

SECONDARY MATHEMATICS

Educational Materials Catalogue

SPECTRUM
EDUCATIONAL SUPPLIES *Nasco*

2021

- new, improved website
- new design, new features, new content
- new products

spectrum-nasco.ca

Specializing in Classroom & Individual Kits

MOBILE MATH CARTS

Math Manipulatives Kits

Customize Your Cart in
3 EASY STEPS!

Step 1

CHOOSE your
CART

carts on page 5 & 6

Step 2

SELECT your
MATH KITS

Step 3

PLACE your
ORDER

All kits are
packaged
in a Mobile Math
Storage
Container!



Spectrum Algebraic Reasoning Kit

1 X-Y coordinate board, 4 dry-erase markers, 12 negative/positive dice, 6 operation dice, 1 number balance, 6 algebra dice, 6 multiplier dice, 200 square red/blue tiles, colour tiles 100 pc, dry-erase board 1cm grids 10 pc, dry-erase board 1cm grids XY axis 10 pc, 1 integer number line, 5 algebra tiles with tray, 1 algebra tiles book 52 pages, red and blue 2-sided counters 200 pc.

206814 \$91.92



Spectrum Data Management Kit

30 deck of cards, 1 clear deck of cards, 9 spinners (numbers/colours), 72 multi coloured dot dice, 72 white dot dice, 108 assorted dice, 4 dry-erase markers, 2 colour counters (yellow/red) set of 200, 2 colour counters (red/blue) set of 200, 36 blank dice with 240 label, 120 coins, dry-erase 1cm grids board set of 30, 6 word dice, 2 dice 30 sided, 500 blank cards.

206813 \$209.92



Spectrum Foam Fraction Circle and Square Kit

15 foam circle fraction set of 51 and 15 foam square fraction set of 51.

206811 \$145.92



Spectrum Probability/Spinners/Coins/Counters Kit

10 blank spinners, 45 numbered/coloured spinners, 120 coins, 200 red/blue 2-sided counters, 200 black/red 2-sided counters, 200 white/red 2-sided counters, 12 coloured spotted dice.

206810 \$115.72



Spectrum Geometric/Masurement Kit

30 angle rulers, 30 (180 degree) protractors, 30 metric tapes, 30 rulers, 30 compass/ruler, 30 circle (360 degree) protractors, 1 folding metre stick, 30 percent protractors, 30 geometry sets.

206815 \$294.92



Spectrum Intermediate Ruler with Fiberglass Tape Kit

Intermediate rulers graduated in cm on one edge and mm on the other edge (120 pieces), metric tape calibrated in cm and mm (40 pieces).

206816 \$105.92



Spectrum Tangrams Kit

125 sets of opaque tangrams (7 pieces per set).

206817 \$108.92

We Care about everything that goes into the creation of our catalogue, and the impact on the world around us, as much as you do.



FSC® stands for Forest Stewardship Council®. FSC®

standards have been developed to protect the forests' biodiversity and ecological processes. The FSC mark on this catalogue means that you can be assured the paper has been produced and handled responsibly throughout the entire process from forest to you.

CONTACT US

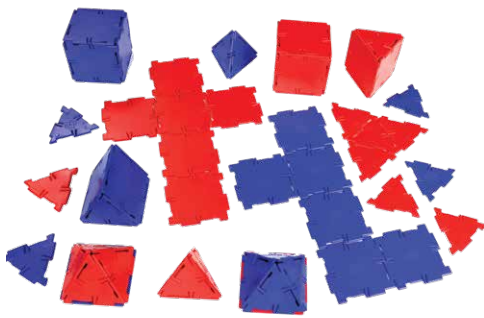
Go online to locate a knowledgeable Spectrum Resource Representative in your area today!

spectrum-nasco.ca

1.800.668.0600

SPECTRUM NASCO

150 Pony Drive, Newmarket, ON Canada L3Y 7B6



Spectrum Polydron Red and Blue Squares and Triangles Kit
520 Polydron Triangles pieces and 200 Polydron Square Pieces.
206822 \$329.72



Spectrum Dotted (1.6 cm) Coloured Dice Kit
450 green dot dice, 450 red dot dice, 450 blue dot dice, 450 yellow dot dice, all are 1.6cm. Total: 1800 dice.
206812 \$328.92

All kits are packaged in a Mobile Math Storage Container!



Spectrum 2 Colour Counter Kit
2000 white and red counters, 2000 red and yellow counters, 2000 red and blue counters
206826 \$239.72

Spectrum Polydron Crystal Clear Pieces Kit
40 square pieces, 20 hexagon pieces, 24 pentagon pieces, 100 equilateral triangle pieces.
206866 \$209.32



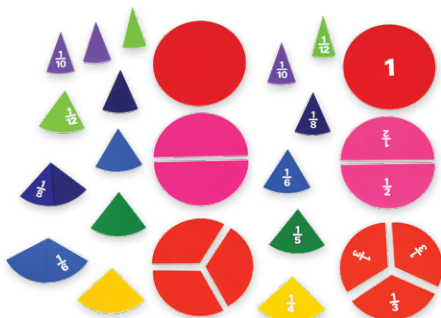
Spectrum Graduated Measuring Volume Kit
Graduated cylinders (7 pieces), measuring cups (3 pieces), and nesting beakers (5 pieces).
206821 \$49.92



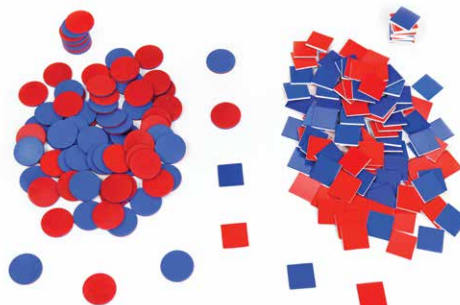
Spectrum Graduated Nesting Beaker Kit
Graduated nesting beakers 50 ml, 100 ml, 250 ml, 500 ml, 1000 ml (25 pieces). Cubes not included.
206818 \$59.72



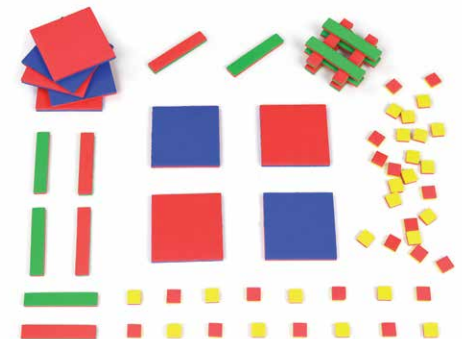
Spectrum Measurement Kit
10 thermometers, 1 stacking mass set of 35, 1 nesting beakers set of 5, 1 measuring cups set of 3, centimetre cubes set of 100, geometrical solids models with book set of 17.
206902 \$58.92



Spectrum Printed Fractions Kit
Circular printed fractions (757 pieces), and circular blank fractions (756 pieces).
206823 \$177.42



Spectrum Square and Round Red and Blue Counter Kit
Two-sided red and blue square tiles (3,000 pieces), and two-sided red and blue circular counters (3,000 pieces).
206824 \$249.42



Spectrum Algebra Foam Tiles Kit
Algebra foam 4-colour pieces (1,750 pieces).
206825 \$134.92

MOBILE MATH CARTS

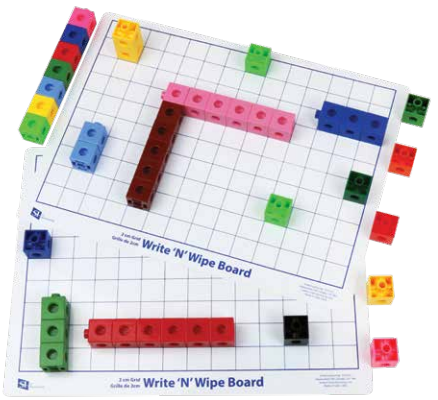
Math Manipulatives Kits



All kits are packaged in a Mobile Math Storage Container!

Spectrum Weight/Mass Gram Cubes Scale Kit

Compact Digital Scale (1), Stacking Coloured Mass 54 pc, Stacking Rectangle Weights 76 pc, Cubes (1cm) 100 pc, Cubes (2cm) 100 pc, Measuring Cups 3 pc.
206708 \$63.92

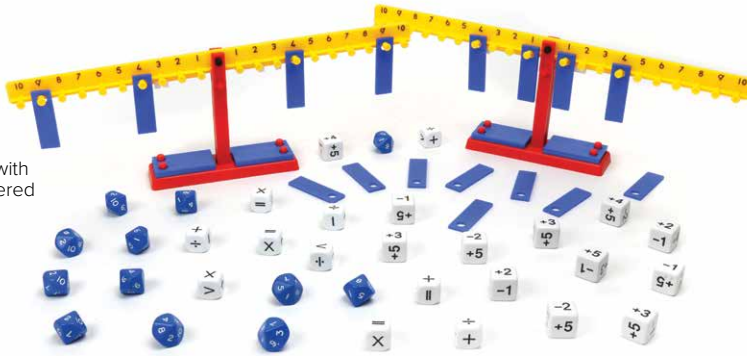


Spectrum 2cm Linking Cubes/2cm Dry-Erase Grids Board Kit

800 (2cm) linking cubes, 20 (2cm) dry-erase boards.
206831 \$99.92

Spectrum Number Balance Kit

12 student number balance with 10 g weights, 20 (1-10) numbered dice, 10 operation dice, 24 positive and negative dice.
206829 \$112.72



Spectrum 2cm Hex-A-Link Cubes Kit

1,000 interlocking 2cm cubes, 10 colours.
206706 \$94.42



Spectrum Playing Cards Kit

100 playing cards set.
206833 \$179.32

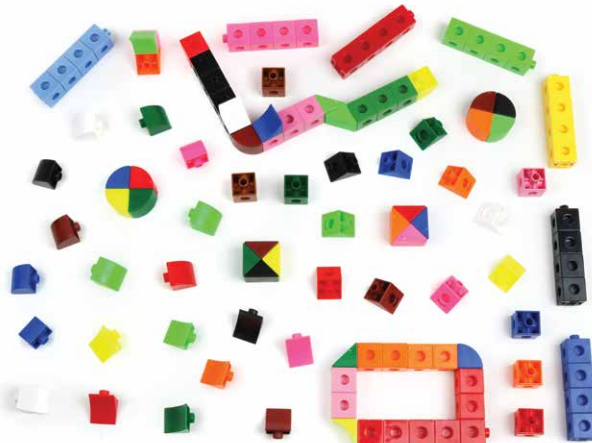


Spectrum 1cm Interlocking Cubes Kit

4000 (1cm) interlocking cubes in 10 colours.
206830 \$108.32

Spectrum 2cm Linking Cubes Refined Cubes Kit

100 concave cubes, 100 convex cubes, 100 triangle cubes, 700 (2cm) linking cubes.
206832 \$112.32



Spectrum Colour Tiles Kit

Colour tiles 4000 pc.
206709 \$106.92

These kits are designed to help students build a solid conceptual foundation in mathematics through an investigative approach, as reflected in the inquiry model of learning.

MOBILE MATH CARTS

Math Manipulatives Kits



Geometric Volumetric Kit

- Includes:**
- Geometric Solids Wood Set (2 sets of 19 pieces per set)
 - Volumetric Solids Set (2 sets of 15 pieces per set)
 - Geometric Solids Plastic Set (1 set of 40 pieces)
 - Volumetric Solids Activity Book, 48 pages (1)
 - Storage Container with Lid (1)

206619 \$77.92



Algebraic Thinking Kit

- Includes:**
- Algebra Tiles Single Variable Set in Storage Tray (10 sets of 89 pieces per set)
 - Algebra Tiles XY Double Unknown Variable Set (1 set of 40 pieces in storage tray)
 - Algebra Dice (1 set of 6 dice)
 - Multiplier Dice (1 set of 6 dice)
 - Integer Ruler with Cubes and Activity Tasks (1)
 - Algebra Tiles Activity Book, 52 Pages (1)
 - Storage Container with Lid (1)

206621 \$91.72

Complete with a Selection of Essential Manipulatives for the Secondary Math Classroom!
Includes 6 Kits!

Spectrum Compact Mobile Math Cart

Our storage cart is complete with selections of essential Math manipulatives for the Secondary classroom! The storage containers are suited to fit 2 custom kits per shelf. One of each of the 6 kits listed on this page are included with our Compact Mobile Math cart. (206615, 206617, 206619, 206621, 206623, and 206834).

206627 \$917.22

Spectrum Storage Cart with Three Metal Shelves

The shelves can be adjusted to different heights; the frame of the rack is thick with rounded corners includes also 4 durable wheels. The shelves are 56 cm in length and 39 cm in width. The Spectrum storage rack measures 109 cm H x 70 cm W x 41 cm D.

206567 \$219.95

Compact Mobile Math Cart Storage Container with Lid

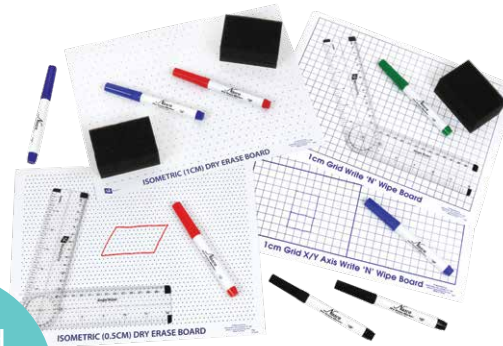
206629 \$6.00



Math-Vu Mirror Geometry Kit

- Includes:**
- Math-Vu Mirror with Protractor & Enhancer (25)
 - Math-Vu Mirror Guide (1)
 - Storage Container with Lid (1)

206617 \$111.22



Spectrum Dry-Erase Board Kit

- Includes:**
- 30 (XY) 1cm grid boards
 - 30 (1cm) grid boards
 - 30 isometric (0.5cm/1cm) grid boards
 - 10 dry-erase erasers
 - Dry-erase markers
 - 6 of each of: red, green, black, blue, and purple markers
 - 10 angle rulers

206834 \$151.52

Measurement Learning Tools Kit

- Includes:**
- Circle Protractor (15)
 - Percent Protractor (15)
 - Protractor 180 Degree (15)
 - Drawing Compass/Ruler (15)
 - Angle Ruler (15)
 - Wind-Up Tape (15)
 - Clear Plastic Ruler (30)
 - Clinometer with Activity Tasks (10)
 - Storage Container with Lid (1)

206623 \$169.22

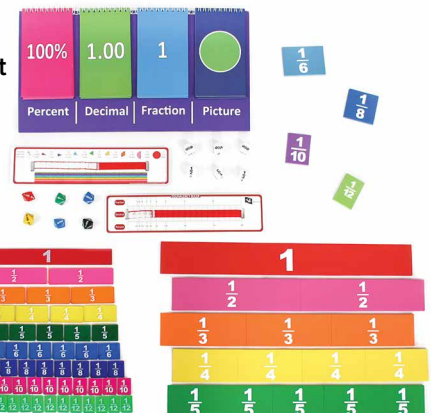


All kits are packaged in a Mobile Math Storage Container!

Fraction Learning Tools Kit

- Includes:**
- Fraction Equivalency Flip Chart (1)
 - Fraction Dice (1 set of 6 dice)
 - 8-Sided Fraction Dice (1 set of 6 dice)
 - Fractional Slide Ruler Set (2 sets of 5)
 - Fraction Tiles Set (10 sets of 51 tiles per set)
 - Magnetic Fraction Tiles (1 set of 51 tiles)
 - Storage Container with Lid (1)

206615 \$138.72



MOBILE MATH CARTS

Math Manipulatives Kits

These kits are designed to help students build a solid conceptual foundation in mathematics through an investigative approach, as reflected in the inquiry model of learning.

Spectrum Condensed Mobile Math Cart

Our condensed cart is complete with selections of essential Math manipulatives for the Secondary classroom! The storage containers are suited to fit 1 custom kit per shelf. One each of 3 of the kits listed on this page is included with our Condensed Mobile Math Cart. (206729, 206730 and 206727).
206733 \$505.05

Spectrum Condensed Mobile Storage Cart with Three Metal Shelves

Shelves can be adjusted to different heights: the frame of the rack is thick with rounded corners. Includes 4 durable wheels of which 2 are locking. Shelves measure 34.5 L x 23.5cm W. The Spectrum Condensed rack measures 110 cm H x 41 cm W x 46 cm L.
206726 \$179.95

Condensed Mobile Math Cart Storage Container with Lid

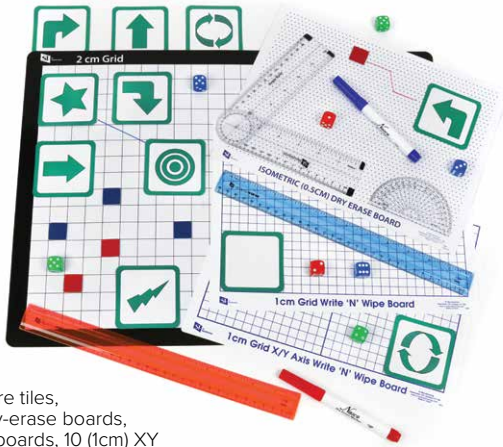
206629 \$6.00

Complete with a Selection of Essential Manipulatives for the Secondary Math Classroom!



Spectrum Math Coding Kit

Our custom coding math kit includes; 113 coding cards, 1 dry-erase 2cm grids mat (36.2cm x 50cm), 12 clear rulers, 6 blue dry-erase markers, 6 red dry-erase markers, 6 angle rulers, 6 protractors, 12 green dot dice, 12 red dot dice, 12 blue dot dice, 200 red and blue square tiles, 10 isometric 2 sided dry-erase boards, 10 (1cm) grid dry-erase boards, 10 (1cm) XY grid dry-erase boards packed into a storage container with lid.
206835 \$110.82



Spectrum XY Coordinate Kit

10 red XY coordinate board with white XY pegs, 200 rubber bands, 40 XY dry erase 1cm grid boards, 40 dry erase markers, black, green, blue and red.
206730 \$119.92

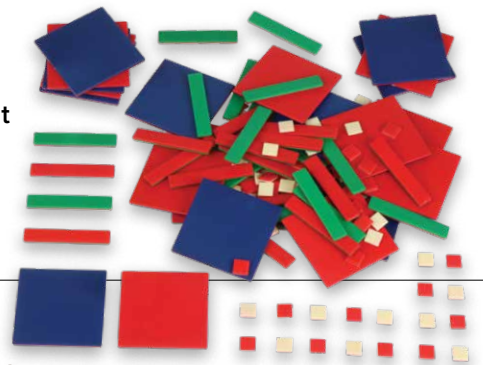


Spectrum Alge-Tiles Kit

7 (X) tiles set of 43, 7 (Y) tiles set of 25, 15 Alge-Tiles student organizers, 1 guide of 50 pages, 3 sets of 60 integer tiles.
206836 \$138.42

Spectrum Algebra Plastic Opaque Tiles Kit

1750 algebra opaque 4 colours plastic pieces.
206729 \$168.92



Spectrum Wood Geometric Solids Kit

114 wood geometric solids.
206727 \$89.42

MATH MANIPULATIVE KITS



Spectrum STEM Math Kit

- Polydron Starter Set (20 pieces)
- Frameworks Starter Set (20 pieces)
- Linking 2cm Cubes (100 pieces)
- Connecting Bars (222 pieces)
- Deci-Rods (240 pieces)
- 3D Foam Pentominoes (12 pieces)
- Polysolids Set (46 pieces)
- Counting Sticks (1000 pieces)
- Wood Pattern Blocks (100 pieces)
- Wood Deci-Blocks (52 pieces)
- Base Ten Flats (10 pieces)
- Base Ten Rods (100 pieces)
- Base Ten Unit Cubes (200 pieces)
- Dominoes (168 pieces)
- Non-Linking 2cm Cubes (100 pieces)
- Dry-Erase 1cm Grids (10 pieces)
- Mirrors 10 x 15cm (10 pieces)
- Mirror Clips (20 pieces)
- Metric Tape Measure (10 pieces)

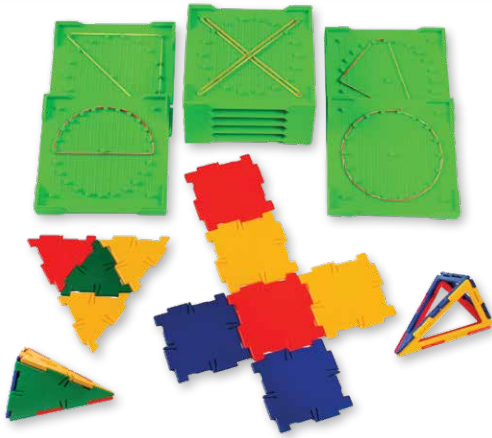
206837 \$288.92

All kits are
packaged
in a Mobile Math
Storage
Container!

