Grade 3 - Unit 11

Measurement of Time, Volume, & Mass



Parent Letter

Dear Third Grade Families,

In Unit 11, students will work on the following third grade Common Core standards in the Measurement and Data (MD) domain.

3.MD.1	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
3.MD.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (L). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Unit 11 Concepts:

- Tell time to the nearest minute
- Add and subtract time intervals to solve word problems
- Measure and estimate volume
- Measure and estimate mass
- Add, subtract, multiply, and divide to solve word problems involving mass and volume

Unit 11 Vocabulary:

- Hour hand
- Minute hand
- Interval
- Liquid volume: milliliter (mL), liter (L)
- Mass: grams (g), kilograms (kg)
- Measure
- Estimate



Ask questions like these to help your child become a productive mathematical thinker:

- What time is it? (Use an analog clock.)
- You read for 30 minutes this afternoon. It's 3:12 now. What time did you start?
- The cookies bake for 12 minutes. It's 5:14 now. What time should we take the cookies out of the oven?
- This 2-liter bottle of soda is half gone. About how much is left?
- Your baby sister takes 2 mL of antibiotics three times a day.
 How many mL will she take today?
- Which has greater volume, a baby food jar or a milk jug?
- Who has greater mass, you or me?
- Let's measure our masses on the bathroom scale (change the unit to kg, if possible). How much less mass do you have than me?
- What would you estimate is the mass of a paperclip? 8 paperclips?

Need a review?

Have your student login to Swun Math to access lesson support videos.

We encourage you to talk with your child daily about what was learned in math class.

Thank you for your support!

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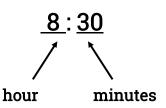
Measurement of Time, Volume, & Mass



Time

Hour hand Minute hand





Time interval: the period of time between two events

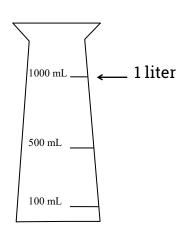
60 minutes = 1 hour 24 hours = 1 day

a.m.: the time of day we think of as morning; this period lasts for 12 hours (midnight to noon)

p.m.: the time of day we think of as afternoon and evening; this period lasts for 12 hours (noon to midnight)

Volume

1000 mL = 1 liter



Volume: the amount of space within a three-dimensional object

Estimate: an approximation, prediction, or projection of a quantity based on experience

~ = "about"

Liter (L): a unit of measure for liquid volume

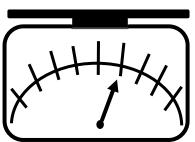
Milliliter (mL): a unit of measure for liquid volume

1 Liter = 1000 mL

1 mL ~ a full eye dropper

Mass

1000 g = 1 kg



Mass: a measure of how much matter is in an object

Estimate: an approximation, prediction, or projection of a quantity based on experience

~ = "about"

1 gram ~ 1 paperclip

1 kilogram ~ 1 bunch of bananas

2 kilograms ~ a 3rd grader's backpack

5 kilograms ~ a basket of library books

27 kilograms ~ an average sized 3rd grade child