

Second Grade Mathematics Georgia Performance Standards

Numbers and Operations

M2N1 Students will understand the place value representation of whole numbers through four digits.

a. Represent numbers using a variety of models, diagrams, and number sentences (e.g., 4703 represented as $4,000 + 700 + 3$, 47 hundreds + 3, or $4,500 + 203$).

b. Understand the relative magnitudes of numbers using 10 as a unit, 100 as a unit, or 1000 as a unit. Represent 2-digit numbers with drawings of tens and ones and 3-digit numbers with drawings of hundreds, tens, and ones.

[Episode 217](#)

c. Use money as a medium of exchange. Count back change and use decimal notation and the dollar and cent symbols to represent a collection of coins and currency.

[Episode 204](#)

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M2N2 Students will build fluency with multi-digit addition and subtraction.

[Episode 207](#)

a. Correctly add and subtract two whole numbers up to three digits each with regrouping.

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[Episode 209](#)

[Episode 213](#)

[Episode 216](#)

[Episode 218](#)

b. Understand and use the inverse relation between addition and subtraction to solve problems and check solutions.

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c. Use mental math strategies such as benchmark numbers to solve problems.

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d. Use basic properties of addition (commutative, associative, and identity) to simplify problems (e.g., $98 + 17$ by taking two from 17 and adding it to the 98 to make 100 and replacing the original problem by the sum $100 + 15$).

e. Estimate to determine if solutions are reasonable for addition and subtraction.

M2N3 Students will understand multiplication, multiply numbers, and verify results.

a. Understand multiplication as repeated addition.

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[Episode 202](#)

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b. Use repeated addition, arrays, and counting by multiples (skip counting) to correctly multiply 1-digit numbers and construct the multiplication table.

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c. Use the multiplication table (grid) to determine a product of two numbers.

d. Use repeated subtraction, equal sharing, and forming equal groups to divide large collections of objects and determine factors for multiplication.

M2N4 Students will understand and compare common fractions with small denominators.

[Episode 204](#)

a. Model, identify, label, and compare fractions (thirds, sixths, eighths, tenths) as a representation of equal parts of a whole or of a set.

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b. Know that when all fractional parts are included, such as three thirds, the result is equal to the whole.

M2N5 Students will represent and interpret quantities and relationships using mathematical expressions including equality and inequality signs ($=$, $<$, $>$).

[Episode 212](#)

[Episode 218](#)

a. Include the use of boxes or ____ to represent a missing value.

b. Represent problem-solving situations where addition, subtraction, or multiplication may be applied using mathematical expressions.

Measurement

M2M1 Students will know the standard units of inch, foot, yard, and metric units of centimeter and meter and will measure length to the nearest inch or centimeter.

Episode 217

- a. Compare the relationship of one unit to another by measuring objects twice using different units each time.
- b. Estimate lengths, and then measure to determine if estimations were reasonable.
- c. Determine an appropriate tool and unit for measuring.

Episode 202

Episode 212

M2M2 Students will tell time to the nearest five minutes and know relationships of time such as the number of minutes in an hour and hours in a day.

Episode 207

Episode 210

M2M3 Students will estimate, then measure, temperature (Fahrenheit) and determine if estimations were reasonable.

Episode 202

Episode 203

Episode 212

Geometry

M2G1 Students will describe and classify plane figures (triangles, squares, rectangles, trapezoids, quadrilaterals, pentagons, hexagons, and irregular polygonal shapes) according to the number of edges and vertices and the sizes of angles (right angle, obtuse, acute).

M2G2 Students will describe and classify solid geometric figures (prisms, cylinders, cones, and spheres) according to such things as the number of edges and vertices and the number and shape of faces and angles.

- a. Recognize the (plane) shapes of the faces of a geometric solid and count the number of faces of each type.

Episode 215

- b. Recognize the shape of an angle as a right angle, an obtuse angle, or an acute angle.

M2G3 Students will describe the change in attributes as two and three-dimensional shapes are cut and rearranged.