Spectrum Calibrated Circular 2-Sided Geoboard Kit

30 Calibrated circular geoboards 2-sided (18 and 24 pins), Polydron starter set 20 pc, Frameworks starter set 20 pc.

206705 \$98.92



Spectrum Essential Tool Kit

Tangram (2) set, Pentominoes (1), Algebra set (1), Base-Ten Rods 50 pc, Base-Ten Flats 10 pc, Base-Ten Decimeter Cube (1), Base-Ten (cm) Cubes 200 pc, Base-Ten chips 100 pc, Attribute Blocks 60 pc, Interlocking 2cm Cubes 50 pc, Geoboard 2-sided 2 pc, Fraction Tiles 51 pc, Colour Tiles 100 pc, Pattern Block wood 100 pc, Deci-Rods 68 pc, 2-Colour Counters 100 pc, Red/Blue Square Tiles 100 pc, Red Dotted Dice 12 pc, Blue Dotted Dice 12 pc, Geosolids Wood 12 pc.

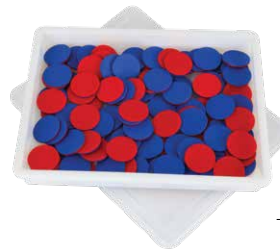
206723 \$109.92



Spectrum Tangrams Mini Kit

6 sets of Tangrams in assorted colours in a container. 168 pieces in total.

206838 \$6.82



Spectrum 2-Colour Counters Mini Kit

Two-colour (red-blue) counters provide a variety of counting and probability activities, packed in a container.

206841 \$7.52

Spectrum Tape Measures Mini Kit

10 fibreglass tape measures with 2 measures, cm and inches in a container.

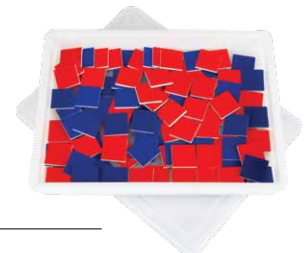
206839 \$7.12



Spectrum Square Tiles Mini Kit

Set of 100. Red and blue double-sided, 3mm thick, packed into a container.

206842 \$7.52



Spectrum Coins Mini Kit

Set of 240. 20 Loonies, 20 Toonies, 50 Pennies, 50 Nickels, 50 Dimes, 50 Quarters packed into a container.

206840 \$11.92



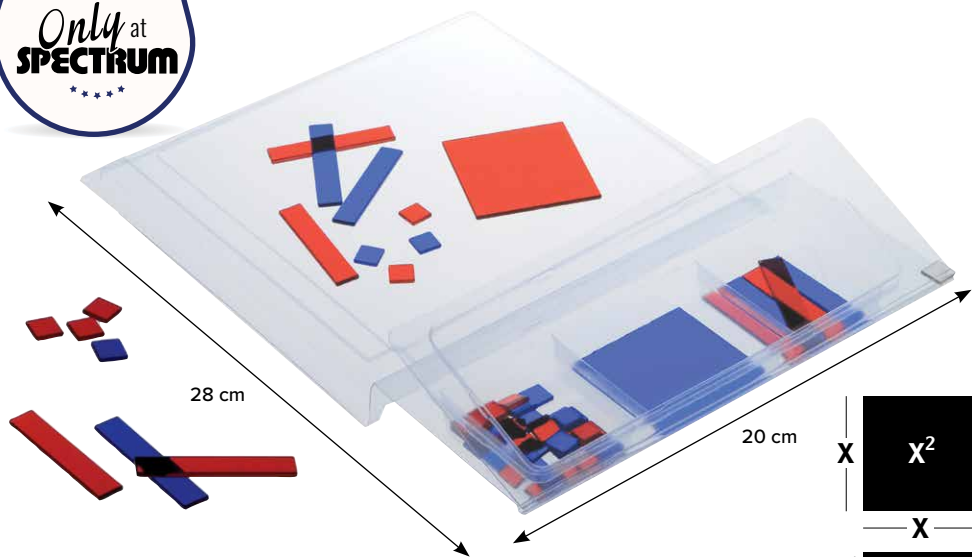
Spectrum Protractor Mini Kit

These 4", 180 degree protractors come with a slotted separation. Lower scale reads the right-opening angles and the upper scale reads the left-opening angles. Made of durable plastic. Includes thirty 4" transparent orange protractors packed in a container.

206843 \$18.22

MATHEMATICAL LEARNING OBJECTS

Red & Blue Integer Tools



Single Variable Clear Algebra Pieces™ with Working Storage Tray (89 pieces in total)

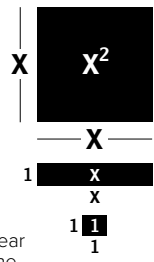
Includes 8 X² squares (4 each of blue/red) 20 of X² tiles (10 each of blue/red), and 60 of X² unit chips (30 each of blue/red).

204062 \$8.25

Single Variable Clear Algebra Pieces™ Group Kit

This set includes 10 single variable clear Algebra Pieces with Tray (204062), the Algebra Pieces Activity Book (52 pages), and a storage container.

206132 \$84.95



Algebra Pieces Single Variable Class Set

Contains 30 trays of Overhead Algebra Pieces (204062), activity book (204060), 1 FREE XY Set valued at \$3.95, and a plastic storage container.

204064 Not shown \$225.25 **Great Value!**

The Integer Overhead Number Line Rule



Integer Clear Number Line Rule

Combining the Integer Line Rule with the Integer 1 cm Cubes This algebraic rule demonstrates the connection between the integer line and integer 1 cm cubes. The blue cubes represent a positive value and move to the right on the integer line. The red cubes represent a negative value and move to the left on the integer line. This set includes 1 integer overhead number line rule, 30 each of the red and blue overhead stackable 1 cm cubes, and activity tasks.

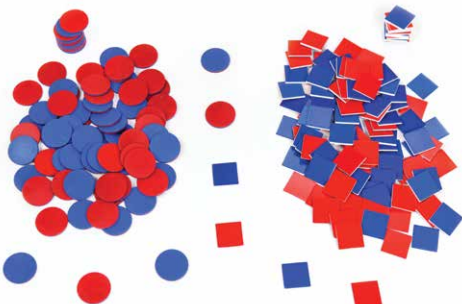
206144 \$4.75



1 cm Clear Spare Cubes

50 red and 50 blue cubes.

206148 \$5.75



Spectrum Square and Round Red and Blue Counter Kit

Two-sided red and blue square tiles (3,000 pieces), and two-sided red and blue circular counters (3,000 pieces).

206824 \$249.42

Two-Coloured Counters (Red & Blue)

205784 Package of 100

\$5.25

205786 Package of 200

\$9.65

205788 Package of 1000

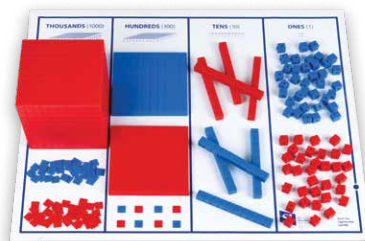
in a plastic bin \$44.42



Spectrum 2-Colour Counters Mini Kit

Set of 100, two-colour (red-blue) counters, packed in a container.

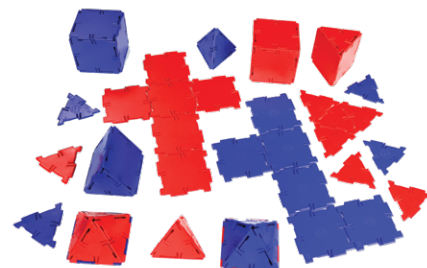
206841 \$7.52



Spectrum Red and Blue Opaque Base Ten Kit

2 red decimeter cube, 20 red flats, 50 red rods, 500 red cubes, 200 red chips, 2 blue decimeter cube, 20 blue flats, 50 blue rods, 500 blue cubes, 200 blue chips, 4 double-sided base ten mat.

206732 \$89.92



Spectrum Polydron Red and Blue Squares and Triangles Kit

520 Polydron Triangles pieces and 200 Polydron Square Pieces.

206822 \$329.72

Spectrum Square Tiles Mini Kit

Set of 100. Red and blue double-sided, 3mm thick, packed in a container.

206842 \$7.52

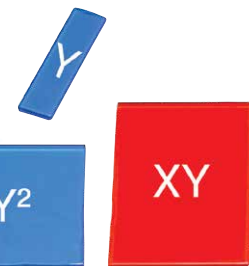


Red and Blue Algebraic Square Tiles (2 cm)

Double sided, 3 mm thick.

206184 Set of 200 \$7.95

206316 Set of 100 \$4.25



XY (Double Unknown Variable) Algebra Pieces Extension Set

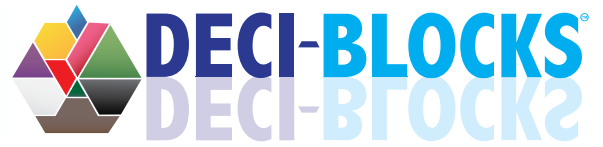
This set has the XY, Y and Y² pieces to be used in conjunction with the regular set (204062). The tiles are rectangular shapes that provide models of variables and integers. Includes 40 pieces in a storage tray: 20 Y pieces 36 x 10 mm (10 red and 10 blue; 10 Y² pieces 36 x 36 mm (5 red, 5 blue); and 10 XY pieces 53 x 36 mm (5 red, 5 blue).

205812 \$3.95

Double Unknown Variable Algebra Pieces Kit

This set includes 10 single variable clear Algebra Pieces (204062) with tray, 10 XY Double Unknown Variable Pieces with tray, the Algebra Pieces Activity Book (52 pages), and a storage container.

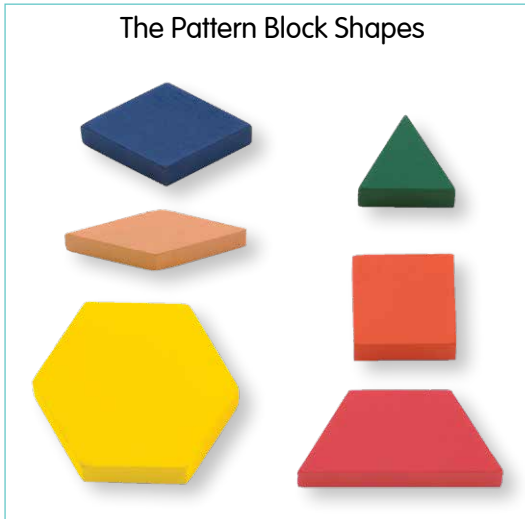
206134 \$105.95



Deci-Blocks™ are designed to extend the mathematical value of Pattern Blocks. This compatibility enables students to do many more tasks than are possible with Pattern Blocks alone.

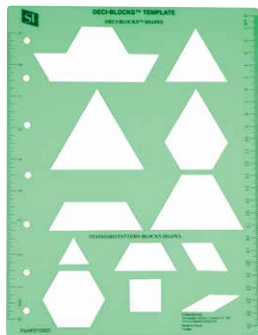
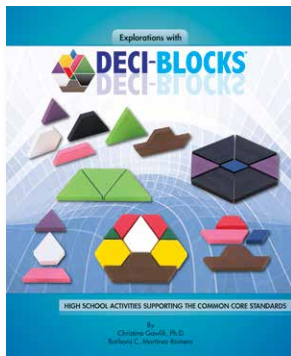
The Deci-Blocks™ can be utilized to deepen students' logic and reasoning to understand the many areas of Mathematics.

The Deci-Blocks™ combined with the Pattern Blocks can be utilized to represent all the Fractions that are needed. This is clearly one of the strengths of the Deci-Blocks™.



Examples of Mathematical topics when working with Deci-Blocks™ and Pattern Blocks:

- Modeling Fraction Relationships
- Solving Algebraic Equations and Balance Scales
- Balance Equations and Augmented Matrices
- Systems of Equations from a Geometric Perspective
- Polygon Congruencies
- Transformations
- Angle Measurements
- Probability Applications



Deci-Blocks™ Teachers' Book – Grades 9-12

Rich problem-solving activities with Deci-Blocks™ combined with Pattern Blocks. Topics provide a beginning framework for Algebraic equations, modeling fractions relationships, congruencies, angle measurements, transformations, probability and many more. Includes selected answers.

206564 Grades 9-12 Teachers' Book, 93 pages \$16.50

Deci-Blocks™ Template

Illustrates all 6 shapes of the Pattern Blocks and Deci-Blocks™, with both imperial and metric ruler markings along the outer edges.

206364 \$3.80

Combining Deci-Blocks™ with Pattern Blocks



Wood

Deci-Blocks™ with Pattern Blocks Set in a Plastic Container with Tasks

Set of 302 pieces.
206172 Wood \$55.75
206392 Hollow Plastic \$30.50

Deci-Blocks™ Wood Set

Set of 52, 1 cm thick pieces. In a plastic container with tasks.
206174 \$25.25
206742 Set of 52 pcs in a bag \$23.00
206743 Set of 208 pcs in a container \$94.42

Manipulatives for the Secondary School Mathematics Class

How do they help students deepen their conceptual understanding of mathematics? When students use manipulatives appropriately in the classroom, they have many opportunities to improve communication skills, share ideas, and use appropriate mathematical vocabulary. These objectives can be achieved by using some of the manipulatives listed on this page.



Spectrum Deci-Blocks™ Wood Kit

208 pieces of relational wooden 1cm Deci-Blocks™ (6 distinct shapes ideally designed to further the math learning with wooden pattern blocks).
206846 \$94.42

MATHEMATICAL LEARNING OBJECTS

Manipulatives for the Secondary School Mathematics Class

How do they help students deepen their conceptual understanding of mathematics? When students use manipulatives appropriately in the classroom, they have many opportunities to improve communication skills, share ideas, and use appropriate mathematical vocabulary. These objectives can be achieved by using some of the manipulatives listed on this page.

Relational Deci-Rods establish and reinforce relationships to create a base of ten manipulative. Working with the Deci-Rods enables the investigations of fraction equivalency, number relationships, multiplication, division, addition, subtraction, geometry, measurement, algebraic thinking and explore a variety of number patterns. The Deci-Rods are a combination of 10 different size rods and colours. The rods similarities, differences and relationships will help students learning from concrete to abstract.



Relational Plastic Deci-Rods Set of 80

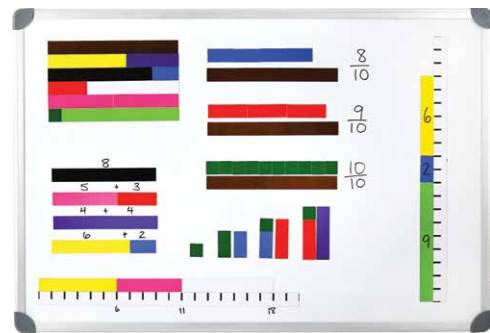
The rods sizes are from 1 x 1 x 10 cm as the longest to 1 x 1 x 1 cm as the shortest. Packaged in a bag.
206745 \$6.35

Relational Deci-Rods Intro Set

Our set contains 80 plastic relational Deci-Rods, 1 resource booklet (20 pages) packed into a custom container with lid.
206747 \$14.50

Relational Deci-Rods Multi-Pack Set

Our multi-pack contains 6 sets of plastic relational Deci-Rods (80 pcs each set), 6 custom plastic containers with lid, 1 resource booklet (20 pages) packed into 1 storage container.
206748 \$57.00



Magnetic Deci-Rods Set

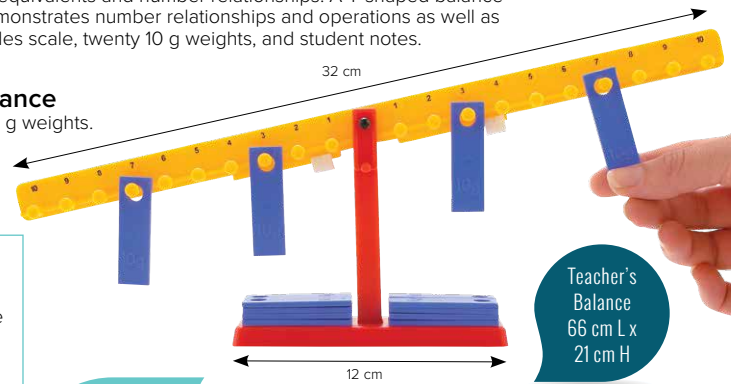
This magnetic demo version is a match to our student set (#206745). The dark green rod represents a unit and measures 2.5cm x 2.5cm. The brown rods are the longest rods and measure 2.5cm x 35cm. This set also contains four rulers that are ten units long to showcase measurement and fractions. Set of 76 pieces. Magnetic board not included.
206847 \$11.95

Student Number Balance (32 x 12 cm)

An easy, visual way to learn equivalents and number relationships. A T-shaped balance with weights that visually demonstrates number relationships and operations as well as pre-algebra concepts. Includes scale, twenty 10 g weights, and student notes.
206190 \$5.75

Teacher Number Balance

Includes scale and twenty 10 g weights.
206192 \$14.95



Number Balance Starter Kit

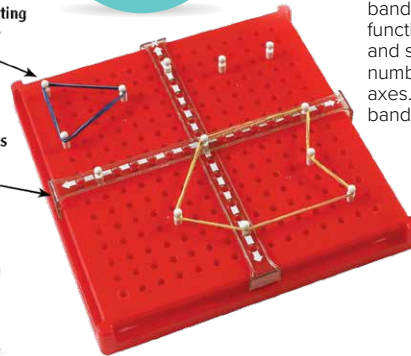
Includes 1 Teacher Balance and 10 Student Balances.
206194 \$62.50

Demonstrate, explore and model in 4 quadrants with the X-Y Coordinate board!

