

Grade 9-12 Unpacked Core Math Standards – Measurement

9-12.M.1.1. Students are able to **choose** appropriate unit label, scale, and precision.

Webb Level: 1

Bloom: Comprehension

Verbs Defined:

Choose: Determine

Key terms defined:

Unit label: The most appropriate measurement quantity for the situation.

Scale: The horizontal and vertical divisions that fit the data.

Precision: The accepted tolerance level.

Teacher Speak:

Students are able to choose (determine) appropriate unit label, scale, and precision.

Student Speak:

- Given a measurement situation, I can determine (choose) the most commonly accepted unit of measure.
- I can determine (choose) the appropriate scale (The horizontal and vertical divisions that fit the data) for any graph (including histograms, scatterplots, and linear function graphs).
- I can determine (choose) the commonly accepted precision (The accepted tolerance level) of a measurement and/or calculation.

9-12.M.1.2. Students are able to **use** suitable units when **describing** rate of change.

Webb Level: 2

Bloom: Comprehension

Verbs Defined:

Use: use

Describing: expressing

Key terms defined:

Suitable units: Commonly accepted divisions of measure.

Rate of change: Slope

Teacher Speak:

Students are able to use suitable units when describing (expressing) rate of change.

Student Speak:

- I can determine the rate of change (slope) using the most commonly accepted units.
- Given the equation of a line of best fit, I can interpret the meaning of the slope of the situation including the correct units.
- Given the graph, I can interpret the meaning of the slope of the situation including the correct units.

9-12.M.1.3. Students are able to **use formulas** to **find perimeter, circumference, and area** to solve problems involving common geometric figures.

Webb Level: 1/2

Bloom: Application

Verbs Defined:

Use: recall and apply

Find: compute/calculate

Solve: solve

Key terms defined:

Formula: A general mathematical statement or rule.

Perimeter: The distance around a closed planar geometric figure.

Circumference: The distance around a circle.

Area: The amount of space contained inside a planar figure.

Common geometric figures: Circle, square, rectangle, triangle.

Teacher Speak:

Students are able to use (recall and apply) formulas to find (compute/calculate) perimeter, circumference, and area to solve problems involving common geometric figures.

Student Speak:

- I can compute/calculate (find) the perimeter (the distance around a closed planar geometric figure) of any polygon.
- I can compute/calculate (find) the area (the amount of space contained inside a planar figure) of any circle, square, rectangle, or triangle without being given the formula.
- I can compute/calculate (find) the circumference (the distance around a circle) without being given the formula.
- I can solve measurement problems without pictorial information.
- Given the area (the amount of space contained inside a planar figure) or perimeter (the distance around a closed planar geometric figure), I can solve for missing parts.
- I can compute/calculate (find) the perimeter (the distance around a closed planar geometric figure) and area (the amount of space contained inside a planar figure)

of common figures (circle, square, rectangle, triangle) on the coordinate plane where at least one side is parallel or perpendicular to the x-axis.