

# DUVAL Math Parent Tips

## Ordering and Comparing Length Measurements as Numbers

In this 13-day module, students will use non-standard units to measure objects, and will compare and order objects by length. They will build conceptual understanding of the need for standard measurement units, beginning with inches.

First Grade,  
Module 3

**What Came Before this Module:** Students extended the work with addition and subtraction to the numbers 1-20, and learned some new strategies to use.

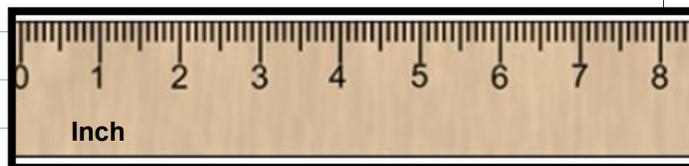
**What Comes After this Module:** Students will extend place value and addition and subtraction work to numbers up to 40, and will begin to use the symbols  $<$ ,  $>$ , and  $=$  to compare numbers.

### Special points of interest:

- ✓ Words to Know
- ✓ Ordering and Comparing Length Measurements
- ✓ Data Interpretation and Sprints
- ✓ Mathematical Practices
- ✓ Homework Help-line

## Words to Know

- Longer Than
- Shorter Than
- Equal in Length
- Endpoint
- Organize
- Sort
- Graph
- Collect
- Represent



Cherries Eaten	
Sue	
Liz	
Joe	

## Questions?

Mrs. Wendy Dobson

Supervisor, Mathematics K-5

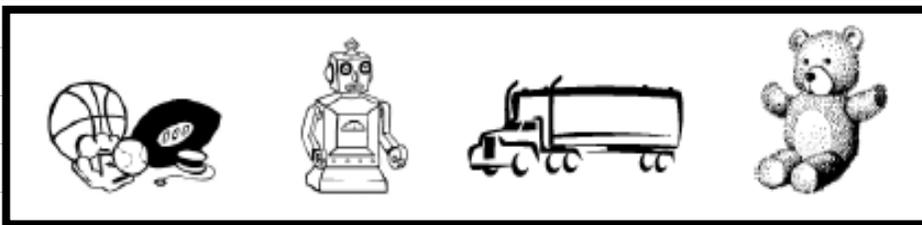
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## Ordering and Comparing Length Measurements as Numbers

**Direct Comparison** is when both objects can be placed side by side and the student can look at each item to compare the two. For example, a pencil and a crayon side by side.

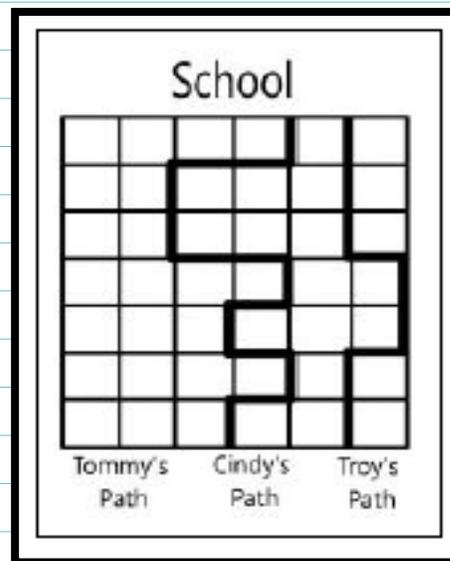
**Indirect Comparison** is when objects are compared using a consistent item. For example, if the crayon is shorter than the string and the pencil is longer than the string, we can say that the crayon is shorter than the pencil.

To help your child, find various things and let them compare at home. Examples: forks, spoons, toys, chair, sofa, table, towel, tools, cars, etc.

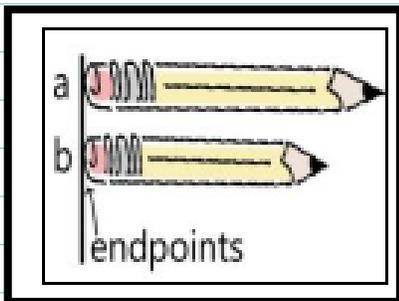


Students extend the use of indirect comparison to compare the distances between objects that cannot be moved next to each other for direct comparison. For example students will explore different routes and figure out which path is the shortest path to school.

- 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.



