

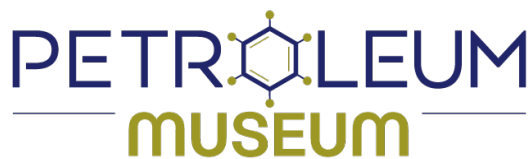


LEGO MoreToMath

LEGO Education MoreToMath is a hands-on educational solution for 1st and 2nd grade that teaches mathematical problem solving by bridging to math facts. By using the familiar LEGO bricks and real-world challenges, students will feel encouraged and motivated to think, write and speak freely about math. MoreToMath is designed to develop students' problem-solving abilities as well as their vocabulary, reading, thinking, listening, and speaking skills related to mathematical topics. The cost for this trunk is \$25 for a week based on availability. This includes the lesson plans and all the equipment and materials you will need for each lesson.

The Lego MoreToMath Trunk supplies provided by:

Helen Greathouse Charitable Trust



1 – 2 MORETOMATH TRUNK MASTER TEKS ALIGNMENT:

Math, 1st Grade

(1.2) Number and Operations: The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:

(A) Recognize instantly the quantity of structured arrangements.

(C) Use objects, pictures, and expanded and standard forms to represent numbers up to 120.

(1.3) Number and Operations: The student applies mathematical process standards to develop and use strategies for whole number addition and subtraction computations in order to solve problems. The student is expected to:

(B) Use objects and pictorial models to solve word problems involving joining, separating, and comparing sets within 20 and unknowns as any one of the terms in the problem such as $2+4=?$; $3+?=7$; and $5=?-3$.

(D) Apply basic fact strategies to add and subtract within 20, including making 10 and composing a number leading to 10.

(E) Explain the strategies used to solve addition and subtraction problems up to 20 using spoken words, objects, pictorial models, and number sentences.

(F) Generate and solve problem situations when given a number sentence involving addition or subtraction of numbers within 20.

(1.5) Algebraic Reasoning: The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:

(B) Count by twos, fives, and tens to determine the total number of objects up to 120 in a set.

(C) Use the relationships to determine the number that is 10 more or 10 less than a given number up to 120.

(D) Represent word problems involving addition and subtraction of whole numbers up to 20 using concrete and pictorial models and number sentences.

(E) Understand that the equal sign represents a relationship where expressions on each side of the equal sign represent the same value(s).

(F) Determine the unknown whole number in an addition or subtraction equation when the unknown may be any one of the three or four terms in the equation.

(1.6) Geometry and Measurement: The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:

(B) Distinguish between attributes that define a two-dimensional or three-dimensional figure and attributes that do not define the shape.

(F) Compose two-dimensional shapes by joining two, three, and four figures to produce a target shape in more than one way if possible.

(G) Partition two-dimensional figures into two and four fair shares or equal parts and describe the parts using words.

(1.7) Geometry and Measurement: The student applies mathematical process standards to select and use to describe length and time. The student is expected to:

(B) Illustrate the length of an object is the number of same-size units of length that, when laid end-to-end with no gaps or overlaps, reach from one end of the object to the other.

(C) Measure the same object/distance with units of two different lengths and describe how and why the measurement differ.

(1.8) Data Analysis: The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:

(A) Collect, sort, and organize data in up to the three categories using models/representations such as a tally marks or T-charts.

Math, 2nd Grade

(2.2) Number and Operations: The student applies mathematical process standards to represent and compare whole numbers, the relative position and magnitude of whole numbers, and relationships within the numeration system related to place value. The student is expected to:

(A) Use concrete and pictorial models to compose and decompose numbers up to 1,200 in more than one way as a sum of so many thousand, hundreds, tens, and ones.

(B) Use standard, word, and expanded forms to represent numbers up to 1,200.

(2.4) Number and Operations: The student applies mathematical process standards to develop and use strategies and methods for whole number computation in order to solve addition and subtraction problems with efficiency and accuracy. The student is expected to:

(A) Recall basic facts to add and subtract within 20 with automaticity.

(B) Add up to four two-digit numbers and subtract two-digit numbers using mental strategies and algorithms based on knowledge of place value and properties of numbers.

(C) Solve one-step and multi-step word problems involving addition and subtraction within 1,000 using a variety of strategies based on place value, including algorithms.

(D) Generate and solve problems situations for given mathematics number sentence involving addition and subtraction of whole numbers within 1,000.

(2.7) Algebraic Reasoning: The student applies mathematical process standards to identify and apply number patterns within properties of numbers and operations in order to describe relationships. The student is expected to:

(C) Represent and solve addition and subtraction word problems where unknowns may be any one of the terms in the problem.

(2.8) Geometry and Measurement: The student applies mathematical process standards to analyze attributes of two-dimensional shapes and three-dimensional solids to develop generalizations about their properties. The student is expected to:

(E) Decompose two-dimensional shapes such as cutting out a square from a rectangle, dividing a shape in half, or partitioning a rectangle into identical triangles and identify the resulting geometric parts.

(2.9) Geometry and Measurement: The student applies mathematical process standards to select and use units to describe length, area, and time. The student is expected to:

(A) Find the length of objects using concrete models for standard units of length.

(C) Represent whole numbers as distances from any given location on a number line.

(D) Determine the length of an object to the nearest marked unit using rulers, yardsticks, meter sticks, and measuring tapes.

(E) Determine a solution to a problem involving length, including estimating lengths.

(F) Use concrete models of square units to find the area of a rectangle by covering it with no gaps or overlaps, counting to find the total number of square units, and describing the measurement using a number and the unit.

(2.10) Data Analysis: The student applies mathematical process standards to organize data to make it useful for interpreting information and solving problems. The student is expected to:

(B) Organize a collection of data with up to four categories using pictographs and bar graphs with intervals of one or more.