Pegs allow easy plotting of ordered pairs.

Sliding axes lines allow students to show 1 or 4 quadrants.

15 x 15 pin grid



X-Y Coordinate Board

Ideal for use in lessons requiring algebraic thinking, this unique board has sliding axes that allow maximum flexibility for coordinate graphing. Use the provided pegs and rubber bands to model points, line segments, functions, and conic sections. The 15 x 15 grid and sliding axes allow students to illustrate numbers from -14 to 14 on both the X and Y axes. Each set includes 50 pegs, 20 rubber bands, and one board.



206656 X-Y Coordinate Board \$5.25

206658 X-Y Coordinate Board, Set of 10 \$44.55

206660 X-Y Coordinate Board, Set of 30, with plastic container \$133.50

206566 X-Y Replacement Pegs, 50 pieces \$1.05



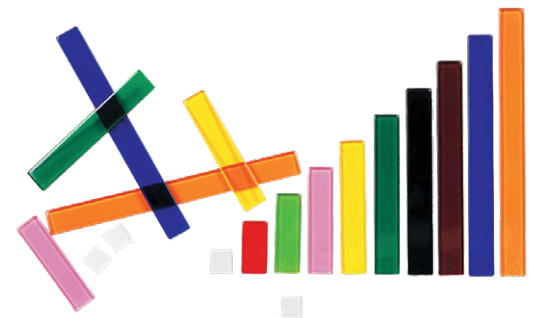
Cuisenaire® Rods Introductory Set

Contains 74 rods, tray with lid and Activity Guide. Set includes 22 white; 12 red; 10 light green; 6 purple; and 4 each of the yellow, dark green, black, brown, blue, and orange rods. For 2-3 students.
204268 Plastic Rods \$18.60

204270 6 trays of 74 rods each with 6 lids and 1 guide \$92.00

Clear Cuisenaire® Rods

Exactly matching the colour and base dimensions of the Cuisenaire® Rods, this set contains 20 white; 8 red; and 4 each of light green, purple, yellow, dark green, black, brown, blue and orange rods.
204272 Set of 60 \$8.95



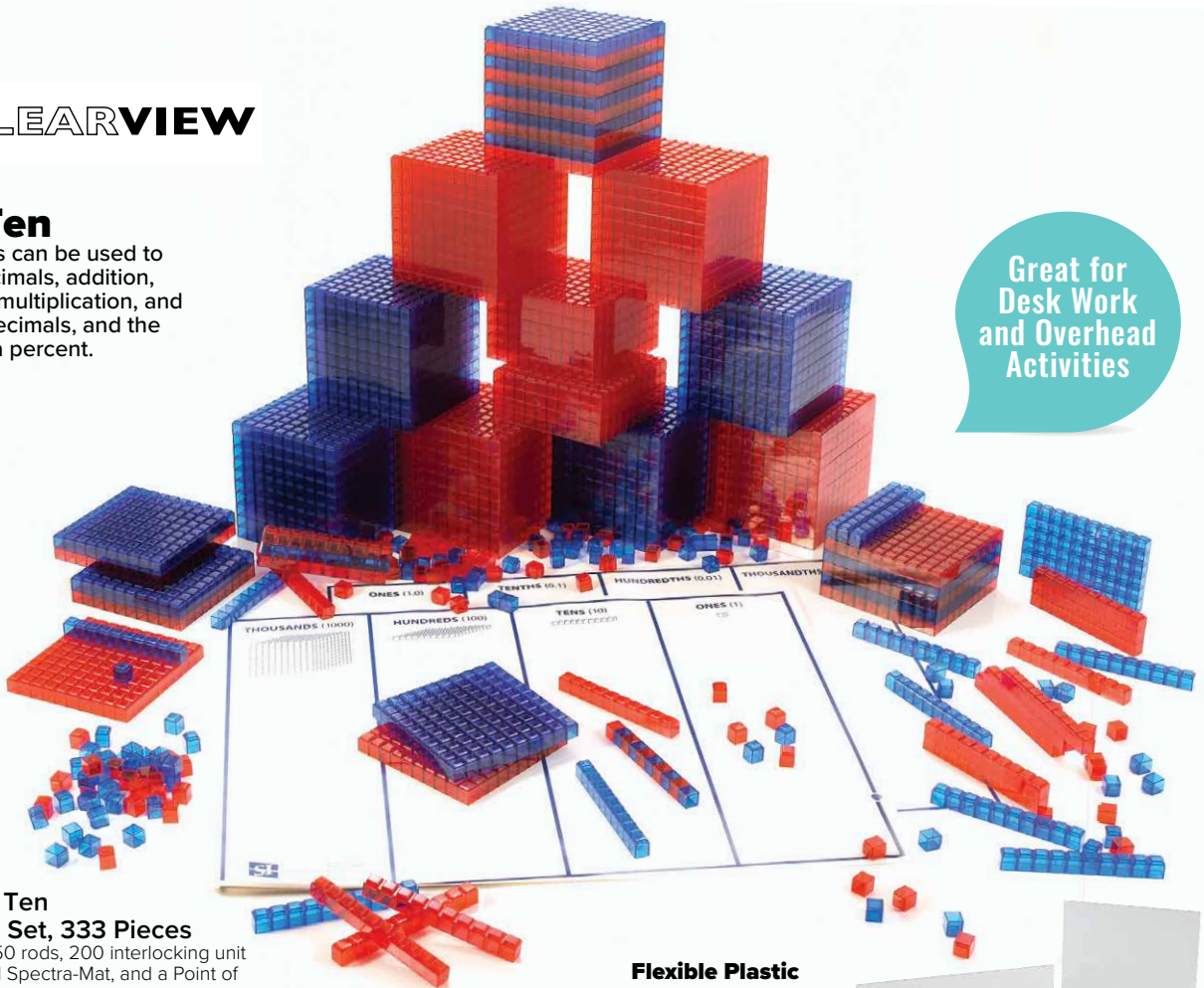


Base Ten

These blocks can be used to illustrate decimals, addition, subtraction, multiplication, and division of decimals, and the meaning of a percent.

Great for Desk Work and Overhead Activities

Vivid Red & Blue Colours!



CLEARVIEW™ Base Ten Starter Interlocking Set, 333 Pieces

This set includes 20 flats, 50 rods, 200 interlocking unit cubes, 1 double-sided vinyl Spectra-Mat, and a Point of Departure Teacher's Guide in a plastic storage bin.
205476 \$76.95

CLEARVIEW™ Base Ten Interlocking Set, 715 Pieces

This set contains enough materials for 6 students working in pairs. Includes 60 flats, 90 rods, 500 interlocking unit cubes, 3 double-sided vinyl Spectra-Mats, and Base Ten Blocks Activities Book. All packaged in a plastic storage bin.
206206 \$169.00

CaddyStack™ CLEARVIEW™ Base Ten 1/2 Class Interlocking Set

Includes 60 flats, 150 rods, 500 unit cubes, 6 vinyl Spectra-Mats, and a 96 page activity book, all packaged in a CaddyStack™.
204278 778 Pieces \$205.00



Base Ten Kits come with Base Ten Chips

Flexible Plastic Mirrors - Unbreakable!



5 x 7 cm, 2-Sided

206691 Set of 4 \$5.95

206692 7 Sets of 4 \$39.95 **Special Price!**

7.5 x 12.5 cm, 1-Sided 10 x 15 cm, 2-Sided

206689 Each \$1.50

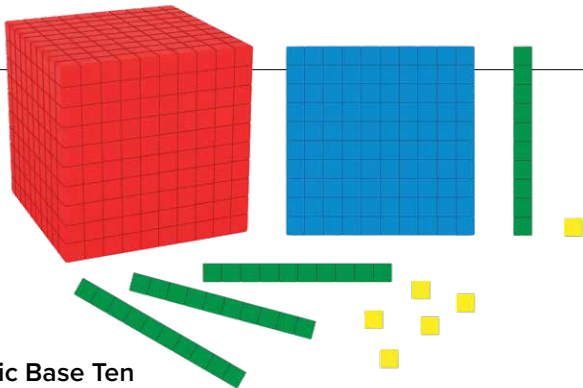
206694 Each \$2.75

206693 Set of 25 \$33.75

White Plastic Mirror Clips, Set of 20

Sturdy and practical, that hold mirrors for all your reflections/symmetry activities.

206690 \$4.65

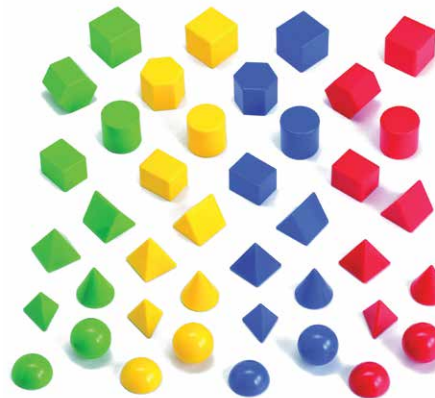


Magnetic Base Ten

Differentiated Set Of 121 Pieces.

Our differentiated base ten set will open-up the exploration by the students to differentiate the value of the colour-coded base ten rods units, rods, flats and cubes. The set includes 100 units, 10 rods, 10 flats and 1 cube.

206739 \$21.80



Geometric Solids

Set of ten different geometric solid shapes (sphere, hemisphere, triangle prism, rectangular prism, cube, hexagonal prism, triangle pyramid, pyramid, cone and cylinder). Four colours, 40 pieces. Hollow Plastic. Largest shape is 2.5 cm.

206293 \$7.20

MATHEMATICAL LEARNING OBJECTS

Manipulatives for the Secondary School Mathematics Class

How do they help students deepen their conceptual understanding of mathematics? When students use manipulatives appropriately in the classroom, they have many opportunities to improve communication skills, share ideas, and use appropriate mathematical vocabulary. These objectives can be achieved by using some of the manipulatives listed on this page.

Geometric Solids can be used to show the meaning of and how to determine surface area, volume of geometric solids, relationships among the solids, and how to look at and analyze various geometric solids.



Deluxe Wooden Geometric Solids Set

Set of 19 in a container.

205744 \$17.95

206378 Set of 6 in a container \$6.95

Colour Tiles The variety of colours allows the tiles to be used for probability, measurement, fractions, patterning, and proportional reasoning.



Colour Tiles

Set contains 400 2.5 cm square plastic colour tiles with teacher's guide (22 pages) in a container.

204260 \$22.95

206374 Set of 100 \$4.95

Clear Colour Tiles

52 tiles in 4 colours.

204262 \$2.50



Interlocking Cubes help students develop spatial sense. They are also used to develop understanding of number and measurement concepts. The variety of colours allows cubes to be used in probability experiments. The patterns can be used to develop algebraic models.



Hex-a-Link™ 2 cm Cubes

Contains 1000 interlocking cubes. Guide included (26 pages).

204252 Class Set (1000) \$94.55 **Great Price!**

206370 Set of 100 \$10.50

206406 Set of 50 \$6.95



Interlocking 1 cm/1 g Cubes

Link in all 4 directions. 10 colours.

203792 Package of 1000 in a container \$33.95

206372 Set of 100 \$4.25

206404 Set of 200 \$8.25

Two-Colour Counters can be used to model integers, addition of integers, subtraction of integers, multiplication of integers, and division of integers, data management and probability, proportional reasoning, and measurement.



Two-Coloured Counters (Red & Yellow)

204256 Package of 200 \$9.65

206384 Package of 100 \$5.25

206402 Package of 1000 in a container \$47.42



Clear Red & Yellow Counters

204258 Package of 50 \$1.95

Two-Coloured Counters (Red & Blue)

205784 Package of 100 \$5.25

205786 Package of 200 \$9.65

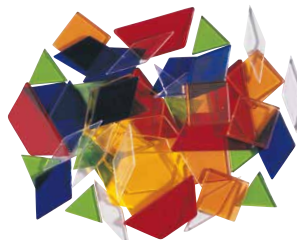
205788 Package of 1000 in a plastic bin \$44.50

Clear Red & Blue Set

205790 Package of 50 \$1.95



Pattern Blocks are used to create, identify, and extend patterns. Students can use the many relationships among the various pieces to explore fractions, angles, proportional reasoning, algebraic reasoning, patterning, and measurement.



Clear Pattern Blocks

204266 \$4.80



Wooden 1 cm Pattern Blocks

Set contains 250 pattern blocks in a bag.

204264 \$15.25

206719 Set of 50 \$5.75

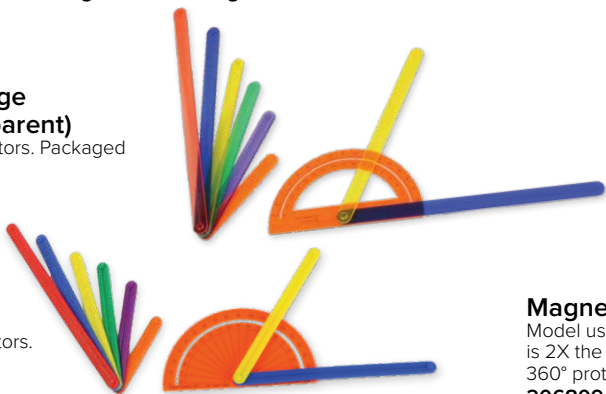
206376 Set of 100 \$9.75

Connecting Bars

Our Connecting Bars are plastic bars made to easily snap together. Each of the opaque and transparent sets include a selection of six lengths bars offering six colours in each set. The addition of custom protractors per set, are designed for the bars to snap onto the protractor: this will open student's mathematics learning to explore topics such as edges, symmetry, angles, areas and much more. In the student set, the longest bars measures 14.14 cm and in the large set, the longest bars measures 28.28 cm.

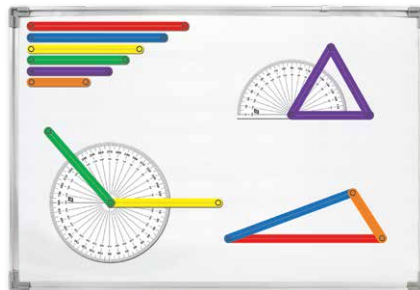
Connecting Bars Large Teachers Set (Transparent)

Set of 26. Includes 2 protractors. Packaged in a bag.
206808 \$17.25



Connecting Student (Opaque) Bars

Set of 74. Includes 2 protractors. Packaged in a bag.
206807 \$10.80



Magnetic Demo Connecting Bars

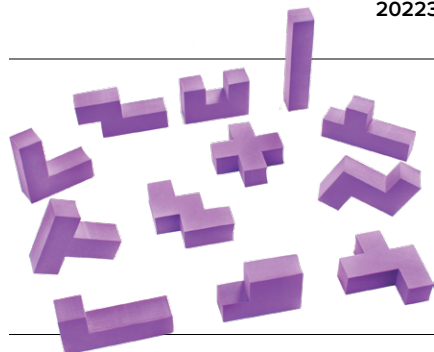
Model using the connecting bars on a magnetic board. This jumbo magnetic version is 2X the size of the student sized set (206807). Includes one 180° protractor and one 360° protractor. 38 pieces.
206809 \$24.25



Tangrams

Tangrams are used for exploring geometry, proportional reasoning, area and algebra. Contains 30 sets, guide (22 pages), 1 clear set in a container.

205232 \$32.50
202234 Extra Clear Tangrams set \$0.90

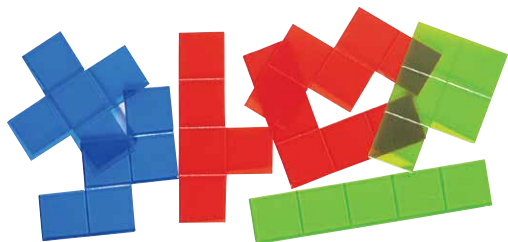


SPECTRUM 3D Foam Pentominoes

Our 3D Pentominoes set includes 12 (2 cm) pieces, made of high density foam.
206718 \$12.05

Pentominoes

The 12 pieces can be used to build spatial sense, develop geometrical visualization, proportional reasoning, and allow students to create conceptual models. Research says that problem solving activities increase when students gain spatial reasoning skills.



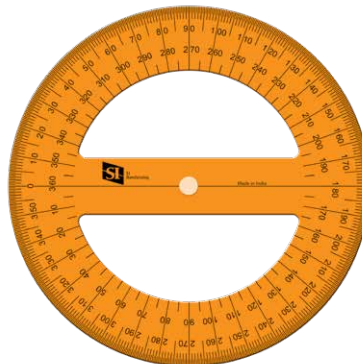
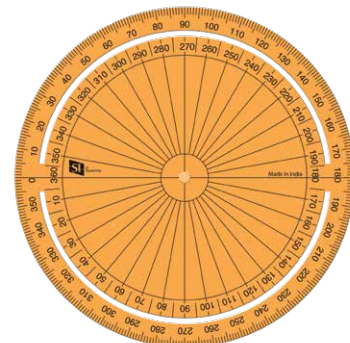
Pentominoes with Clear Set

Pentominoes are colourful plastic shapes composed of 5 squares each, all of which must share at least one side. Contains 18 sets, bucket, teacher's guide (22 pages), and overhead set.

