GO Math! Scope and Sequence

This document contains a high-level scope and sequence for the GO Math! program intended to give teachers an overview of where instructional time will be spent across the year through use of GO Math!. It provides a suggested sequence of instruction and assessments, including where NYCDOE Periodic Assessments can be used to gauge students' understanding of concepts and skills taught at benchmark moments throughout the year. Based on the Common Core Standards, Go Math! is divided into critical areas that offer a focused and coherent study of the key concepts and skills for each grade.

For each critical area, you will see the following:

- **Essential Ideas:** The key topics of the unit; chapters and lessons are built around achieving understanding and mastery of these topics.

- **Standards:** The standards listed show the main standards covered throughout the Critical Area. Instruction is focused on achieving a thorough knowledge of these standards.

- **Mathematical Practices:** While all practices are integrated into each Critical Area, the practices listed are ones that receive particular emphasis.

- **Essential Questions:** The essential question for each chapter is listed, showing the goal of each chapter.

- **Assessment Opportunities:** This listing highlights the assessments that ensure teachers can gauge student success on mastering the standards covered in the Critical Area.

Grade K: Suggested Sequence for the *GO Math!* program	Suggested Amount of Time (in days)
Critical Area 1: **Number and Operations**	84 days
Critical Area 2: **Geometry and Positions**	25 days
Critical Area 3: **Measurement and Data**	15 days

Critical Area 1: Number and Operations Chapters 1–8 84 Days (Instructional Days: 68; Assessment Days: 16)	**Critical Area 2: Geometry and Positions** Chapters 9–10 25 Days (Instructional Days: 21; Assessment Days: 4)
Focus or Main CC Standards	

Focus or Main CC Standards

Know number names and the count sequence.

K.CC.1 Count to 100 by ones and by tens.

K.CC.2 Count forward beginning from a given number within the known sequence (instead of having to begin at 1).

K.CC.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).

Count to tell the number of objects.

K.CC.4 Understand the relationship between numbers and quantities; connect counting to cardinality.

K.CC.4a 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.CC.4b 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.

K.CC.4c Understand that each successive number name refers to a quantity that is one larger.

K.CC.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.

Compare numbers.

K.CC.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.

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

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

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

K.OA.2 Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.

K.OA.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 $5 = 4 + 1$).

K.OA.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.

K.OA.5 Fluently add and subtract within 5.

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

K.NBT.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.

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

K.G.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.

K.G.2 Correctly name shapes regardless of their orientations or overall size.

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

Analyze, compare, create, and compose shapes.

K.G.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).

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

K.G.6 Compose simple shapes to form larger shapes.

Highlighted Mathematical Practices

MP.5	Use appropriate tools strategically.	**MP.3**	Construct viable arguments and critique the reasoning of others.
MP.6	Attend to precision.	**MP.7**	Look for and make use of structure.
MP.8	Look for and express regularity in repeated reasoning.		

Essential Questions

- How can you show, count, and write numbers 0 to 5? (Chapter 1)
- How can building and comparing sets help you compare numbers? (Chapter 2)
- How can you show, count, and write numbers 6 to 9? (Chapter 3)
- How can you show and compare numbers to 10? (Chapter 4)
- How can you show addition? (Chapter 5)
- How can you show subtraction? (Chapter 6)
- How can you show, count, and write numbers 11 to 19? (Chapter 7)
- How can you show, count, and write numbers to 10 and beyond? (Chapter 8)

- How can you identify, name, and describe two-dimensional shapes? (Chapter 9)
- How can identifying and describing shapes help you sort them? (Chapter 10)

Assessment Opportunities

Show What You Know
Mid-Chapter Checkpoint
Chapter Review/Test
Chapter Test
Chapter Performance Task
Critical Area Performance Task

Show What You Know
Mid-Chapter Checkpoint
Chapter Review/Test
Chapter Test
Chapter Performance Task
Critical Area Performance Task

Critical Area 3: Measurement and Data Chapters 11–12
15 Days (Instructional Days: 11; Assessment Days: 4)

Focus or Main CC Standards	**Describe and compare measurable attributes.**
	K.MD.1 Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
	K.MD.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.
	Classify objects and count the number of objects in each category.
	K.MD.3 Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
Highlighted Mathematical Practices	**MP.1** Make sense of problems and persevere in solving them.
	MP.2 Reason abstractly and quantitatively.
	MP.4 Model with mathematics.
Essential Questions	• How can comparing objects help you measure them? (Chapter 11)
	• How does sorting help you display information? (Chapter 12)
Assessment Opportunities	Show What You Know
	Mid-Chapter Checkpoint
	Chapter Review/Test
	Chapter Test
	Chapter Performance Task
	Critical Area Performance Task