Students explore and compare the length of two objects paying close attention to the **endpoints** of each object.  
Pencil a is longer than Pencil b  
Pencil b is shorter than Pencil a



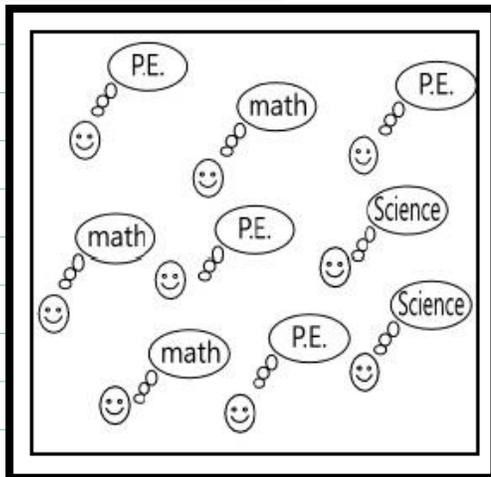
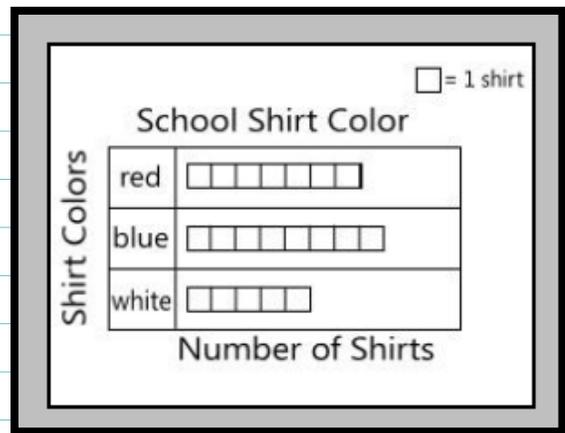
## Data Interpretation and Sprints

Students work as a class to collect, represent, and interpret personally relevant data. Students will begin to organize data on a graph and begin to ask questions about the number of data points in a given category. A group of people were asked "What is your favorite class?" Organize the data using tally marks.

Students begin to interpret information presented in the graphs by exploring compare with difference unknown problems. The question chosen is "What shirt color is your favorite?"

Write a number sentence to show how many fewer students wore white shirts than red shirts.  $7 - 5 = 2$

Math	
P.E.	
Science	



### Spotlight on Math Strategies: Sprints!

#### Sample from a Sprint in Lesson 1

**A**

Name \_\_\_\_\_ Date \_\_\_\_\_

Number correct:

\*Write the missing number.

1	$3 - 3 = \square$	16	$13 - 1 = \square$
2	$13 - 3 = \square$	17	$13 - 2 = \square$
3	$3 - 2 = \square$	18	$14 - 3 = \square$
4	$13 - 2 = \square$	19	$14 - 4 = \square$
5	$4 - 2 = \square$	20	$14 - 10 = \square$

Sprints are a fluency tool used throughout the grades in A Story of Units. Sprints are high-energy classroom activities in which students complete as many math facts as they are able in a set amount of time. Care is taken during a sprint to make sure that all students are working as hard as they can to recall facts, notice patterns within the sprint page, and do their personal best.

To this end, sprints are designed to come in pairs, so that students can try the first sprint (Sprint A), assess their correct and incorrect answers, and then try to improve their score on Sprint B, given immediately after assessing Sprint A.

Sprints are one of the primary ways in A Story of Units in which students gain fluency and competency with math facts, a key building block skill for computation and comprehension throughout elementary school.

## Standards for Mathematical Practice

### Mathematical Practices Addressed in this Module:

**MP.2 Reason quantitatively and abstractly.** Students describe and compare lengths using longer than and shorter than and numerically represent relationships among and between length. This takes place in the context of comparing sets within data collection as well as comparing objects with different length units.

**MP.3 Construct viable arguments and critique the reasoning of others.** Students describe and explain their process of finding accurate length measurements and challenge each other to measure precisely.

**MP.6 Attend to precision.** Students use measuring tools, such as a inch ruler, precisely and explain precisely the cause of errors in using the tools.

**MP.7 Look for and make use of structure.** Students use transitivity to compare multiple objects. "My string is longer than the pencil. My string is shorter than the book. That means the book is longer than the pencil." In this case, the students use the string as the structure to compare the book and the pencil.



### Grades K-5 Homework Help Duval County Parent Helpline

Tuesday and Thursday Evenings (see dates  
to the right)

6:00 p.m. – 8:00 p.m

Grades K-5 Homework Help

*You can access this help on your home computer so that we can demonstrate the mathematics on a white board or call in via telephone.*

**By Telephone:** (571)-392-7703 PIN: 731 439  
616 412

**By Web:** [click here](#)

Want to help your child at home with DUVAL Math?

Every Tuesday and Thursday evening, we are offering a Homework Helpline! You can access using a home computer or call in via telephone. Use the link below to access more information!

<http://www.duvalschools.org/Page/17877>



