

Dear Parents,

We will begin our next unit of study in math soon. The information below will serve as an overview of the unit as you work to support your child at home. If you have any questions, please feel free to contact me. I appreciate your ongoing support. For additional information or electronic access to this letter, please visit www.wcpss.net/mathhelp.

Sincerely,

Your Child's Teacher

Unit Name: Using Tools to Measure Length, Weight, and Capacity

North Carolina Content State Standards:

NC.3.MD.2 Solve problems involving customary measurement.

- Estimate and measure lengths in customary units to the quarter-inch and half-inch, and feet and yards to the whole unit.
- Estimate and measure capacity and weight in customary units to a whole number: cups, pints, quarts, gallons, ounces, and pounds.
- Add, subtract, multiply, or divide to solve one-step word problems involving whole number measurements of length, weight, and capacity in the same customary units.

Math Language:

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|------------------------|------------|---------------|----------------------|
| ● Measure | ● Unit | ● Inch | ● Length |
| ● Standard Measurement | ● Yard | ● Foot | ● Ruler |
| ● Customary System | ● Distance | ● Estimate | ● Quarter of an Inch |
| ● Standard Unit | ● Equation | ● Fraction | ● Half of an Inch |
| ● Customary Unit | ● Addition | ● Subtraction | ● Multiplication |
| ● Whole Number | ● Division | ● Capacity | ● Volume |
| ● Cups | ● Pints | ● Quarts | ● Gallons |
| ● Weight | ● Ounces | ● Pounds | ● Unknown |

Unit Overview:

This unit builds on student understanding of using a system of measurement, focusing on the customary system for length (inches, feet, yards), capacity (cups, pints, quarts, gallons), and weight (ounces and pounds). They will apply their knowledge of fractions to measuring the length of objects to the nearest one-fourth and one-half inch. Students will use rulers to measure lengths less than an inch (halves and quarters). They will also solve one step word problems involving the same unit. All four operations (add, subtract, multiply and divide) will be used to solve word problems about measurement.

Skills/Strategies:

- Reason about the units of length, weight and capacity
- Apply their knowledge of size and weight for selecting units to use when estimating and measuring size and weight
- Measure lengths in customary units to the $\frac{1}{4}$, $\frac{1}{2}$ and whole inch
- Measure feet and yards to the whole unit

- Measure capacity and weight to the whole number
- Make reasonable estimates of length, weight, and capacity
- Solve one-step word problems related to measurement

Strategies that Students will Learn:

Students will reason about the unit to use to measure:

- Would you use feet to measure a crayon?
- Would you use yards or miles to measure the distance from your house to the school?

Students will also estimate and measure capacity and weight in customary units using tools such as scales, balances, measuring cups, and gallon jugs. They will choose appropriate units for the object they are measuring, such as cups for the amount of milk they would drink for dinner and gallons for the amount of water they would use to fill a bathtub.

Finally, students will solve one-step story problems that involve whole number measurements in the same customary units. This will continue to reinforce skills with all four operations using a measurement context. For example:

- Timothy drank 2 quarts of water a day for 5 days. How many quarts of water did Timothy drink in all?
- Jenny’s family drove 386 miles to her grandmother’s house. Then they drove 532 miles to the beach. How many miles did they drive altogether?
- A bag of avocados weighed 42 ounces. Each avocado weighed 6 ounces, How many avocados were in the bag?

Video Support:

- No videos are referenced for this unit.

Additional Resources:

- [NCDPI Additional Resources](#)

Questions to Ask When Helping Your Child with Math Homework

Keep in mind that homework in elementary schools is designed as practice. If your child is having problems, please let the classroom teacher know. When helping your child with his/her math homework, you don’t have to know all the answers! Instead, we encourage you to ask probing questions so your child can work through the challenges independently. Some examples may include the following:

- What is the problem you’re working on?
- What do the directions say?
- What do you already know that can help you solve the problem?
- What have you done so far and where are you stuck?
- Where can we find help in your notes?
- Are there manipulatives, pictures, or models that would help?
- Can you explain what you did in class today?
- Did your teacher work examples that you could use?
- Can you go onto another problem & come back to this one later?
- Can you mark this problem so you can ask the teacher for an explanation tomorrow?