

# Elementary Mathematics Materials

## **Attribute Block Set (Set of 60) Grades Pre-K-3** (at least one per grade level)

- Set includes 60 colorful plastic pieces in five basic shapes: circles, triangles, squares, rectangles, and hexagons. Each shape comes in three colors--red, yellow, and blue--in two sizes and two thicknesses.
- Overheads are also available.

## **Base-10 Manipulatives Grades 1-4** (5<sup>th</sup>/6<sup>th</sup> may wish to have at least one class set available to explore place value with decimals and measurement conversions in science)

- Thousands Block  
Hundreds Flat (10)  
Tens Rods (50)  
Units Cubes (100)  
Each Base-10 component is based on the single cubic centimeter models for numeration. All items are bright yellow in durable plastic. Faces of blocks, flats, and rods are scored in centimeters.
- Overheads are also available.

## **Clock Face (Pkg. of 10) Grades 1-3**

- Durable 4½" x 5" wipe-clean plastic clock face has movable dials with the minute hand clearly longer for easy identification. Features space to write in digital time equivalent. Black dials on white background for clear, sharp contrast.
- Overheads are also available.

## **Clock Face Stamp Grades 1-3**

- Stamped clock face image is 1 and 5/8" in diameter with large numerals for easy viewing. Rubber stamp is affixed to smooth wood block shaped for easy handling.

## **Centimeter Cubes – Rainbow (Pkg. of 500) Grade K**

- Plastic 1-cm cubes come in a rainbow of 10 brilliant colors. Use to explore mass, volume, metric measurement and more.

## **Coin Stamp Set, Grades 1-2**

- Five-piece rubber stamp coin set contains head side of a penny, nickel, dime, quarter and half-dollar. Smooth wood blocks shaped for easy handling.
- Overheads are also available.

## **Compass, Helix Grades 4-6**

- Helix compass features centering mechanism for drawing accurate circles and arcs. Snub-nosed safety point. Heavy-duty metal construction. Top grip and pencil holder knob both ribbed for easy handling. Use to draw accurate circles up to 5" in diameter. Pencil included.

## **Connectors (Pkg. of 2000) Grades 1-6**

- Bendable twist-ties are used to connect straws when forming simple and complex geometric designs. (pipe cleaners work just as well)

**Connecting Cubes (Pkg. of 100) Grade Pre-K** (I would also suggest these for 1<sup>st</sup> grade as they compose a “ten”)

- These interlocking cubes are useful for teaching measurement concepts in the Pre-K classroom.

**Counting Sticks (Pkg. of 1000) Grades Pre-K-2**

- Smooth wood craft sticks for counting, patterning, sorting, and other uses. Size 3/8" x 4½".

**Counters, Bears (Set of 80) Grade Pre-K**

- These bear-shaped counters are useful for teaching patterns in the Pre-K classroom.

**Cup Set, Standard (Set of 4) Grades Pre-K & 4-6** (Consider purchasing for all grades that explore liquid measures in the CCSS-M)

- White plastic measuring cup set for handling solids and liquids. Four sizes with two pouring spouts and dual measurements: 1/4 cup (60ml); 1/3 cup (80ml); 1/2 cup (125ml); 1 cup (250ml).
- Includes detachable holder.

**Dice, Blank (Set of 16) Grades Pre-K-3** (Blank dice are also helpful for grades 4/5 when exploring fraction games)

- Use to create custom-made dice for probability and other math activities. Set includes sixteen 5/8" opaque dice: green (5), red (5), and white (6).

**Dice, Dot (Set of 12) Grades Pre-K-6**

- Standard 5/8" dot dice set includes four each of green, red, and white dice per set of 12.

**Dice, Polyhedral (Set of 6) Grades 1-3** (One class set per school would be appropriate- good for fact games)

- Set of six includes one each of the five platonic solids: octahedron (n 1-8); decahedron (n 0-9); dodecahedron (n 1-12); icosahedron (n 1-20); and tetrahedron (n 1-2-3, 1-2-4, 1-3-4 & 2-3-4) plus a hexahedron cube (n 1-6).

**Dominoes, Double-9 (Set of 55) Grades Pre-K-3**

- Domino set can help students improve their probability, estimation, and other mental math skills. Set of 55 black pieces.
- Overheads are also available.

**Everything Math Deck (Pkg. of 10) Grades 1-6**

- This Everyday Mathematics exclusive is a unique deck of 54 cards that form the basis for a number of exciting, fun classroom math games and activities. It's really two decks in one: whole numbers, geometric representations, and dot patterns on one side; and fractions and illustrations on the other.
- Overheads are also available.

**7x7 Geoboard, Two-Sided Grades Pre-K-3** (I would suggest at least one class set for grades 4-6 to share)

- Two boards in one: a 7 x 7 Pin Geoboard with 3-cm molded grid area explorations on one side; and a Circle geoboard with pins every 15 degrees on the other. Safety lips on ends of pins keep rubber bands securely in place.
- Durable blue plastic; 8½, ¼" x 8½, ¼" size.

