
- Solve and model addition and subtraction word problems to ten using actions, objects, and/or drawings.
- Represent addition and subtraction of numbers to ten using number bonds.
- Identify and classify shapes as flat or solid.
- Describe and compare two-dimensional and three-dimensional shapes.

March - May

4th Nine Weeks

During the 4th Nine Weeks, students will compare written numerals and groups of objects. Students will identify which number is greater than or less than and explain verbally how they know. Students will also tell if sets of objects have the

same amount. Students will continue to work on fluency to 5 and solving addition and subtraction word problems within 10 by modeling with objects or drawings.

- Model addition and subtraction word problems.
- Explain how addition and subtraction problems are solved.
- Compose and decompose numbers 11- 19 into ten ones and some more ones.
- Identify which group of objects is more or less.
- Compare two numbers between 1and 10 presented as numerals.
- Describe measureable attributes of an object.
- Compare two objects with measurable attributes.
- Fluently add and subtract within 5.