204254 \$57.95
206380 1 Opaque Set (12 pcs.) \$2.95
206382 Clear Set (12 pcs.) \$2.95

Connecting Bars 360 Degree Protractor (15cm)

Protractor designed to work with set #206807
206848 Set of 2 \$3.55



Connecting Bars 360 Degree Protractor

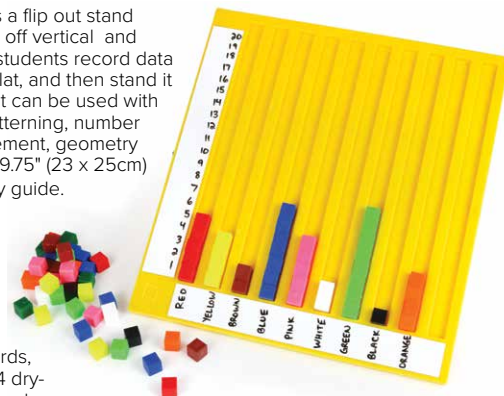
Our Connecting Bars protractors extend the math learning to explore topics such as measuring reflex angles, full circle measurement and further investigations of geometry. Connecting Bars 360 degree protractor (10cm) is designed to work with set #206808.
206849 Set of 2 \$2.35

1 cm Graph Board

This graph board features a flip out stand as well as a write on wipe off vertical and horizontal axes. This lets students record data while the board is laying flat, and then stand it up before adding cubes. It can be used with any 1cm cube to teach patterning, number sense, graphing, measurement, geometry and more. Measures 9" x 9.75" (23 x 25cm) and comes with an activity guide.
206289 \$8.40

1 cm Graduated Graph Board Group Set with Linking Cubes

Set includes: 5 graph boards, 500 (1 cm) linking cubes, 4 dry-erase markers, tasks and a storage container.
206290 \$43.50



1 cm Graduated Graph Board Group Set with Non-Linking Cubes

Set includes: 5 graph boards, 500 (1 cm) non-linking cubes, 4 dry-erase markers, tasks and a storage container.
206291 \$43.50

FINANCIAL LITERACY

Money Flip Chart Canada and US

This extra-large versatile flip chart teaches coins and bills from a penny to \$100. One side of the flip chart has currency from the United States and the other side has Canadian currency. The flip chart covers the name of the coin or bill, the value, what it looks like, and groups of coins or bills that add up to that value. This teacher desk version measures 7.9" x 24" (20 x 61cm). Canadian side also includes French translation. **206715 \$30.30**



Spectrum Starter Money Pack

Includes 20 x \$5, 20 x \$10, 20 x \$20, 10 x \$50, 10 x \$100, 50 x pennies, 50 x dimes, 50 x nickels, 50 x quarters, 25 x toonies, 25 x loonies. Packed into a money tray with a clear custom lid. Tray size: 31.5 cm x 15.5 cm. **206412 \$17.50**



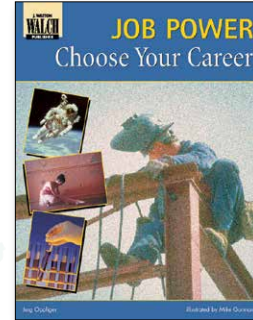
2 Colour Counters Red/Black

These two colour counters are a great way to help students with financial literacy tasks.

206850 Set of 200 **\$9.65**

206851 Set of 1000 in a container **\$44.42**

JOB POWER!

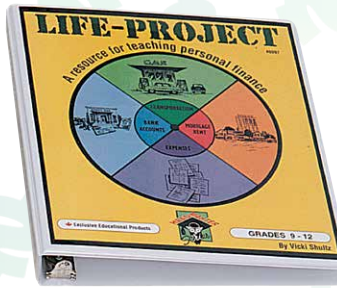
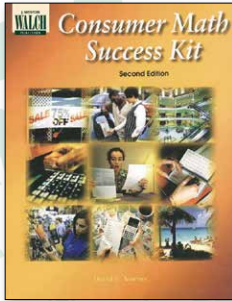


Job Power: Choose Your Career Student Guide

How do you decide what job is best? What kinds of questions should you be asking? Developed for high school students, this book helps prospective job seekers break down the many components that go into choosing a career. Filled with checklists, action sheets, sample documents, and role-playing activities. Topics include: Who am I?; What Are My Skills?; Kind of Company?; Job Satisfaction; Possible Occupations; and List of Contacts. 64 pages. **206528 \$23.25**

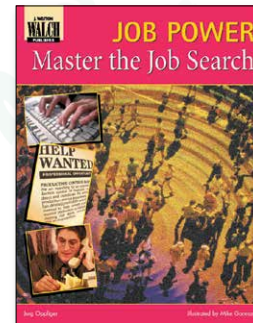
Consumer Math Success Kit Teacher's Guide

A proven aid for students who need to sharpen or develop their basic concepts. More than 50 specific, consumer areas detail how math shows up in an everyday situation, followed by practice problems and teacher notes. Select just the situations your students need to cover, or use the entire book in a life skills setting. Sample topics include: Collateral loans; Retail store charge accounts; Heating costs; Wages and salaries; Stocks and bonds; Telephone bills, and Vacation planning. 328 pages. **206534 \$49.95**



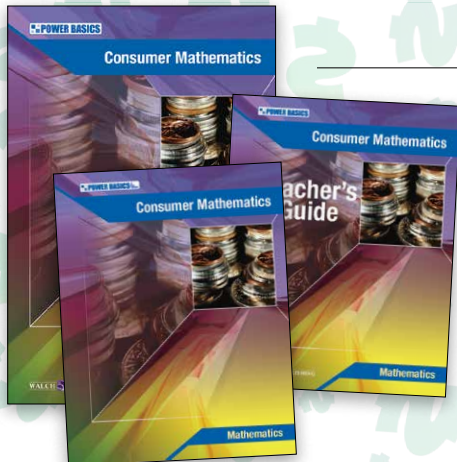
Life-Project

9-12 Arranged into integrated topics: banking, budgeting, paying bills, investing, employment, income taxes and more. Package includes complete teacher notes, occupation card, pay cheques, erasable calendar, in/out centre, expense tickets, evaluation sheets and much more. 108 pages. **203672 \$35.95**



Job Power: Master the Job Search Student Guide

The second title in this series walks the reader through a variety of exercises and activities that narrow down the job search. Laying the Groundwork includes targeting particular resources, and itemizing an individual's success stories. Create a Winning Resume covers the purpose of resumes, how to create one, and the language to use. The Four Proven Ways to Find a Job includes sections of how to network, writing target letters, employment agencies, and responding to ads. Your Work Plan develops step-by-step approaches to succeeding in the job search. 64 pages. **206530 \$23.25**



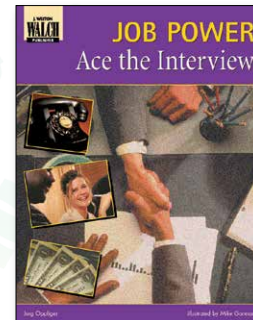
Consumer Mathematics

Help students add to their real-world knowledge. Uses a step-by-step approach to strengthen money-management skills. Explains how to spend wisely and create a balanced budget. Demystifies concepts such as getting a loan and establishing good credit. Teaches crucial life skills such as buying insurance and filling out a tax return.

206536 Student Text, 232 pages **\$37.75**

206538 Teacher's Guide, 44 pages **\$9.95**

206540 Workbook & Answer Key, 128 pages **\$24.95**



Job Power: Ace the Interview Student Guide

Developed for high school students, this book helps prospective job seekers with that final, critical step in getting a new position: the job interview. Filled with checklists, action sheets, sample documents, and role-playing activities. Topics include: Identify Your Strengths and Weaknesses; Skills on the Job; Your 60-Second Infomercial; Difficult Questions You May Be Asked; Making a Good First Impression; and Letter After an Interview. 64 pages. **206532 \$23.25**



Available
Only at
SPECTRUM

Spectrum Complete Money Pack

Set contains a 12 compartment tray with see-through storage lid, and: 100 each of pennies, nickels, dimes, and quarters, 50 each of toonies and loonies, 100 each of \$5, \$10, and \$20 bills, 50 each of \$50 and \$100 bills. Our bills are printed in colour on one side and produced at 60% of actual size.
205474 943 Pieces \$43.95



206856



206855

206854



206853

206852



Canadian Bills (Updated)

206852 \$5 Bills, Set of 100 **\$3.30**
206853 \$10 Bills, Set of 100 **\$3.30**
206854 \$20 Bills, Set of 100 **\$3.30**
206855 \$50 Bills, Set of 50 **\$1.95**
206856 \$100 Bills, Set of 50 **\$1.95**

Canadian Money: Coins

Set of 500: 50 Loonies, 50 Toonies, 100 Pennies, 100 Nickels, 100 Dimes, 100 Quarters.
206351 \$14.50

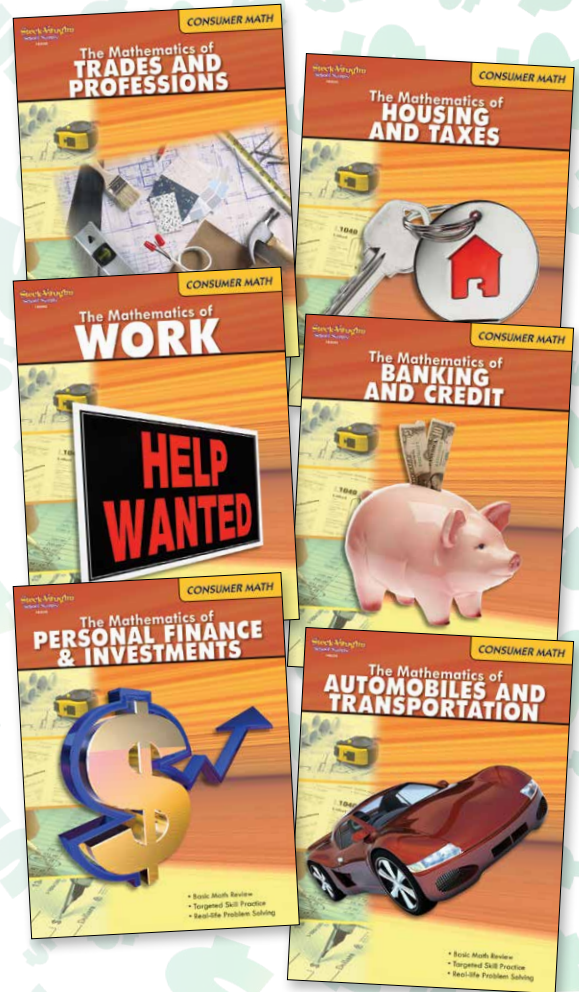
US Mixed Bills Set

This set contains 25 x \$1.00, 20 x \$5.00, 20 x \$10.00, 20 x \$20.00, 5 x \$50.00 and 10 x \$100.00. Total of 100 pieces.
206717 \$2.70



US Mixed Coins Set

Set of 94 Coins includes 30 pennies, 20 nickels, 20 dimes, 20 quarters and 4 half-dollars.
206716 \$3.05



Consumer Mathematics

This very practical series will help students and teachers to understand mathematics as it relates to their everyday lives. Each book covers basic math concepts and skills before exploring the more specific topics. Clear explanations are followed by ample practice. Each section also has a pretest, a section review, and post test. All books are 180 pages.

This highly relevant series explores a wide range of topics, such as:

- Using a calculator, pencil and paper, or mental math
- Calculating wages
- Filing income tax returns
- Budgeting household expenses
- Renting and obtaining a mortgage
- Investing in stocks, bonds, and savings accounts
- Buying insurance
- and many more!

The Mathematics of Trades and Professions
206577 \$45.95

The Mathematics of Housing and Taxes
206579 \$45.95

The Mathematics of Work
206581 \$45.95

The Mathematics of Banking and Credit
206582 \$45.95

The Mathematics of Personal Finance and Investments
206583 \$45.95

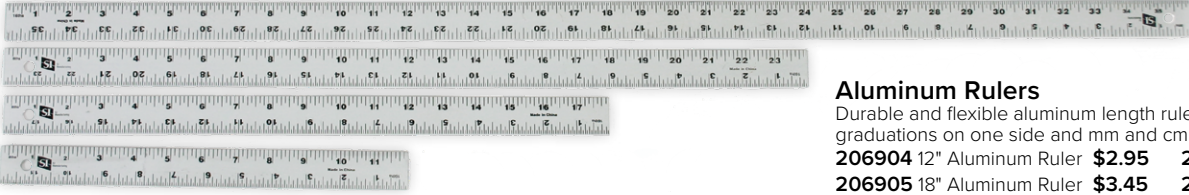
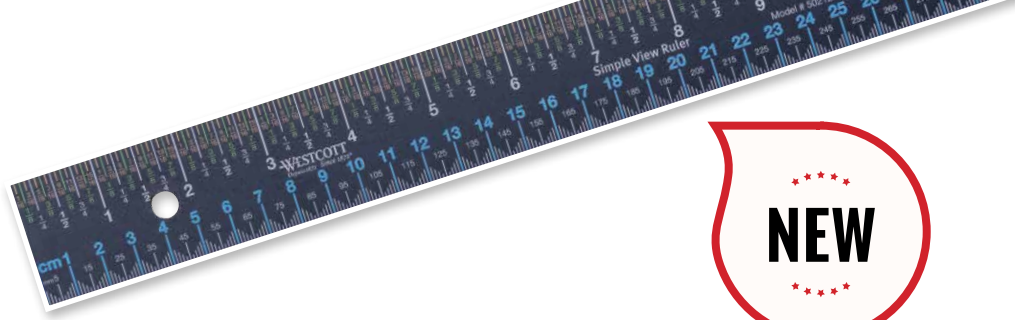
The Mathematics of Automobiles and Transportation
206585 \$45.95

MEASUREMENT

Instruments

Westcott Simple View Steel Ruler

30cm (12") Steel Ruler with cork backing. Vibrant colour coded graduations for 1/4", 1/8", 1/16", and 1/32" plus millimeters and centimeters mean no guessing or counting lines. The zero-bottom edge on the left side allows for easy height measurement. Features convenient hole for hanging. **95669 \$7.90**



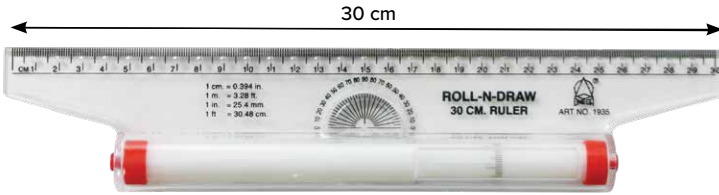
Aluminum Rulers

Durable and flexible aluminum length rulers. Calibrated with 1/8" and 1/16" graduations on one side and mm and cm on the other side.

206904 12" Aluminum Ruler **\$2.95** **206906** 24" Aluminum Ruler **\$3.95**
206905 18" Aluminum Ruler **\$3.45** **206907** 36" Aluminum Ruler **\$4.90**

Roll-n-Draw Ruler

This innovative multi-use tool is ideal for drawing vertical lines, horizontal lines, parallel lines, angles and circles.



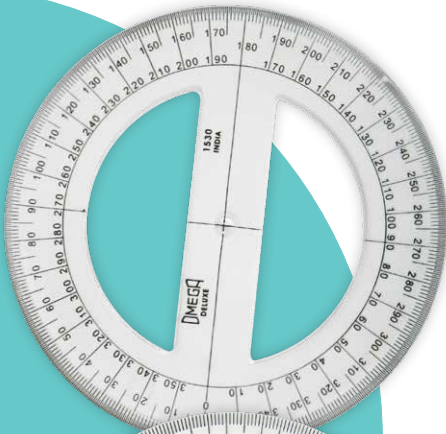
Roll-n-Draw Ruler 30 cm
206685 \$3.00

Roll-n-Draw Ruler 16 cm
206684 \$1.90



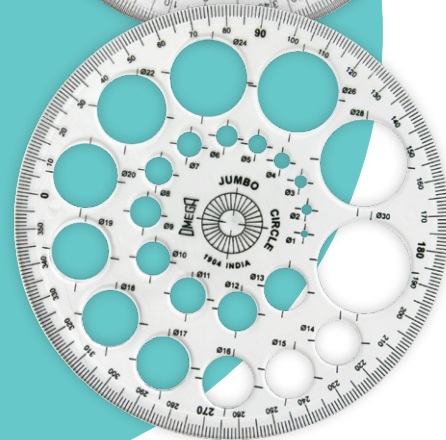
Circular Protractor

Our 360 degree protractor measures 15cm in diameter, and has beveled edges with finger lift. **206686 \$1.15**



Pro-Circle Protractor

This convenient 360 degree protractor offers multiple circles in sizes ranging from 1mm to 30mm in diameter. **206683 \$1.15**



Platform Scale 5kg/10lbs

This easy to use scale is perfect for measurement activities. Has both kg and lbs for understanding of the conversion. Can weigh up to 5kg or 11lbs with 40g and 0.1lb increments. Red colour.

206908 \$15.75

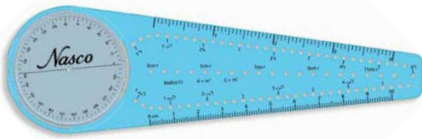


Platform Scale 2.2kg/5lbs

This easy to use scale is perfect for measurement activities. Has both kg and lbs for understanding of the conversion. Can weigh up to 2.2kg or 5lbs with 20g and 1oz increments. Blue colour.

206909 \$12.75





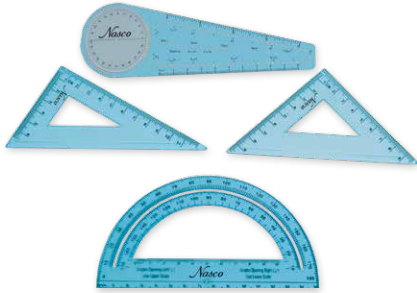
5-in-1 Compass

This safe to use compass has a movable circle to easily swing the arm around to create circles and arcs. Draw circles from 1" to 5" in 1/16" radius increments and 3 cm to 12 cm in 0.5cm radius increments. Also has a 360° protractor, 4" ruler and 10 cm ruler.

206804 \$1.30

5-in-1 Compass - Set of 10

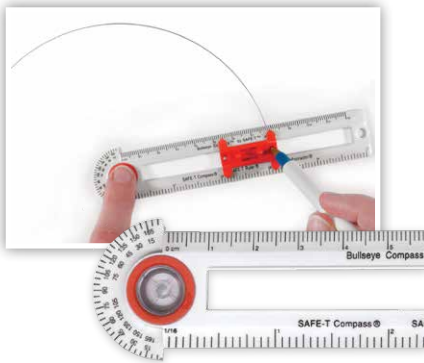
206803 \$10.85



5-in-1 Compass Geometry Set

Complete geometry set with 5-in-1 Compass, a 180° protractor and 45° and 60° triangles.

206805 \$1.90



Bulls Eye Compass

A 4-in-1 instrument that draws circles, measures length (in. or cm) and has a built-in protractor.

204282 \$1.65



Wind-Up Meter Tapes

Durable, high quality, fibreglass tapes in ABS plastic, wind-up cases. Calibrated on one side in cm and on the other in inches. Useful in outdoor activities, track and field, rough terrain, mud and water. Will not tear, break, or stretch.

206164 10 metres/33 feet \$5.75 **Great Price!**

206166 30 metres/100 feet \$10.85

206168 50 metres/165 feet \$15.75

Metal Compass

This metal compass can be used with a pencil or a craft knife to draw or cut circles up to 10" in diameter. Has markings every 1/2". The back has centimeter markings. Can tighten the compass at the center to maintain the set diameter.

206801 \$3.35



Metal Compass, Pack of 10

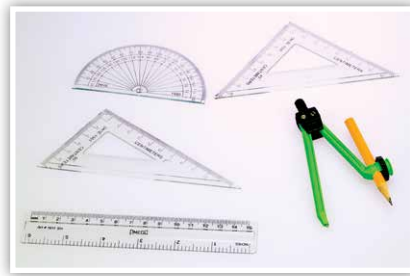
206802 \$32.75



Micrometer

This traditional English caliper is used for precise measurements. The body is constructed of brass and features a stainless steel screw adjustment. 25 x 1 mm pitch.

206254 \$17.95



Geometry Math Set

This student math set includes fundamental drawing aids: a 15 cm ruler, 45° and 60° triangles, 10 cm protractor, pencil and compass with shortened safety point for student safety.

