

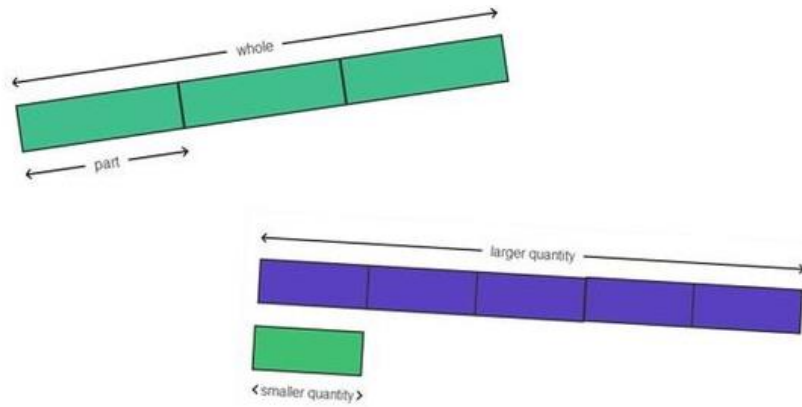
Module 6 Grade 3

In this unit your student will focus on Collecting & Displaying Data:

- ✓ Students will initially use tally marks, tables, or graphs with 1 to 1 correspondence and transition to other methods of collecting, displaying and analyzing data such as tape diagrams.
- ✓ Students use picture and bar graphs as vertical representations of tape diagrams, and apply well-practiced skip-counting and multiplication strategies to analyze them.
- ✓ Students solve one- and two-step problems. Students to make observations, analyze, and answer questions such as, "How many more?" or, "How many less?"
- ✓ Students generate a six-inch ruler marked in whole-inch, half-inch, and quarter-inch increments by partitioning a whole into parts.
- ✓ Students use the rulers to measure the lengths and record their findings to generate measurement data.
- ✓ Students will continue to use line plots with fractions as a tool for displaying measurement data.
- ✓ Students interpret scales involving whole, half, and quarter units to analyze data.

Terminology:

- ✓ Skip Counting – counting by a number that is not one. This skill helps build fluency and multiplication skills. For example: 2,4,6,8,10
- ✓ Tape Diagrams -Tape diagrams are models that students draw to help them visualize the relationships between the quantities. The models open the door to efficient problem solving and help students see the coherence in the mathematics across the years. (<http://e2math.weebly.com/tape-diagrams.html>)



- ✓ **Partitioning** - Partitioning is a way of working out math problems that involve large numbers by splitting them into smaller units so they're easier to work with. So, instead of adding numbers in a column, like this...

$$\begin{array}{r} 79 \\ +34 \\ \hline 113 \end{array}$$

...younger students will first be taught to separate each of these numbers into units, like this...

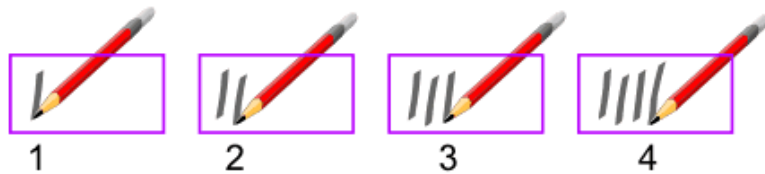
$$70 + 9 + 30 + 4$$

...and they can add these smaller parts together. For instance, they can pick out all the tens and work down to single units, making the problem more and more manageable, like this...

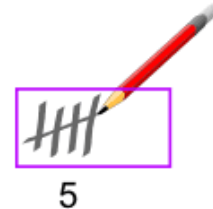
$$70 + 30 + 9 + 4 = 100 + 13 = 113$$

- ✓ Tally Marks (www.mathsisfun.com)

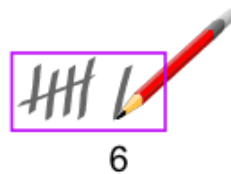
Here are the tally marks for 1 to 4:



BUT the 5th mark is drawn ACROSS the previous 4 marks:



Then continue making single marks again:



- ✓ One to One Correspondence – the ability to match one object to one number.

Activities you can do at Home:

- ✓ Have students chart or graph their activities at home: time spent on reading, playing, chores etc.
- ✓ Have students use a ruler to measure objects around the house to the inch, half inch and quarter inch.
- ✓ Sing songs that involve skip counting to increase fluency and build foundational skills for multiplication. Ex: Count by Six Song - <http://www.havefunteaching.com/songs/counting-songs/counting-by-sixes-song>
- ✓ Consider reading Minnie's Diner.