- Overheads are also available.

#### **Inch Cubes (Pkg. of 10) Grade Pre-K**

- Inch cubes have pictures of coins on all sides.

**Liter Pitcher Grades 4-6** (Consider purchasing for all grades that explore liquid measures in the CCSS-M 1 per grade level or a set of liquid measure/graduated cylinders etc. for the school)

- Unbreakable plastic measuring pitcher features molded spout for no-drip pouring, sturdy one-piece handle, and easy-to-read liter/milliliter gradations.

**Liter Volume Cube Grades 4-6** (Consider purchasing for all grades that explore liquid measures in the CCSS-M)

- Clear plastic cubic box with see-through cover holds one liter.
- Calibrated in 100ml gradations.

**Marker Board (Pkg. of 10) Grades 1-6** (Shower board can be cut at Home Depot or Lowes and serves the same purpose).

- Durable, 9" x 12" white marker board has easy-to-clean writing surface for all kinds of student activities.
- Use over and over again--wipe clean instantly. (Markers not included.)

**Meter Stick (Set of 10) Grades Pre-K-6** (Make sure these are meter sticks and not yard sticks)

- Quality hardwood meter stick features inches on one side, centimeters on other.
- 39 and 3/8" (100cm) long, 4mm thick.

**Number Line (Pkg. of 3) Grades 1-6** (One per classroom)

- Designed for flexible classroom display, the eighteen 4" x 39" sections can form a 58½-foot long number line stretching from -35 to 180.
- Printed in bold black on white, the numbers can be viewed easily from any point in the classroom.
- Special symbols identify even/odd numbers and multiples of 5.

**Pattern Blocks (Pkg. of 250) Grades Pre-K-6**

- Lightweight, plastic, 1 cm thick, and six shapes in an assortment of bright rainbow colors: 25 each of a hexagon and a square; 50 each of a triangle, a trapezoid, and two different rhombuses.
- Overheads are also available.

**Pattern Block Template (Pkg. of 10) Grades K-3**

- Clear green plastic tracing template contains a variety of geometric shapes with six of the shapes exactly matching the pattern block sizes above.
- Included are two hexagons, two triangles, two rhombuses, one square, one trapezoid, and three circles.
- Template edges include a 6" ruler on one side and a 15 cm ruler on the other. 4 and 3/4" by 6 and 5/8".

**Play Money Bill Set Grades 1-3**

- Two-sided set of play dollar bills in various denominations help students learn monetary values.
- Use to practice making change and budgeting.

- Set includes \$1 (30), \$5 (25), \$10 (20), \$20 (15), \$50 (5), \$100 (5).
- Overheads are also available.

#### **Rocker Balance *Grades Pre-K-6***

- Sturdy, wipe-clean plastic primary balance is easy to use and accurate for solid or liquid measurements.
- Removable, see-through  $\frac{1}{2}$  liter hoppers with shaped spouts can be used as scoops. Standard (cup/pint) and metric (ml/liter) calibrations.
- Sliding zero adjustment knobs. 1-liter capacity; 1-gram sensitivity.

#### **Rubber Bands (Pkg. of 400) *Grades Pre-K-3***

- Durable, small-size rubber bands.
- Bag of 400 is enough for about 15 Geoboards.

#### **Rulers, 6-in./15 cm (set of 10) *Grades Pre-K & 1-3***

- Measure inches or centimeters with these clear plastic, heavy-duty rulers.

#### **Spring Scale *Grades 2-3* (at least one per grade level, for all grades that explore mass/weight in the CCSS-M)**

- Dial spring scale measures mass and force in grams and pounds.
- Red plastic body with metal hook. 500g/1.1 lb.

#### **Stamp Pad *Grades 1-3***

- Pad contains black ink for use with time and money stamps.
- White plastic covered case is  $3\frac{3}{4}$ " by  $6\frac{1}{2}$ " high.

#### **Straws (Pkg. of 500) *Grades 1-6* (Available fairly inexpensively at Smart & Final)**

- Clear, plastic straws can be used for counting and making shapes.

#### **Tape Measure, Retractable (Pkg. of 10) *Grades 1-6***

- $1\frac{1}{2}$ -meter (5 foot) tape measure has inches on one side, centimeters/millimeters on other side.
- Push button and tape automatically rewinds into plastic case.
- Easy-to-read markings on easy-to-clean vinyl tape material.

#### **Tape Measure *Grades Pre-K & 4-6***

- Heavy-duty, vinyl-coated, fiber glass tape measure has inches/feet on one side and centimeters/meters on other.
- Extends to 30 meters/100 feet.
- Retract into plastic case manually with recessed handle.

#### **Thermometer *Grades Pre-K-3***

- High quality plastic thermometer has large numbers that read clearly in tow-degree increments from -40 to 50 degrees Celsius and -40 to 120 degrees Fahrenheit.
- Tube is recessed to prevent breakage.
- Use indoors or out.
- 3" wide by 14 $\frac{1}{2}$ " high.