205406 6-piece Set \$2.90 **Great Price!**



Electronic Stop Watch

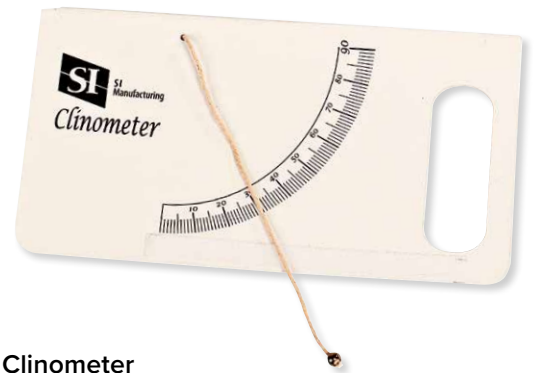
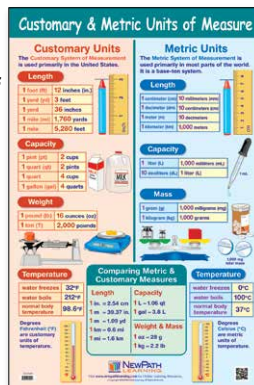
Features hour, minute, and seconds display; calendar display 24 hour stop watch.

203774 \$4.75

Customary & Metric Units of Measurement Poster

58cm x 89cm. A detailed look at key customary and metric units to include length, capacity, weight and temperature.

206806 \$29.95



Clinometer

An easy-to-use, lightweight clinometer that measures in degrees just like a protractor - makes calculating height simple! Laminated for durability and suitable for right- or left-handed use. Designed with students and their safety in mind. Teacher Task included.

203708 \$8.25

60"/150 cm Wind-Up Tape

Fibreglass tape in windup case. Locks and holds in position and automatically retracts at the touch of a button. One side in inches and the other in cm/mm.

204286 \$1.40



150 cm Fibreglass Tape (Metric/Imperial)

Top quality fibreglass tapes will not break or tear. One side is calibrated in cm. The other side is calibrated horizontally in inches.

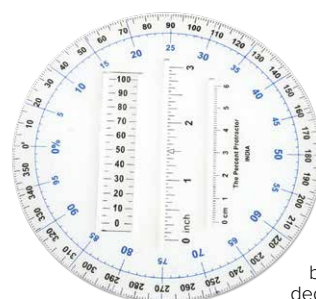
204284 Package of 10 \$5.75



Circle Protractor

The circle protractor can be used to actually create the arc of an angle. Alternatively, it can be used as a single 360° protractor with single degree calibrations. Diameter 12.5 cm.

203726 \$1.15



Percent Protractor

Clear, flexible plastic with a 12.5 cm diameter. Ideal for making pie graphs and for showing the correlation between percent and degrees. Scales can be used to draw axes of a graph.

205244 \$1.15

MEASUREMENT

Instruments

Essential Chalkboard Accessories

High quality and easy to read graduations make these chalkboard accessories ideal for any classroom. Can be used on chalkboards or white boards and have rubber pads to prevent scratches and provide greater grip.

Complete Set of 6
205238 \$39.95

GREAT VALUE!

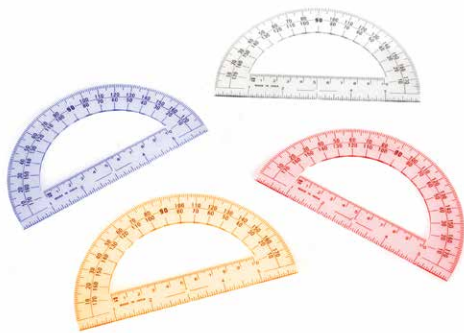
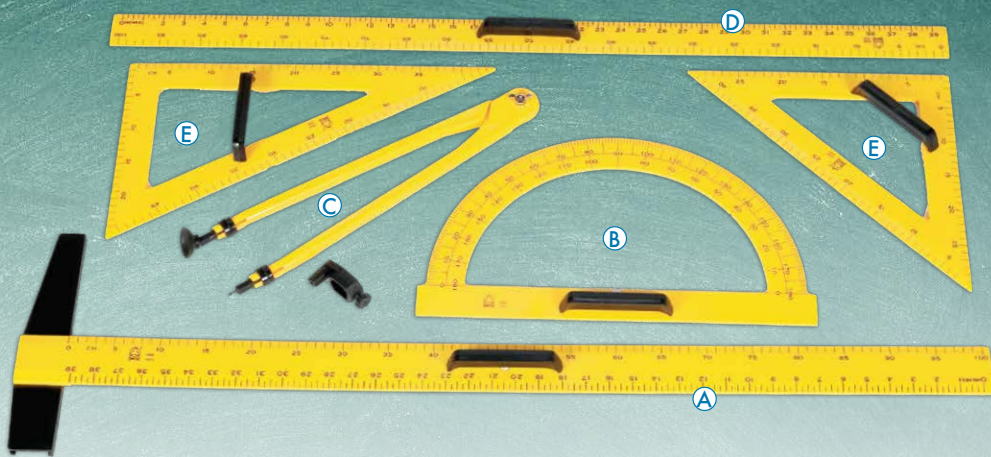
A T-Square
Printed 0-100 cm on both edges.
203722 \$8.75

B Protractor
180° protractor, printed in single degrees. Maximum height 25 cm with 45 cm base and easy-grip handle.
203724 \$6.35

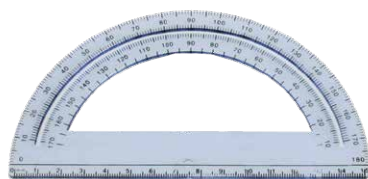
C Compass
Supplied with rubber suction cup, separate metal point, and white board marker holder.
203728 \$7.60

D Ruler
Printed 0-100 cm on both edges.
203730 \$7.60

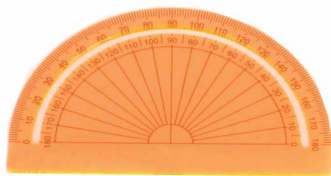
E Triangles
45 cm triangles with pads on the reverse to prevent rub off when used on whiteboards.
203732 45° \$6.35
203734 60° \$6.35



Clear-view Protractor Set of 24
6 of each colour: blue, green, yellow and pink.
205430 \$10.60



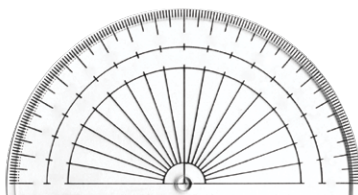
Clear-view Protractor 6"
205414 \$0.70



Clear-view Protractor 4" Orange
205416 \$0.50



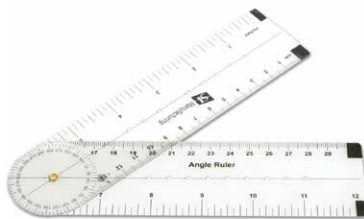
6" Protractor
Open centre with accurate 6" ruler. Clearly printed calibrations.
205404 \$0.45



30 cm Blank Protractor
206859 \$0.40



Beveled Edge Protractor
206738 \$0.75



Angle Ruler
Flexible, clear plastic. Includes 12", 30 cm and 360° scales.
206423 \$1.75
206424 Class Pack of 25 \$39.35

Economy Trundle Wheel

The all-plastic trundle wheel comes with a loud, non-wearing, clicking device which is activated in either direction with each full metre revolution. It is a unique method for measuring long distances in the classroom or outdoors. Comes apart into 2 pieces for storage and is easily reassembled.

204288 \$20.50



Deluxe Trundle Wheel

Features adjustable measuring unit for "click" indicator at one metre or half metre. Non-slip rubber tread makes measuring on any surface easy! Extendable handle adjusts to three different lengths. The perfect trundle wheel for every classroom!

205396 \$23.00



Wooden Rulers. We use only select hardwoods. Numerals and graduations are sharply delineated. Edges are straight and true. Protective lacquer finishes are clear and durable.



mm, cm, inches



mm, cm, inches

School Ruler with Plain Edge
205925 30 cm/12" \$1.40

School Ruler with Metal Edge
205923 30 cm/12" \$1.40



(mm, cm)



46 cm/18" School Ruler with Metal Edge
206798 1/8" thick, 1-3/8" W. \$2.35

18" Plastic Ruler
1/16" graduations on one edge and mm graduations on the other.
206799 \$2.25

12" Ruler with Binder Holes
Plastic 12"/30 cm ruler with 1/16" graduations on one edge and mm graduations on the other. Also has binder holes to easily store away.
206800 \$0.80



Clear-view 1/8" Scaled Metric Ruler
205424 \$0.80



Clear-view Ruler Orange 12" Metric/Imperial 1/16 Scale
205420 \$0.75



Clear-view Ruler 12", Pack of 12, 6 Colours, 1/16 Scale
Two each of red, green, blue, orange, yellow and purple.
205428 \$15.20



Clear-view Flexible 12" Orange Ruler
205422 \$1.30



Clear-view Flexible Ruler, Pack of 12
2 of each of blue, red, green, orange, yellow and purple.
205426 \$15.20

Storage Box with Divider
29 cm x 19.3 cm x 7.3 cm
205434 \$4.95



30 cm Clear-view Rulers - Kit of 30 in Ruler Box
205438 \$17.50



Clear-view Ruler 15 cm
205412 \$0.45



15 cm Clear-view Rulers - Kit of 30 in Ruler Box
205436 \$12.50



MEASUREMENT

Instruments



Intermediate Ruler

Designed to show the relationship between dm, cm and mm on one edge and calibrated in mm on the other.
203716 \$0.80

Length	UNIT	SYMBOL	Volume	UNIT	SYMBOL	SI UNITS	UNIT	SYMBOL	Area	UNIT	SYMBOL
centimetre	cm	cm	cubic metre	m ³	litre	L	kilogram	kg	square metre	m ²	cm ²
millimetre	mm	mm	litre	L	millilitre	mL	tonne	t	hectare	ha	mm ²

SI Relationship Ruler

Same as our Intermediate Ruler with a chart showing proper symbols for units of length, area, mass and volume on the reverse.
203718 \$0.75



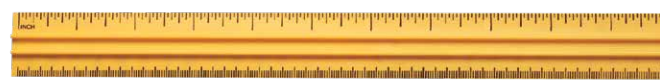
Senior Ruler

Both edges calibrated in mm with one edge numbered in cm and the other numbered in mm.
203720 \$0.80



Metric/Imperial Ruler

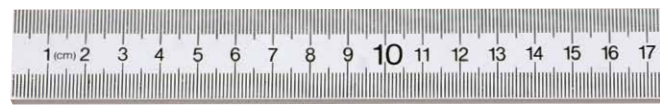
One edge has cm and mm, and the other has imperial markings.
205660 \$0.75



Blank Metric/Imperial Ruler

This incremental ruler, without numbers, promotes the development of computational fluency and conceptual knowledge in mathematics. The open-ended nature of the blank ruler permits exercises that range from simply assigning values, to more complex strategizing and modelling situations. One edge displays cm and mm markings, and the other shows imperial. Ages 3+. Grades K+.
206857 \$0.75

Pack of 10 Blank Rulers
206858 \$7.90



Senior Metre Stick

Calibrated one side in 0.5 cm and numbered each cm. Reverse side is calibrated in mm. Dead length and made of break-resistant plastic.
203830 \$6.90



205408



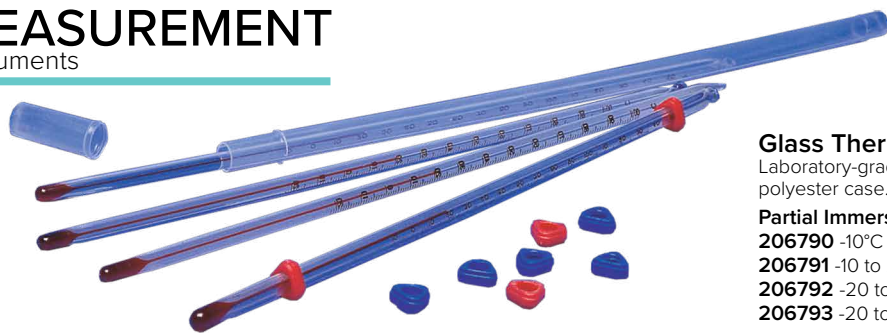
205410

Clear-view Metric Ruler 30 cm
205408 \$0.80

Clear-view Ruler 12" (cm/mm)
205410 \$0.80

MEASUREMENT

Instruments



Glass Thermometers

Laboratory-grade thermometers. Red liquid filled and individually packed in a polyester case.

Partial Immersion

206790 -10°C to 150°C **\$3.30**

206791 -10 to 200°C **\$3.10**

206792 -20 to 150°C **\$3.10**

206793 -20 to 110°C **\$2.95**

Total Immersion

206794 -10°C to 150°C **\$2.95**

206795 -10 to 200°C **\$3.15**

206796 -20 to 150°C **\$3.10**

206797 -20 to 110°C **\$3.10**

Compact Digital Scale 5 kg/5000 g

This digital scale features auto power off, mode button for grams, pounds, and ounces. Capacity is 5 kg/5000 g, accuracy is 1.0 g/0.1 oz, and 4 AA batteries are included.

205798 **\$39.95**



Compact Digital Scale 2 kg/2000 g

This digital scale features tare function, auto power off, one 5 cup clear bowl. Capacity is 2kg/2000g, accuracy is 1.0g/0.1oz, unit changing from kg to lb., and 4 AA batteries are included.

205800 **\$24.20**



Hooked Weight Set

Set of nine weights consisting of one each of 10 g, 50 g, 100 g, 500 g, 1,000 g, and two each of 20 g and 200 g weights. Weights are made of cast iron with a black enamel finish.

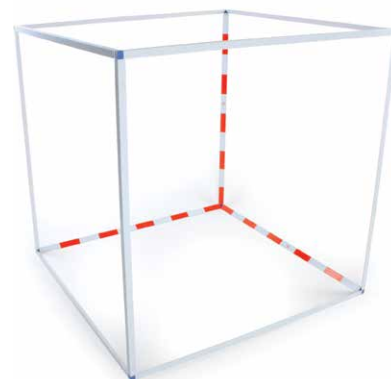
206369 **\$67.95**



Digital Counter Timer

This easy-to-use countdown timer is able to count down or up in minutes and seconds. It will track time up to 99 minutes 59 seconds and includes a 60-second alarm. It can be used on a flat surface with a self-standing option, clipped on or placed on a magnetic surface.

206257 **\$8.40**



Cubic Metre Set

A set of 3 alternately coloured dm triangle metre sticks, 9 blank triangle metre sticks, and 8 corner inserts for construction of an accurate inside dimension cubic metre. When unassembled, the blank metre sticks are very useful for introductory metre and square metre activities.

206664 **\$48.50**



5 pc. Teacher's Dry Erase Board Geometry Set

Features handles and magnets for use with dry erase/white boards. Includes both imperial and metric markings. Compass features an adjustable grip which fits most markers (with a dia. of 0.88 cm to 1.67 cm). Contains: compass, triangle (30-60-90), triangle (45-45-90), protractor and a 60 cm ruler.

206737 **\$93.40**



Giant Geometric Set

Investigate measurement, size relationships, volume and 3-D geometry with this set of ten 20 cm tall shapes. Includes cube, rectangular prism, square pyramid, hexagonal prism, triangular prism, cone, cylinder, triangular pyramid, and 2 hemispheres.

204052 \$88.95



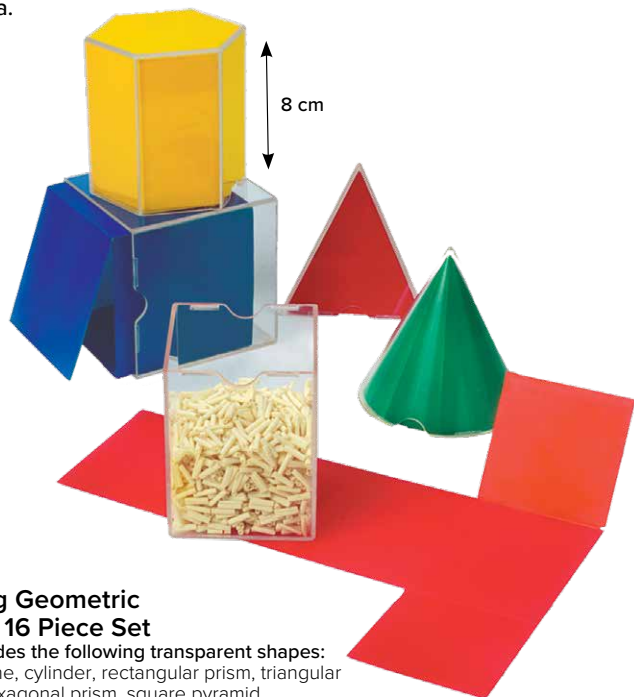
Clear Geometric Solids

These solids demonstrate the relationships between volume, size and shape. This set contains 17 pieces which are made of durable plastic and can be used with most fillers as all lids are removable and easy to clean up. Each piece measures up to 10.5 cm tall.

205394 \$54.00

Folding Geometric Solids

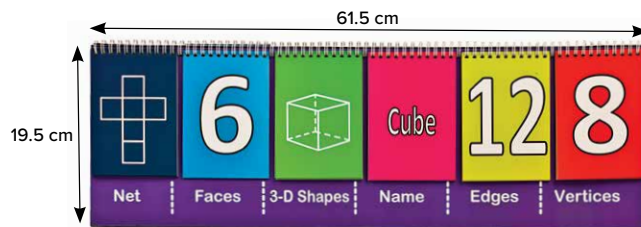
Folding geometric shapes with clear casings. These shapes unfold to teach and demonstrate perimeter, surface area, volume, symmetry and area.



Folding Geometric Solids, 16 Piece Set

Set includes the following transparent shapes: cube, cone, cylinder, rectangular prism, triangular prism, hexagonal prism, square pyramid, triangular pyramid, also included is 8 folding shapes (nets) that fit into the transparent shapes.

206672 16 pcs, 8 cm \$35.95



Spectrum Geometric Shapes Flip Chart

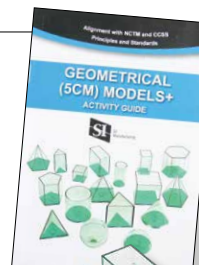
Our Geometric Shapes Flip Chart provides a versatile resource for learning and reinforcing recognition of 13 3D geometric shapes. Each flip chart includes 78 different geometric shapes, 63 printed cards, and 6 blank cards.

206662 \$24.95

Dissectable Sphere

A Sphere is a perfectly round geometrical object in 3D space. Our Sphere will mathematically break down into parts. Calculate the volume and surface area of the full Sphere or Hemisphere. Showcase the diameter, radius, circumference and spherical cap. Measures 10 cm in diameter.

