## GRADE FOCUS

First Grade mathematics is about (1) learning strategies for adding and subtracting within 20; (2) developing an understanding of whole number relationships and place value, including grouping in tens and ones; (3) measuring length and using length units such as centimeters; and (4) reasoning about the qualities of shapes.

- Module 1: Sums and Differences to 10
- Module 2: Introduction to Place Value Through Addition and Subtraction Within 20
» Module 3: Ordering and Comparing Length Measurements as Numbers
- Module 4: Place Value, Comparison, Addition and Subtraction to 40
- Module 5: Identifying, Composing, and Partitioning Shapes
- Module 6: Place Value, Comparison, Addition and Subtraction to 100

LET'SCHCCK IT OUT!

## MODULE 3 FOCUS

Module 3, students will be ordering and comparing objects by length and expressing the length of objects in units. They will also have a few weeks to practice and internalize "making a 10" during daily fluency activities.

## TOPIC OVERVIEW

Topics are the lessons within a module that help children master the skills above. Here are the lessons that will guide your child through Module 3:

- Topic A: Indirect Comparison in Length Measurement
- Topic B: Standard Length Units
- Topic C: Non-Standard and Standard Length Units
- Topic D: Data Interpretation


## WORDS TO KNOW

- Centimeter (standard length unit within the metric system)
- Centimeter cube (also used as a length unit in this module)
- Centimeter ruler (measurement tool using length units of centimeters)
- Data (collected information)
- Endpoint (the end of an object, referenced when aligning for measurement purposes)
- Height (measurement of vertical distance of an object)
- Length unit (measuring the length of an object with equal-sized units)
- Poll (survey)
- Table or graph (organized charts visually representing data)


## MORE SPECIFICALLY, CHILDREN WILL LEARNHOWTO:

- Count to answer "how many?" questions about as many as 20 things.
- Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, by using matching and counting strategies.
- Compare two numbers between 1 and 10 presented as written numerals.
- Describe measureable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.

- 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.



## SAMPLE PROBLEMS

## SAMPLE

Students extend the use of indirect comparison to compare the distances between objects that cannot be moved next to each other for direct comparison. For example students will explore different routes and figure out which path is the shortest path to school.


- Cindy's path to the school was 14 blocks.
- Troy's path to school was 9 blocks.
- Tommy's path is shorter than Troy's. Draw Tommy's path.
- Order the paths from shortest to longest
- Who took the shortest path to school?


## SAMPlE 2

Students work as a class to collect, represent, and interpret relevant data. They will begin to organize data on a graph and ask question about the number of data points in a given category.



How many people like Math? 3 people like Math How many people like Science? 2 people like Science How many people like P.E.? 4 people like P.E. What subject do people like the least? Science
Write a number sentence that tells the number o people interviewed. $3+4+2=9$

## HOW YOU CAN HELP AT HOME

- Measure the length of various items around the house using different objects (crayons, pennies, etc.)
- Keep track of your child's growth each month by measuring his/her height using standard and nonstandard units of measurement.
- Talk with your child about specific times that activities occureating breakfast, going to school, dinner time, bed time, etc.
- Talk about graphs in newspapers and magazines.
- Take a family survey and make a graph based on the data.
- Use toothpicks or Popsicle sticks to show tally marks.
- Create a bar graph based on the amount of time your child reads, plays outside, or watches television.
- Create a pictograph to show the number of hours of sleep or exercise your family gets each day.