#### **Timer *Grade Pre-K***

- Children enjoy using this tool for measuring time in various Pre-K activities.

#### **Transparent Mirror *Grades 4-6***

- This combination mirror/straight edge is a freestanding geometric tool that helps students explore symmetry, reflection, congruence, etc., in its acrylic reflective surface.
- Also can be used as a straight edge for drawing perpendicular and parallel lines, angle and line bisectors, and more.
- 5 and 7/8" wide by 3 and 3/4" high.

#### **Additional Manipulatives:**

##### **Compass/Ruler, 6 in. (Pkg. of 10)**

- Two tools in one: a no-point compass and a 4  $\frac{1}{2}$  in. / 11 cm ruler.
- Compass can be used to accurately draw circles up to 9 in. in diameter, areas in 15-degree increments, angles, and more.
- Works with most pens and pencils.
- Durable, clear, plastic construction. Overall: 1 x 5  $\frac{3}{4}$  in. long.

#### **Fact Triangle Cards**

##### **Addition/Subtraction (Pkg. of 10 sets)**

##### **Multiplication/Division (Pkg. of 10 sets)**

- These non-tearable, lightweight plastic "flashcards" are more durable versions of the fact Triangle Cards found in the student materials.
- Every Fact Triangle consists of three numbers from a "fact family."
- One number, marked with an asterisk, is the sum or product of the other two numbers. By covering one number with a thumb, children can practice addition/subtraction or multiplication/division facts. Children also recognize the inverse relationship between addition and subtraction, and the relationship between multiplication and division.
- Each set contains 36 Fact Triangles packaged with a re-closable plastic bag.
- Overheads are also available.

**Geometry Template (Pkg. of 10)** (included with initial Student Materials Set at *Grades 4-6*) These are blue. There is also one for the primary grades which is green. These are fairly expensive.

- This unique Geometry Template used in Everyday Mathematics grades 4, 5, and 6 is a multi-faceted drawing/measuring device that features 23 geometric shapes.
- It includes various sizes of circles, triangles, and quadrilaterals as well as a half-size version of each of the standard pattern blocks: pentagon, hexagon, octagon, and ellipse.
- It also contains two protractors, a percent wheel, and two rulers (with 17 centimeter and 7 inch scales) for drawing circle graphs and measuring angles and lengths.
- 6" x 7.5", blue plastic.

#### **MathTool Kit Bag (Pkg. of 10)**

- This sturdy zippered 7.25" x 10" nylon pouch provides convenient storage for each student's collection of mathematics tools.
- The MathTool Kit bag has a white loop handle on which math numbers can be written for easy reassignment from year to year.

#### **Number Grid Chart (Pkg. of 3) (One per classroom)**

- This study posterboard number grid chart, 28" x 22", has numbers from 0-110 and blank spaces for the numbers 1 to -9.
- Ideal for explorations of number patterns, order, operations, and negative numbers as well as games.
- This is heavier than the folded paper version included in the K-3 Teacher Resource Packages.

#### **Spoon Set, Standard**

- Set of white plastic measuring spoons includes 5 sizes:  $\frac{1}{4}$  tsp / 1.2 ml,  $\frac{1}{2}$  tsp / 2.5 ml, 1 tsp / 5.0 ml,  $\frac{1}{2}$  tbs / 7.5 ml, and 1 tbs / 15 ml.
- Detachable plastic holder.

#### **TI-108™ Calculator (Pkg. of 10) (at least one set per each classroom)**

- This solar-powered beginner's calculator has an 8-digit display, color-coded keyboard, and sliding cover.
- Designed specifically for use with young children in grades K-4, the calculator has large keys, is impact resistant, and automatically shuts off when left unattended.
- The calculator performs the four basic functions, figures percentages and square roots.
- It also has memory capabilities for work with automatic constants, and has a change in sign key.

#### **TI-15 Explorer (Pkg. of 10) (At least one set per each classroom)**

- Created for grades 3-6, the TI-15 Explorer offers a 2-line display that show entries and results at the same time.
- Previous entry feature lets students review entries and results and look for patterns.
- Other features include stacked fraction formats, problem solving and place-value functions. color-coded keyboard with impact-resistant case and quick-reference card.

#### **Deluxe Overhead Manipulative Kit *Grades 1-6***

- Includes all overheads available with Everyday Mathematics program. All overheads listed separately below.
- Use these overhead, transparent manipulatives to conduct classroom explorations and demonstrate key math concepts.
- Grades 1-6.

#### **Additional manipulatives that you may wish to have on hand:**

- 2 color counters (at least 1,000) for the school
- Consider purchasing multi-link cubes at least one set for the school (these are similar to connecting cubes yet link together in multiple ways, great for exploring capacity with a "packing" concept & ratio reasoning)
- Colored tiles (one class set for the school) helpful when working with the distributive property, area/perimeter models, and demonstrating operations using grouping or arrays)