206765 \$15.70



206607

Volumetric Relational Solids Set (5 cm pieces)

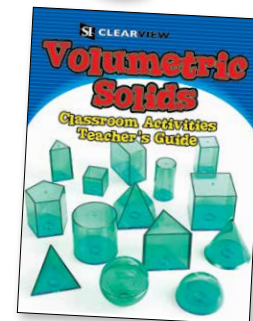
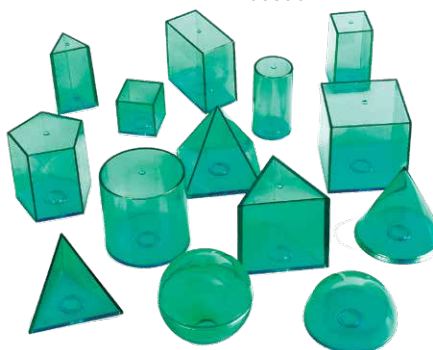
These relational sets can be used to determine the surface area of three-dimensional structures, the volume formula, and the relationship among the solids. Removable base and stopper for easy filling.

205390 Set of 15 \$14.50

206607 Set of 17 with Teacher's Guide, 14 Pages \$15.75



205390

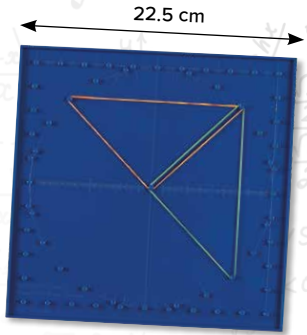
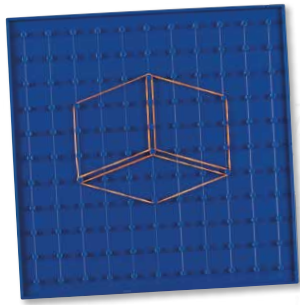


Volumetric Solids Teacher's Guide

This resource book is an ideal compliment to the Volumetric Solids Set (205390). 48 pages.

205392 \$13.95

GEOMETRY

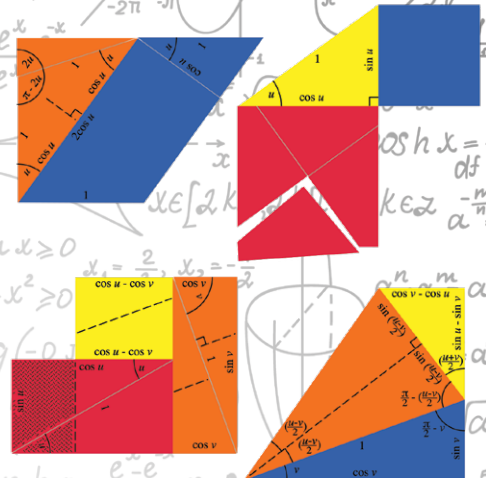
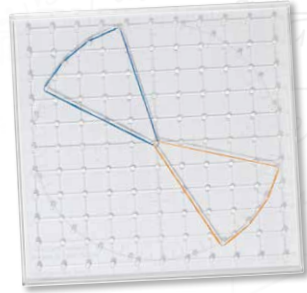
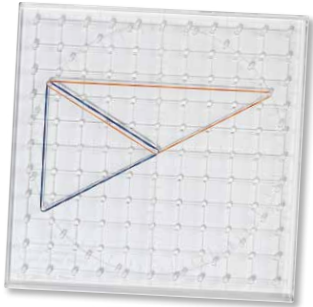


CircleTrig™ Geoboard

With pegs every 15 degrees around the circle and every 2 cm around the perimeter of the circumscribing square. The engraved degree marks on the circle and millimetre marks on two sides of the square extend the geoboard's use to trigonometry topics, making it the most versatile circle geoboard around. The 11 x 11 square, 22.5 cm geoboard on the other side can be used to make important connections between geometry and algebra.

205756 Opaque Blue \$4.30

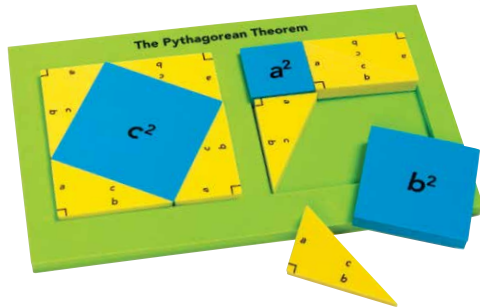
205764 Clear \$4.75



Hands-on Trigonometry Proofs

7-12 This set contains four separate "proofs" of trigonometry relations, with examples of a Pythagorean identity, a sum formula, a double-angle formula, and two sum-to-product formulas. Demonstration of each relation is accomplished by physically rearranging the pieces to establish equalities of areas or lengths. These are not rigorous mathematical proofs, but rather visual common-sense proofs. As such, they help make these abstract relationships real and believable. By actually handling the pieces, students engage their minds to a greater degree than they would by merely looking at the proofs on paper. The colour instructions describe how each proof is demonstrated, and four reproducible worksheets reinforce the material. Contains 20 magnetic foam pieces.

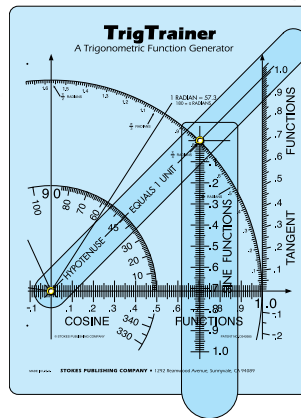
206334 \$40.95



Pythagorean Theorem Tile Set

This hand-held puzzle gives students an opportunity to discover and visualize the reasoning behind one of the classic and most accessible proofs by rearrangement for the Pythagorean Theorem. The set includes a 15 x 25 cm frame, 11 foam tiles, and a teacher's guide with activities.

206605 \$12.25



73586

Trig Trainer Introductory Kit

A trigonometric function generator that provides a hands-on approach to the teaching of trigonometry. Allows students to explore basic relationships of the sine, cosine, and tangent functions with two-digit accuracy. Made of high-impact styrene. Activity book contains 24 lessons exploring the basic functions and their relationship to the unit circle. Kit includes student Trig Trainer, overhead Trig Trainer, and activity book.

73582 Introductory Kit \$36.75

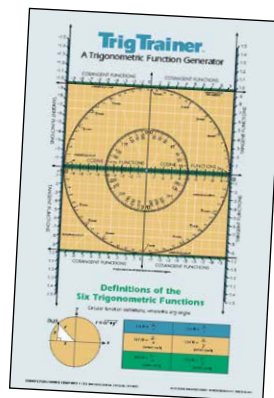
73586 Single Trig Trainer \$10.50



Nasco's Triggles Trigonometry Memory Cubes

Grade 9+ Trigonometry cubes that can be used for study and review. One student rolls the cubes and has 30 seconds to name the answers to the items on the cubes. After points have been totaled, the next student gets a turn. The game continues until students have reached a predetermined point total. Includes 6 cubes, scorepads, and 3-minute timer. For 2-5 players.

206670 \$30.95



Trig Trainer Poster

Full colour, 60 x 90 cm poster with accompanying set of transparent sine and hypotenuse arms.

73588 \$22.95



Calibrated Circular 2-Sided Geoboard - 18 & 24 Pins

Features:

- 24 pins (to illustrate increments of 4, 8, 12 and 24 pins)
- 18 pins (to illustrate increments of 8 and 18 pins)
- 14 x 14 square grid
- Stackable
- Geobands included

206068 \$2.25

Circular 2-Sided Geoboard CaddyStack™ Set

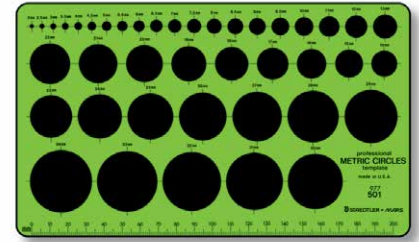
Contains 30 geoboards and a stackable CaddyStack™ storage bin with 4 removable partitions and translucent plastic snap lid.

206070 \$60.75



Geometry Poster Set of 12

Give students an angle on tricky geometry problems. Posters use colourful graphics and catchy headlines to help students understand and remember important geometry concepts. Topics include types of triangles, terminology for triangles and circles, formulas for area and distance, formal proof, Pythagorean theorem, and more. Each poster measures 48 x 120 cm. Set of 12. **206361 \$73.50**



Template – Circles

41 circles from 2 to 34 mm in diameter. Built-in ink risers. **205904 \$7.95**



Reflect-View Mirror

An excellent tool for teaching the basics of geometry, including axes of symmetry, reflections, transformations, and congruence. **203160 Each \$2.95**
203162 Set of 100 \$264.95 Great Value!

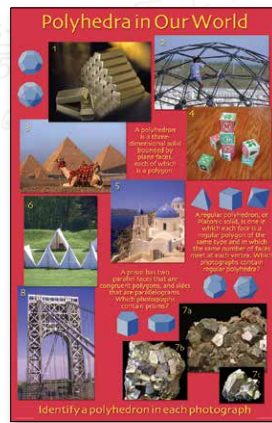
Reflect-View: Geometry with a Transparent Mirror Book (High School) 48-page activity guides covering a variety of geometry topics. Solutions, extensive glossary, and blackline masters included. **203164 \$14.95**

CaddyStack™ Reflect-View Mirror Contains 32 Reflect-View and a teacher's guide, all packaged in a CaddyStack™. **203166 \$94.95 Great Value!**



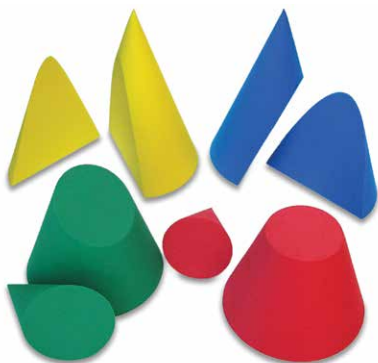
The Circles of Descartes

This 55 x 85 cm poster describes the Descartes Circle Theorem and shows some of the beautiful and complex figures, known as Apollonian packings, that can be created using the theorem. Some arrangements lead to intriguing number sequences, such as the squares (1, 4, 9, 16, 25...). Includes a 4-page lesson guide and worksheets that may be copied. **206338 \$17.95**



Polyhedra in Our World

This 55 x 85 cm poster uses photographs of real-world scenes and objects to demonstrate the role that polyhedra play in nature and human-made objects. Includes a 4-page lesson guide and worksheets that may be copied. **206340 \$17.95**



Conic Sections

This set contains four cones cut four different ways to reveal the different conic sections: circle, ellipse, parabola, and hyperbola. Four reproducible worksheets cover various properties of the conic sections, including their descriptions using Cartesian and polar coordinates, their foci, and their eccentricity. Cones measure 7 cm across the base and 10 cm in height. **206336 Set of 8 pieces \$38.95**



COMES APART!

Dissectable Cone

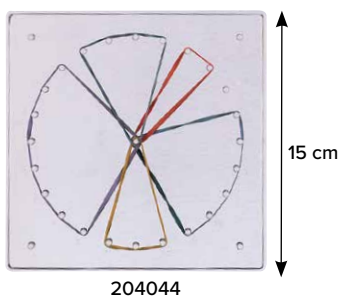
The conic sections are clearly visualized with the aid of this 23 x 15 cm cone. **20022 \$119.90**



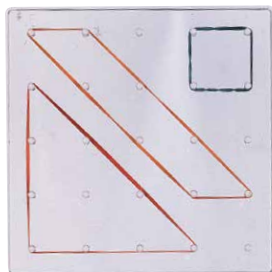
Perspex Prisms Set

Made from polished acrylic. Very high quality. All 25 mm thick. Seven pieces in a strong storage box. **206371 Set of 7 \$53.80**

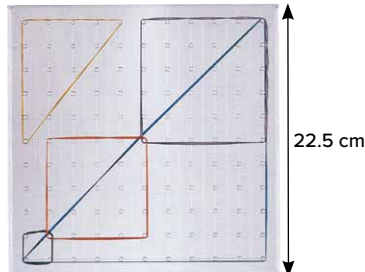
GEOMETRY



204044



204046



204040

15 cm

22.5 cm

CLEARVIEW™ Geoboards

CLEARVIEW™

Circular Geoboard

Circular 24-pin board for the overhead projector.

204044 \$2.40

CLEARVIEW™ 15 cm Geoboard

5 x 5 pin array for the overhead projector.

204046 \$2.40

CLEARVIEW™

22.5 cm Geoboard

11 x 11 pin array for the overhead projector.

204040 \$4.95

Isometric 22.5 cm Geoboard

204041 Not Shown \$4.95

All Geoboards Include Geobands



CaddyStack™ Geoboards

30 Clear-View Geoboards (15 x 5 x 5 pin, 15 circular), 400 rubber bands and a 26-page teacher's guide, all packaged in a CaddyStack™.

204360 \$69.25 **Great Value!**

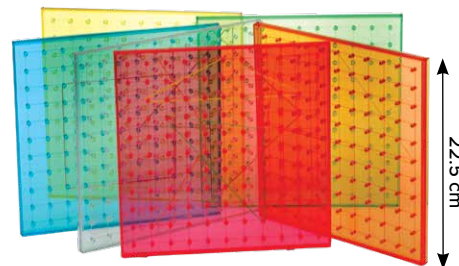
204362 CaddyStack™ 5 x 5 Pin Kit \$69.25

204364 CaddyStack™ Circular Kit \$69.25



How do Geoboards help students?

Geoboards are particularly useful in developing conceptual understanding of area and perimeter. When students work together using geoboards, they have opportunities to improve communication skills, share ideas, and use mathematical vocabulary.



22.5 cm

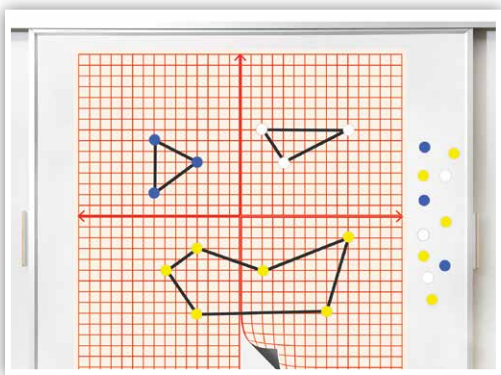
Transparent Rainbow Geoboards

Set of 6, 1-sided, clear, 22.5 x 22.5 cm geoboards. 11 x 11 pins.

205154 \$25.45

Geobands

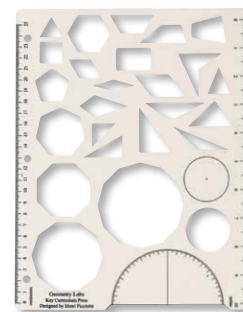
75 gram bag.
206681 \$1.75



Jumbo Magnetic XY Board Set

Our Jumbo Magnetic XY Board Set has a total of 79 cm x 79 cm magnetic working/dry-erase surface. This will allow the entire class to participate in the classroom exploration. The set comes packaged in four separate magnetic quadrants so that each quadrant can be used specifically or combine the four quadrants for working with one large XY board. Also included in the set is 2.5 cm foam magnetic counters: 30 white, 30 yellow, and 30 blue. Each magnetic/dry-erase quadrant measures 39.5 cm x 39.5 cm.

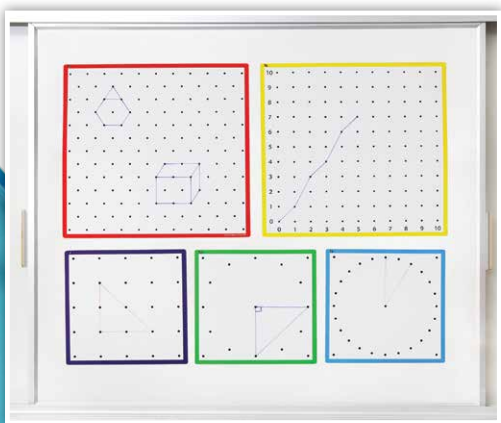
206788 \$36.40



Geometry Drawing Template

Template includes 25 geometric shapes, 1 protractor, imperial and metric ruler marking along the outer edges in clear plastic.

205828 Each \$4.75



Magnetic Giant Geoboards (Dry-Erase) Set

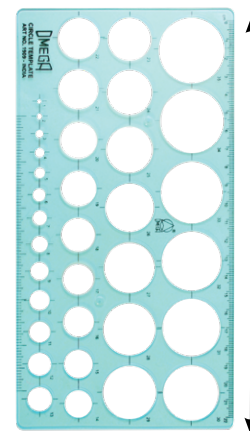
Our magnetic geoboards are made with strong magnetic backs and dry-erase surfaces. Makes it simple and clear to demonstrate the various geoboard math concepts to a small group or classroom. Models included in this colour-coded set are 5x5 pin, 12 pin circular, 24 pin circular (28 cm x 28 cm), an 11 x 11 pin and an isometric model (43.2 cm x 43.2 cm). Set of 5 models.

206789 \$27.80

Circle Template

Our template has a total of 35 circles ranging in size from 1mm to 35mm in diameter, it includes a 22cm ruler on one side of the template and a 6" ruler on the other side.

206682 \$1.75



22 cm

12 cm

Polydron is completely compatible with Crystal Polydron

POLYDRON The Original

Math is a snap! with Polydron, the versatile, easy-to-use building system. These durable, plastic shapes snap together by means of a unique clip hinge, making it easy for students to create 2-D and 3-D shapes. Polydron is a proven system for helping students develop their spatial sense.

Polydron Basic Start-Up Kit

Kit includes 5 equilateral triangle pieces, 8 square pieces, 4 rectangular pieces and 3 isosceles triangle pieces.

206260 \$23.92



Geometry Set (Large Set)

Designed for use with the *Investigating Mathematics Using Polydron* resource book. Contains 50 equilateral triangles, 20 squares, 12 pentagons and 10 hexagons. Storage bin and 48 page Teacher's Guide included.

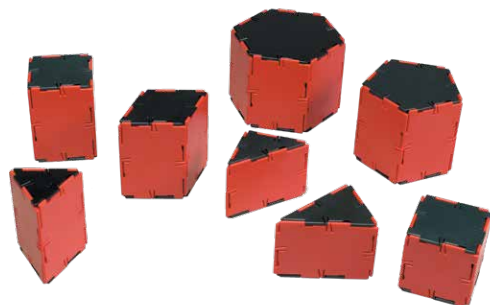
205374 \$89.95



Polydron Pyramid Set

39 pieces build 7 different pyramids or 5 different tetrahedrons. Contains 8 different shapes. A modelling sheet showing models, components, and individual nets is provided.

203106 \$35.00



Polydron Prism Set

48 pieces build 8 different prisms. Contains 9 different shapes. An ideal resource for any classroom. Complete with modelling sheet.

203108 \$39.95



203104

Polydron Classroom Set

For a class of 30 students. Includes a resource book with a variety of tasks. Contains 200 equilateral triangles, 80 squares, 24 pentagons, 20 hexagons, 80 right angle triangles, 60 isosceles triangles, 30 rectangles, 48-page resource book and plastic storage bin. Total 496 pieces, enough materials for up to 30 students.

205138 \$339.25

Investigating Mathematics Using Polydron

The activities in this book are designed to be used for grades 9-10. Students will explore and discover geometric properties, work with measurement, patterning, and algebra. The activities from this book will encourage collaboration and discussion among students. Although there is a natural sequence, the activities in this book can be used alone or in conjunction with other resources to help meet the expectations of a grades 9-10 mathematics program. Includes teacher's notes, solution and glossary. By Canadian authors Sylvana Simone and Caroline Rosenbloom. 48 pages.

