

# Math Connections for Parents

Grade 3 Module 2

Place Value and Problem Solving with Units of Measure

Welcome to Third Grade Module 2! Newark City Schools is using the EngageNY curriculum, which is aligned with Ohio's New Learning Standards. In Module 2, students will explore measurement using kilograms, grams, liters, milliliters and time in minutes. Students will estimate measures, and solve one-step addition, subtraction, multiplication and division problems using metric weight and liquid volume. They will also add and subtract two and three digit numbers.

## Important Words and Concepts

- Analog clock: clock that is not digital
- Capacity: amount of liquid a container can hold
- Compose: change 10 smaller units for 1 of the next larger unit on a place value chart
- Endpoint: numbers that mark the beginning and end of a length
- Gram: unit of measurement for weight
- Kilogram: kg, measure for mass
- Liter: L, unit of measure for liquid volume
- Milliliter: mL, unit of measure for liquid volume
- Reasonable: think about if your answer makes sense; "Is your answer reasonable?"
- Round: estimate a number to the nearest 10 or 100 using place value

## **Multiplication and Division within 100**

Fluency of multiplication and division facts, up to 100 will continue to be stressed in third grade. By the end of grade 3, students are expected to know from memory all products of two one-digit numbers. They also should see the relationship between multiplication and division (i.e. knowing that  $8 \times 5 = 40$ , so you also know  $40 \div 5 = 8$ ). Work with your child at home on mastering these basic math facts.

## KEY STANDARDS

- Tell and write time to the nearest minute. Solve word problems involving addition and subtraction of time intervals in minutes.
- Measure weight and liquid volume in metric units
- Round numbers to the nearest ten and hundred
- Add two and three digit numbers using a standard algorithm
- Subtract two and three digit numbers using a standard algorithm

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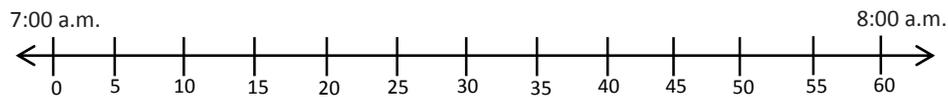
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## Graphics and Strategies you may see...

Students will use number lines and clocks to solve problems with elapsed times.

Example A : Trey left home at 7:05 am. He arrived at school at 7:35 am. How long did it take Trey to travel to school?

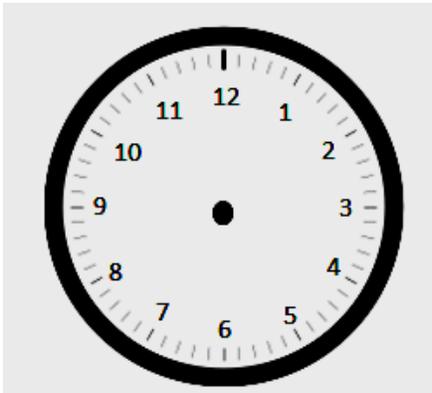


Students can count on the number line or clock by fives to find the time to travel.

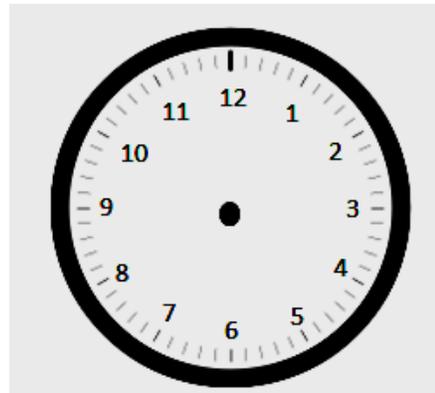
Trey took 30 minutes to travel to school.

Example B: Independent reading time starts at 1:34 p.m. It ends at 1:56 p.m.

Draw the start time on the clock below.

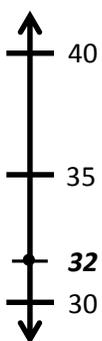


Draw the end time on the clock below.



How many minutes does independent reading time last?

Count from 1:34 to 1:56, using the clocks. Independent reading lasts 22 minutes.



Students learn to use a Vertical Number Line to solve rounding problems.

32 rounded to the nearest ten. Make endpoints counting by 10s (30 and 40), then find the midpoint (35). Plot 32 on the number line and look at which endpoint is it closer to.

In this case, 32 rounds to 30.



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