203104 \$13.95

Crystal Polydron

Let's Get Started! Crystal Polydron Basic Start-up Kit

Kit Includes:

- 5 Equilateral Triangle Pieces
- 8 Square Pieces
- 6 Pentagon Pieces
- 4 Hexagon Pieces

206865 \$25.95



206866

Polydron Crystal is completely compatible with the original Polydron. All the plastic shapes are of clear colours, offering the option to build various models with available light source. Build various structures while allowing students to see inside the models with the option of building more structures. Building with the original Polydron and Crystal Polydron, will further the open exploration of 2-D and 3-D: investigating solids, developing reasoning, investigating symmetry, work with measurement, and algebra are some of the topics of exploration working with Crystal Polydron.

SPECTRUM Crystal Polydron Clear Pieces Kit

40 square pieces, 20 hexagon pieces, 24 pentagon pieces, 100 equilateral triangle pieces.

206866 \$209.32

Crystal Polydron Equilateral Triangle Set - Pack of 100

206860 \$56.90

Crystal Polydron Pentagon Set - Pack of 24

206861 \$56.90

Crystal Polydron Square Set - Pack of 40

206862 \$56.90

Crystal Polydron Hexagon Set - Pack of 20

206863 \$56.90

Crystal Polydron - Pack of 6 (Trial)

206864 \$9.90



FRACTIONS

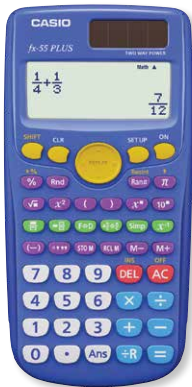


Mini Fraction Tiles

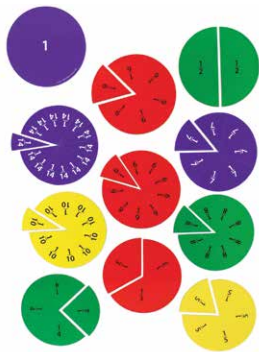
Set of 51 Pieces. The length of the longest tile is 15.2 cm. All mini sets are packaged into a custom storage unit. The Fraction Set includes 1, 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, and 1/12. **206307 Opaque \$6.25**

FX-55plus Casio Fraction Calculator

- Natural textbook input and display
- User definable math input/output
- Division with remainder
- VPAM TM order of operations
- Fraction calculations, mixed and improper
- Random Integers (definable range)
- Fraction Simplification
- Fraction/decimal conversion
- Reoccurring decimal display
- Time calculations
- Powers, Logarithmic
- Percent calc. & conversion
- Two way power (solar & battery)



205808 \$23.95



Printed Magnetic Fraction Circles

Coloured magnetic fraction circles are excellent for finding equivalent fractions. 19 cm in diameter and includes 1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, 1/9, 1/10, 1/14 and 1. **206736 Set of 69 \$10.75**



Fraction Ruler Set

Helps make the task of explaining measurement and fractions easier for the teacher and more concrete for the students. Three of the rulers target how to measure to the nearest 1/8", 1/4", and 1/2", with 1 ruler showing all 3 measurements each colour coded. Teach equivalent fractions, improper fractions, mixed numbers, and fraction reduction. Works splendidly with overhead projectors. Set of 4 rulers. **205836 \$4.75**

Blank Interlocking Fraction Cubes Set

Stack, build and compare with this open-ended teaching tool. These blank stackable fraction cubes challenge students to assign values and visualize equivalent relationships. The colours match our leading fraction products. 51 pieces packed into a custom container with lid.

206867 \$15.75

206870 Includes 6 sets of 206867, for a total of 306 pieces packed into a reusable container **\$89.50**



Interlocking Fraction Cubes Set

Our fractions interlocking cubes cover the fractions from 1 (whole) to 1/12. The colour-coded cubes will help students explore fractions understanding to new mathematical meaning. Set of 51 packed into a custom container with lid.

206786 \$15.75

206869 Includes 6 sets of 206786, for a total of 306 pieces packed into a reusable container **\$89.50**

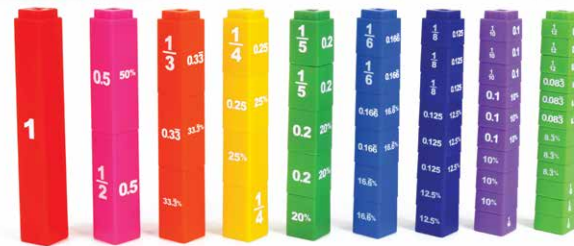


Interlocking Fraction, Decimal and Percent Cubes Set

Our fraction equivalency interlocking cubes set is colour-coded and will help students with the exploration and comparisons of fractions modeling from part to whole. Set of 51 packed into a custom container with lid.

206787 \$15.75

206868 Includes 6 sets of 206787, for a total of 306 pieces packed into a reusable container **\$89.50**

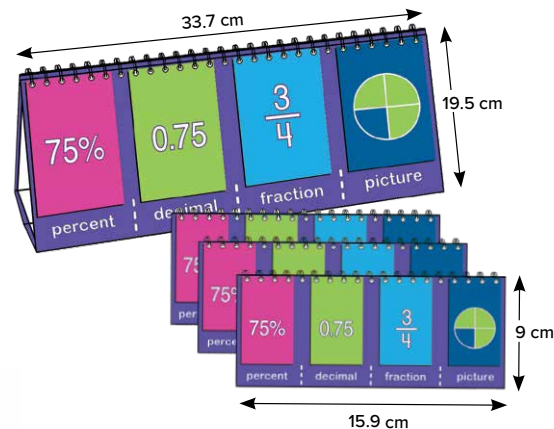


Fraction Equivalency Flip Chart

Our Equivalency Flip Charts provide a versatile resource for learning and reinforcing recognition of Decimal Fractions and Percents. Each flip chart includes 56 printed cards representing 15 different fractions and 4 blank cards. The cards in the student flip chart are randomly sequenced.

206299 Large Demonstration Flip Chart \$16.95

206300 Student Flip Chart, Set of 10 \$24.95



Fraction Dice Set 1

Fraction dice with 1/2, 1/3, 1/4, 1/4, 1/6 and 1/6 on each side. 16mm.

206910 Set of 5 \$3.50



Fraction Dice Set 2

Fraction dice with 1/2, 1/3, 1/4, 1/5, 1/6 and 1/8 on each side. 16mm.

206911 Set of 5 \$3.50



8 Sided Math Fraction Dice

Set of 6 eight sided dice covering 1, 5/8, 3/4, 1/4, 7/8, 3/8, 1/8, and 1/2.

206296 \$5.30



10 Sided Math Fraction Dice

Set of 6 ten sided dice covering 1/10 to 10/10.

206574 \$3.95



Math Fraction Dice

Set of 6 six sided dice 1, 1/2, 1/3, 2/3, 1/6, and 5/6.

206295 \$4.30



205478



205480



205482



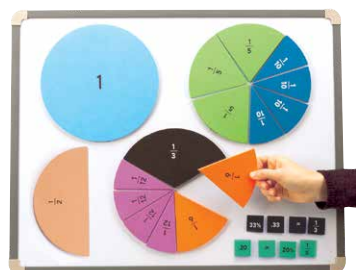
Overhead Tiles

Colourful, comparative percent, decimal, or fraction tiles in 23 x 25 cm plastic tray. Set of 51 tiles representing 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/12, and 1.

205478 Clear Fraction Tiles with Tray **\$9.50**

205480 Clear Decimal Tiles with Tray **\$9.50**

205482 Clear Percent Tiles with Tray **\$9.50**



Foam Magnetic Equivalence Fraction Circles

The easy to grip colour-coded pieces let students see, feel, and compare equivalent fractions. Use the large 22.5 cm foam fraction circles on any magnetic surface. Set includes 51 proportional foam magnetic pieces showing fractions in a whole, halves, thirds, fourths, fifths, sixths, eighths, tenths, and twelfths.

Expand your lessons with the 36 additional magnetic pieces showing fraction, decimal, and percentage equivalents.

206676 **\$49.95**



SPECTRUM Fraction/Decimal Prolific Balance

Our Prolific Fractions/Decimal balance is an excellent visual tool to illustrate equivalence while working with our large double-sided Fraction/Decimal tiles. One set of 31 double-sided tiles and suggested tasks are included.

206677 **\$33.95**

Tiles Sizes: 5 x 3cm, 10 x 6cm, 20 x 6cm, 20 x 12cm.

Fractions: 1/16, 1/8, 1/4, 1/2, and 1.

Decimals: 0.0625, 0.125, 0.25, 0.5, and 1.0.

SPECTRUM Fraction/Decimal Prolific Tile Set

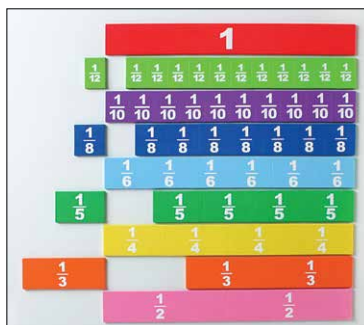
Set of 31 tiles.

206675 **\$14.50**

Set of 31

Blank Tiles

206679 **\$10.85**



Magnetic Foam Fraction Bars – Set of 51

Set of 51 pieces covering: 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10, 1/12 and 1. The longest bar measures 40 cm.

206565 **\$18.15**

Fraction Circles

These plastic fraction circle pieces make up a 8.5 cm circle. Each set includes: 1/2, 1/3, 1/4, 1/5, 1/6, 1/8, 1/10 and 1/12 fraction pieces. Each fraction gradation has its own distinct colour.

204276 Clear 51 pieces **\$5.95**

CONNECTING TILES!



Connecting Mini Fraction Tiles with Tray

Upgrade your fraction tiles with tiles that connect together! Easily link the fraction tiles together to show equivalent fractions. Compare the tiles on this novel three row tray. Printed with fractions and the longest tile is 15.3 cm long. Set of 51 in a tray.

206784 **\$7.90**

Connecting Mini Fraction Tiles

Set of 51 in a bag.

206785 **\$5.00**

Transparent Connecting Mini Fraction Tiles

Set of 51 in a bag.

206783 **\$5.75**



Connecting Mini Fraction Tiles - Blank with Tray

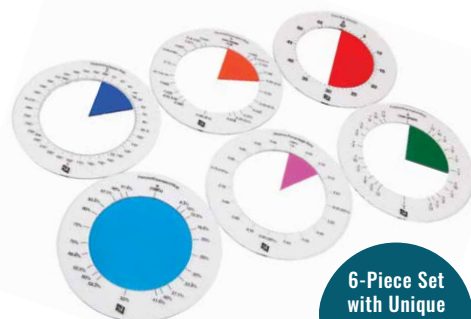
Easily link the fraction tiles together to show equivalent fractions. Compare the tiles on this novel three row tray. Blank without printing and the longest tile is 15.3 cm long. Set of 51 in a tray.

206781 **\$7.25**

Connecting Mini Fraction Tiles - Blank

Set of 51 in a bag.

206782 **\$4.55**



Clear Fraction Rings

Set of 6 Expand the learning possibilities of our fraction circles (204276) with this set of 6 rings:

fraction equivalent ring, percent equivalent ring, decimal equivalent ring, decimal percentage ring, degree compass ring and time ring.

204274 **\$5.95**

6-Piece Set with Unique Degree Compass Ring

Buy Both Clear Fraction Rings (204274) and Fraction Circles (204276) and SAVE! 206188 \$10.70



Spectrum Foam Fraction Circle and Square Kit

15 foam circle fraction set of 51 and 15 foam square fraction set of 51. Packaged in a container.

206734 **\$145.92**

STATISTICS & PROBABILITY

Dodecahedra Dice (1-12)
206587 Set of 6 \$3.95



Icosahedra Dice (1-20)
206586 Set of 6 \$3.95

10-Sided Double Dice

Can be used to create percentages, practice basic math functions and enhance all games and activities.

205206 Set of 6 \$5.95



20-Sided Double Dice

Bag of 6, twenty sided double dice.

206226 \$5.95



24-Sided Dice

These polyhedral dice come in 5 colours: white, blue, green, red, and black. Numbers 1-24. Set of 5.

206227 \$5.95



Unique Double Dice, Clear, 2.5 cm

Two outcomes with one roll!
205646 Each \$0.95

3-in-a-Cube Dice

A math kit in a cube. Three 5 mm (1/4") dice in a clear 25 mm (1") cube. Cube holds 1 red, 1 white, and 1 blue die.

206228 \$0.75



Spectrum Foam Equivalence Dice Set

This set of 36 dice is a great way to create games and supplement lessons when comparing fractions, decimals, and percents. Set includes 4 each of 3 different fraction dice (sides display 1/2, 1/10, 1/8, 1/6, 1/5, 1/4, 1/3, 1/2, and 1), decimal dice (sides display 0.083, 0.1, 0.125, 0.166, 0.2, 0.25, 0.333, 0.5, and 1), and percentage dice (sides display 8.33%, 10%, 12.5%, 16.66%, 20%, 25%, 33.33%, 50%, and 100%).

205846 \$21.50



SPECTRUM Probability Kit

This kit includes;

- 6 Decks of Playing Cards
- 108 Multi-Sided Dice
- 50 Playing Cards Activities
- 2 in 1 Large Playing Cards Set of 78
- 1 Overhead Set of Cards (52 pieces)

- 2 Jumbo Moulded Foam Dot Dice
- 100 Magnetic Chips, 1 Wand
- 5 of each of 3, 4, and 5 Colour Spinners
- 5 of each of Number Spinners (1-5), (1-8), (0-9)
- 1 Storage Container

204188 \$183.45

GREAT VALUE!



Positive & Negative Number Dice

Set of 12 extra-large 2 cm numbered cubes -2, -1, +2, +3, +4 and +5. Provides practice in basic operations, > <, random number sets, simplifying/combining integers and pre-algebra skills.

205360 Set of 12 \$17.95



Numero Dice Set

This versatile dice set allows simple math practice. Includes 2 dice each with numbers 1 to 6, 4 to 9 and 7 to 12 to allow different learning levels. Also has two add/subtract dice and two multiply/divide dice.

206912 Set of 10 \$3.90



Blank Dice and Label Set

Self-adhesive labels for 1.5 cm dice in 3 colours to make numeral, fraction, operational, and other specialty dice. Includes 36 dice and 340 labels.

204150 Set \$7.95



Standard Coloured Dice, 1.6 cm

In green, red, blue and yellow.

206225 Set of 24 \$4.95

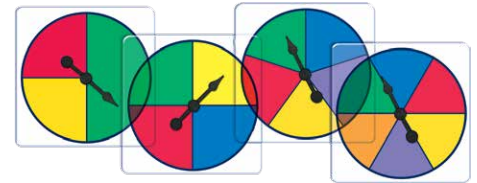
206753 Set of 36, red, green, white \$7.95

206752 Set of 36, red, blue, green \$7.95

206751 Set of 36, red, blue, white \$7.95

206750 Set of 36, red, blue, yellow \$7.95

206749 Set of 36, red, green, yellow \$7.95

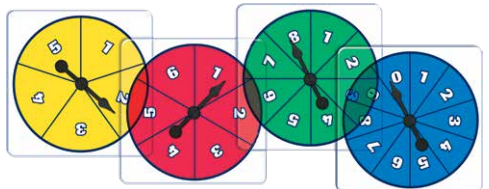


Transparent Colour Spinners (Thick Plastic)

These spinners can be used by students at their desks or on overhead projector.

204172 3 colours \$2.75 204178 6 colours \$2.75

204176 5 colours \$2.75 206150 8 colours \$2.75



Transparent Number Spinners (Thick Plastic)

These spinners can be used by students at their desks or on overhead projector.

204180 1 to 5 \$2.75

204182 1 to 6 \$2.75

204186 0 to 9 \$2.75

206152 1 to 8 \$2.75

206154 Set of 9 Spinners \$23.50



BEST BUY!

Spectrum's Bag-O-Dice

Ideal for games, probability and problem solving. Contains 18 each of 4-sided, 6-sided, 8-sided, 10-sided, 12-sided, and 20-sided dice. Total of 108 dice.
203900 \$36.95



Sampler Dice Set #1

97 pieces in a box: 20-sided (36), 12-sided (7), 10-sided (28), 8-sided (7), 6-sided (10), and 4-sided (9).
205840 \$46.75



Sampler Dice Set #2

With 4 special decade dice, boxed, 100 pieces. Includes 20-sided (18), 12-sided (7), 10-sided (36), decade (13), 8-sided (7), 6-sided (10), and 4-sided (9) dice.
205842 \$46.75



SPECTRUM (Regular Size – 6.5 x 9 cm)
Deluxe Playing Cards
204154 \$2.50
204084 Set of 6 \$13.50

SPECTRUM Playing Cards, Basic Classroom Kit

Kit Includes:
• Playing Cards, Set of 30
• 50 2-Sided Playing Cards Activities
• 1 Overhead Playing Cards, Set of 52 pieces
• Packed into a convenient container
206584 \$88.00



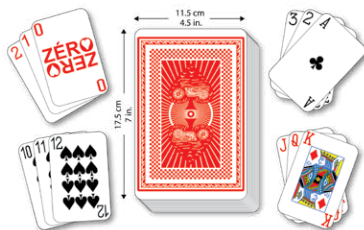
Platonic Solids Dice

The Platonic Solids are useful in a wide variety of probability experiments. Set includes Hexahedra, Tetrahedra, Octahedra, Dodecahedra, Icosahedra, and Decahedra Dice.
205636 Set of 6 \$3.25



50 Playing Card Activities

Set of 50 double-sided activity cards for teaching math skills. Topics include: addition, subtraction, counting, probability, number bonds, equivalence, skip counting, multiplication, and division. The front side provides teaching objectives, resources used and procedures.
206872 \$23.50



2 in 1 Large Playing Cards

These large format playing cards measure 4.5" x 7" (11.5 x 17.5cm). This product includes a traditional deck of 52 cards with 2 jokers for classic card games. As an added value the deck also includes zeros, ones, elevens, twelves and wild cards to explore math with educational games. 78 cards total.
206871 \$14.50

Standard Dice, 1.2 cm

203338 Set of 12 \$2.95

Standard Dice, 1.6 cm

203340 Set of 12 \$2.95



Smooth Plastic!

Operation Dice
206229 Bag of 10 \$6.95



SPECTRUM Assorted Dice Kit

60 each of green, red, blue, yellow, white dot dice, 36 blank dice with 240 labels, 12 each of 1-12, 1-8, 1-20, 1-10, 1-6, 0-9 and 4 sided dice, 4 attribute dice, 12 positive/negative dice, 10 word number dice, 10 operation dice, 8 (3-D) shape dice, 12 place value large dice, 12 equivalence large dice, 36 foam equivalence dice, 100 foam dot dice, 6 spotted coloured dice, 2 each of foam dot, numbers, operations dice (7.5cm).
206780 \$219.92

ALGEBRA

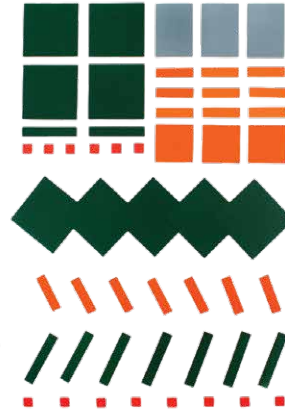
Alge-Tiles

Alge-Tiles™

The lengths of the rectangular xtile and ytile are not an integral number of 1tiles. Similarly, the bases and heights of the x2tile, the y2tile, and the xytile are not an integral number of 1tiles. This is not a construction defect, but is done deliberately to guarantee uniqueness when students use the tiles for factoring. Have the students discover this feature before you begin the algebra unit.

The Algebraic concepts covered:

- Ratios
- Integers
- Polynomials
- Factoring
- Solving Equations



Alge-Tiles™ Class Set

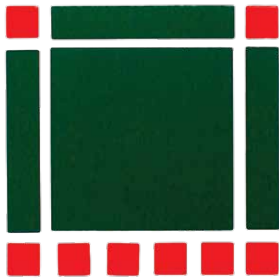
Contains 15 "x" sets and 15 "y" sets, plus 15 Alge-Tile™ Student Organizers and a teacher's blackline resource binder (130 pages) in a storage container.

203280 \$255.00
203282 French \$255.00

Spectrum Alge-Tiles™ Group Set

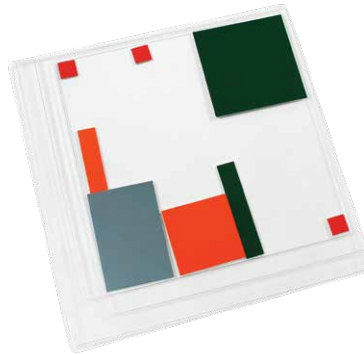
This set is ideal for group of students working cooperatively exploring the Alge-Tiles possibilities of X and Y values. The set includes, 7 (x) tiles set (43 pcs each set), 7 (y) tiles set (25 pcs each set), 15 Alge-Tiles student organizer, 1 Alge-Tiles guide of 50 pages, 3 set of 60 integer tiles, packed into a storage container.

206764 \$138.42



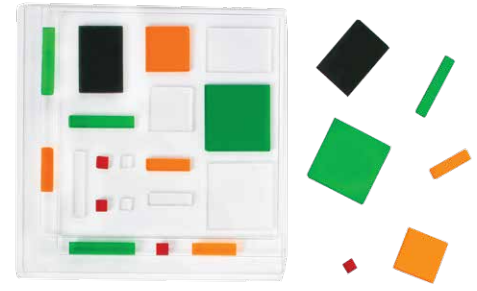
Alge-Tiles™ Student Replacement Sets

"x" Tile Set
43 pcs.
203294 \$7.60



Alge-Tiles™ Student Organizers

Set of 10. Tiles not included.
206613 \$25.25



Alge-Tiles™ Clear Set

137 pieces covering both the "x" and "y" sets. Our special overhead "organizer" is included to make the pieces easier to handle on the overhead.

206698 \$46.00



Alge-Tiles™ Student XY Kit

This convenient student kit includes 1 (x) Alge-Tiles set of 43 pieces, 1 (y) Alge-Tiles set of 25 pieces, 1 Alge-Tiles student organizer, packed into a storage container.

206763 \$11.92

203296 "y" Tile Set, 25 pcs. \$5.00



Hands-on Algebra Class Kit

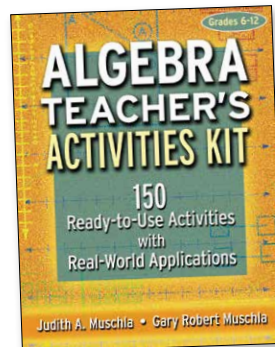
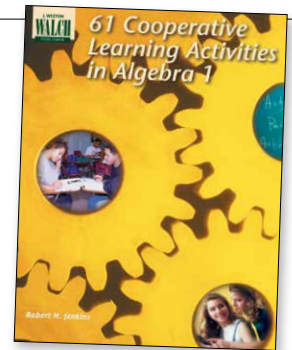
Includes 30 sets of foam Easyshapes Algebra Tiles, *Working with Algebra Tiles* book (120 pages), one set overhead algebra tiles.

205504 \$157.95

61 Cooperative Learning Activities for Algebra 1

This book explores key concepts including solving equations, factoring, slope, graphing, functions and more. Includes step-by-step procedures, suggested materials and notes on effective group strategies, plus detailed lesson plans, objectives, assessment guidelines and more. 158 pages. Reproducible.

203268 \$33.50

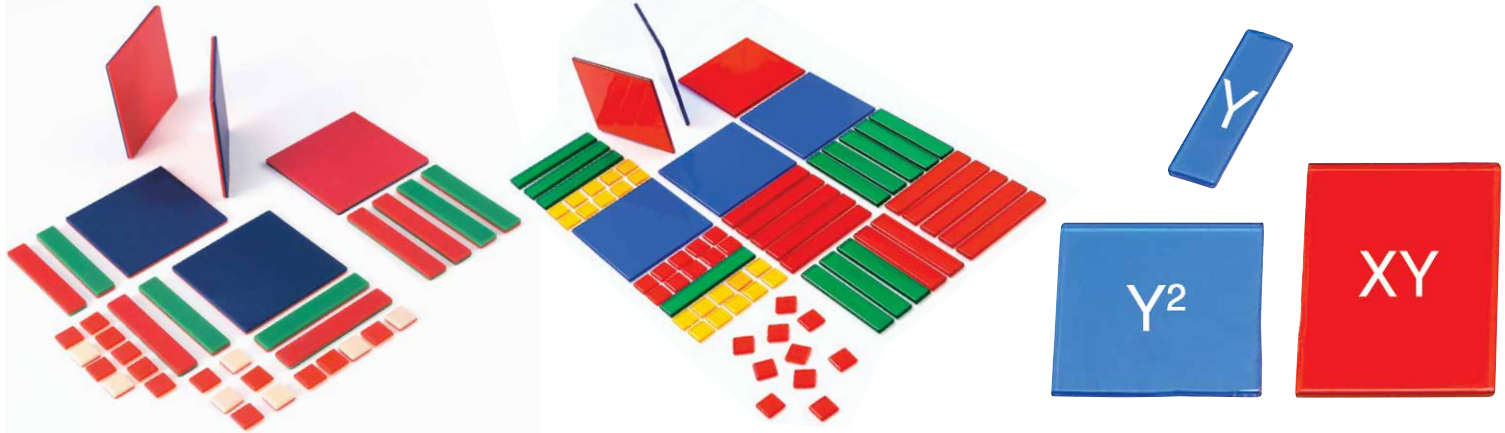


Algebra Teacher's Activities Kit

Grades 9-12 150 ready-to-use activities with real-world applications. Developed to motivate and challenge students. Ten sections provide strategies for implementing activities and are accompanied by answer keys. The activities supply students with quick feedback and many of the answers are self-correcting. 325 pages.

205616 \$43.50

Algebra Pieces. Algebra Pieces are used to build concrete area representations of abstract algebraic concepts. The concrete representations help students become comfortable with using symbols to represent algebraic concepts.

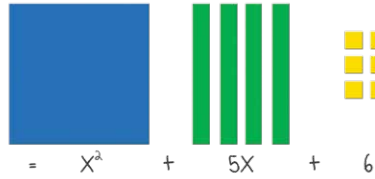


4 Colour Opaque Algebra Pieces Student Sets

9-12 Students build geometric models of polynomials exploring first-hand the concepts related to them. This 4-colour set matches the Clear set (203212), so students can be actively involved in teacher-directed lessons. **35 pieces per set.**
206130 1 Student Set **\$3.75**
203206 5 Student Sets **\$17.75**
203208 30 Student Sets **\$106.75**
203210 100 Student Sets **\$337.00 Great Value!**

4 Colour Clear Algebra Pieces

9-12 Set of 70 clear plastic pieces in 4 colours and 3 shapes. Comes with a 52-page book showing how the pieces are used to model algebraic concepts. Includes modeling, the Zero Principle, adding and subtracting of polynomials, and factoring trinomials.
203212 Set **\$12.00**
203214 Clear Pieces Only **\$3.95**



206230 Magnetic Algebra Tiles (72 pcs.) **\$17.25**

XY (Double Unknown Variable) Algebra Pieces Extension Set

This set has the XY, Y and Y² pieces to be used in conjunction with the regular set (204062). The tiles are rectangular shapes that provide models of variables and integers. Includes 40 pieces in a storage tray: 20 Y pieces 36 x 10 mm (10 red and 10 blue); 10 Y² pieces 36 x 36 mm (5 red, 5 blue); and 10 XY pieces 53 x 36 mm (5 red, 5 blue).
205812 **\$3.75**

Double Unknown Variable Algebra Pieces Kit

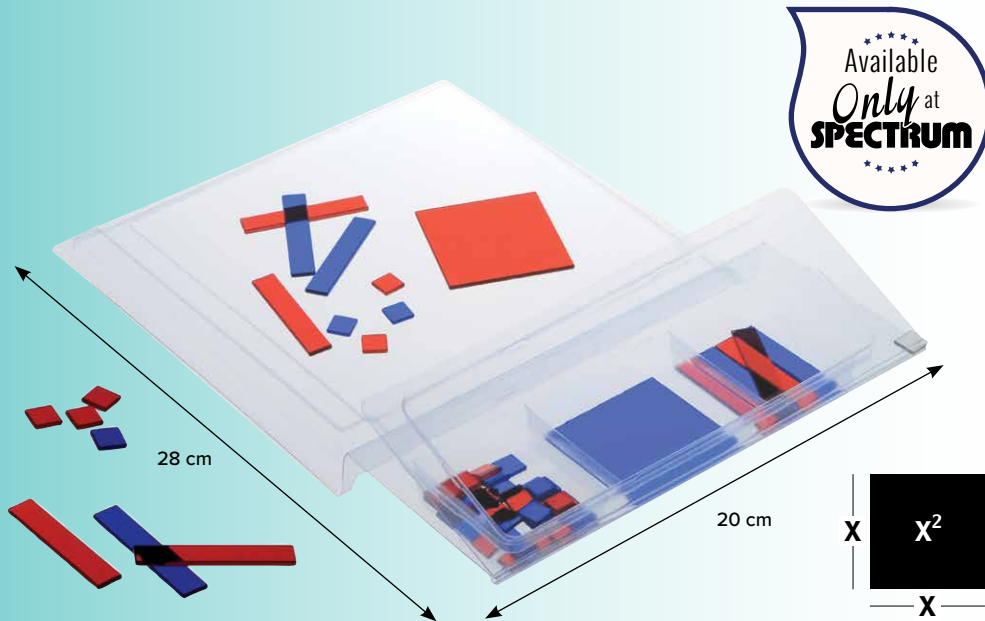
This set includes 10 single variable clear Algebra Pieces (204062) with tray, 10 XY Double Unknown Variable Pieces with tray, the Algebra Pieces Activity Book (52 pages), and a storage container.
206134 **\$105.95**

4 Colour Algebra Pieces Classroom Set

9-12 Includes 30 student sets, 1 clear set, activity book (204060), and storage container.
203216 Set not shown **\$102.50 Great Value!**

Integer Two Colour Pieces (1 cm)

These tiles are great for addition, subtraction and multiplication of integers. They can also be used as spare pieces for our own Algebra Pieces and Tray set of 60.
205156 **\$2.25**

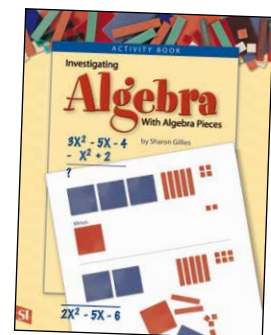
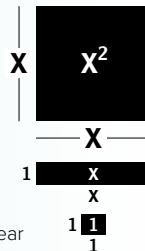


Single Variable Clear Algebra Pieces™ with Working Storage Tray (89 pieces in total)

Includes 8 X² squares (4 each of blue/red) 20 of X² tiles (10 each of blue/red), and 60 of X² unit chips (30 each of blue/red).
204062 **\$8.25**

Single Variable Clear Algebra Pieces™ Group Kit

This set includes 10 single variable clear Algebra Pieces with Tray (204062), the Algebra Pieces Activity Book (52 pages), and a storage container.
206132 **\$84.95**



Investigating Algebra with Algebra Pieces Resource Guide

9-12 A great introduction to algebra concepts, the activities in this 52-page resource guide introduce students to the zero principle, polynomials and trinomials. Canadian-authored by Sharon Gillies of the London Catholic District School Board.
204060 **\$11.95**

See page 33 for our 2-Colour Algebra Pieces Kit!

Algebra Pieces Single Variable Class Set

Contains 30 trays of Overhead Algebra Pieces (204062), activity book (204060), 1 FREE XY Set valued at \$3.95, and a plastic storage container.
204064 Not shown **\$225.25**



Four-Pan Algebra Balance

9-12 Unlike any other balance, this one makes it possible to physically show that $-1 < 0$. Weights placed on the outer pans represent negative integers and those placed in the inner pans represent positive integers. When you place a weight in each pan on one side of the centre post, the balance remains level as $(-1) + (+1) = 0$. Ideal for small group work, this sturdy 42.5 cm balance comes with four plastic pans, four canisters, a set of plastic weights, and a teacher's booklet.

203200 \$59.80

Balance Benders™

Gr. 8-12+ Level 3 Students develop deductive thinking and pre-algebra skills as they solve balance puzzles. Students must analyze each balance to identify the clues, and then synthesize the information to solve the puzzle. Includes teaching suggestions, balance tips, and detailed answers. 48 pages.

206697 \$15.90

Algebra Tiles Foam Group Set

Our Group Set includes, 12 algebra tiles foam set (35 pcs each set) packed into a storage container.

206761 \$32.32

Algebra Tiles Foam Group Set Plus

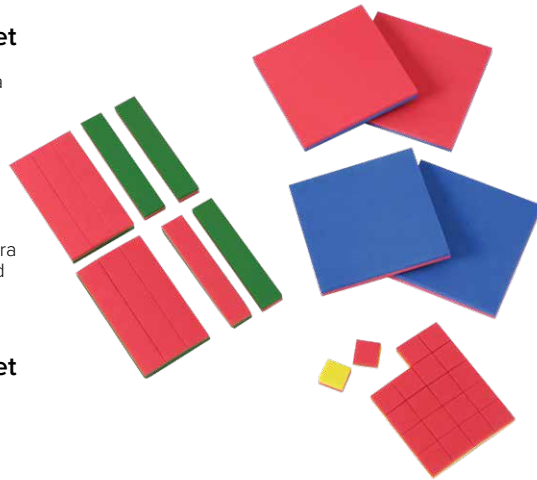
Our Group Set Plus includes, 12 algebra tiles foam sets (35 pcs each set), 1 algebra tiles resource book of 52 pages, packed into a storage container.

206762 \$42.92

Algebra Tiles Foam Single Set

Our Algebra Tiles Foam Single set includes, 35 pieces in 4 colours and is packed in resealable bag.

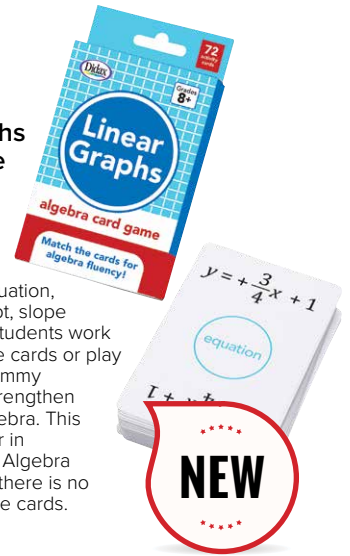
206760 \$3.00



Didax® Linear Graphs Algebra Card Game

This deck of algebra matching cards is an interactive, hands-on way to teach key algebra concepts. Included are 12 matching sets of graph, equation, coordinate pairs, y-intercept, slope and standard form cards. Students work collaboratively to match the cards or play variations on Go Fish or Rummy (instructions included) to strengthen understanding of basic algebra. This deck may be used alone or in conjunction with our larger Algebra Game: Linear Graphs set - there is no overlap in the content of the cards. Includes 90 game cards.

95395 \$19.90



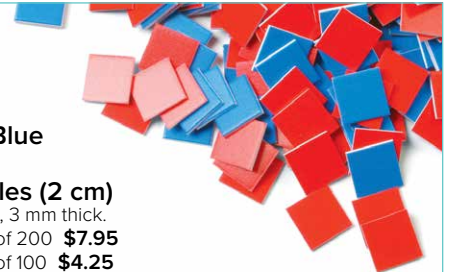
NEW

Red and Blue Algebraic Square Tiles (2 cm)

Double sided, 3 mm thick.

206184 Set of 200 \$7.95

206316 Set of 100 \$4.25



Algebra Dice

16 mm moulded cubes for making games and activities that help demonstrate basic algebraic functions.

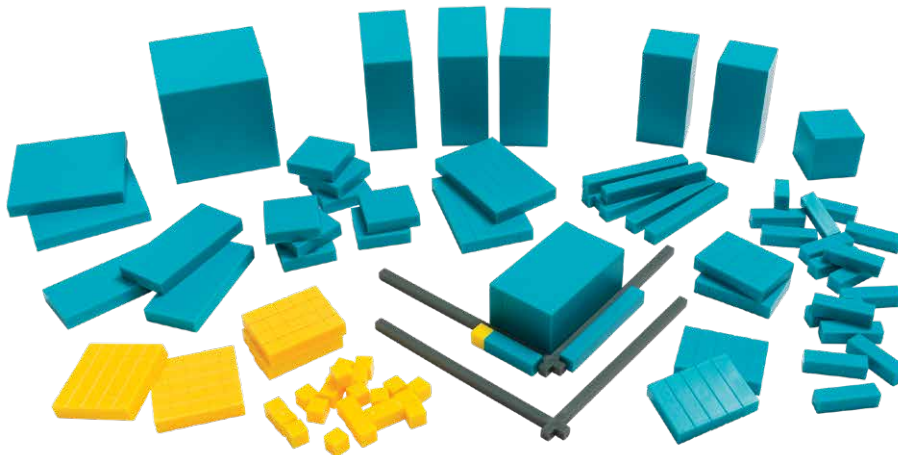
204068 \$3.95



Multiplier Dice

These X, 2X, and 3X 16 mm cubes are used for an introduction to basic algebra solving for X and other functions.

204070 \$3.95



Algebra Lab Gear – 2-Student Set

The 2-Student Set consists of 90 pieces. The "number" blocks are yellow (24 one, 8 fives, 2 twenty-fives) and the "variable" blocks are blue (18x, eight y, four xy, eight x², four 5x, two 5y, two y², three x²y, three xy², one x³, one y³). There are also two corner pieces per set which extends use into multiplication into the third dimension.

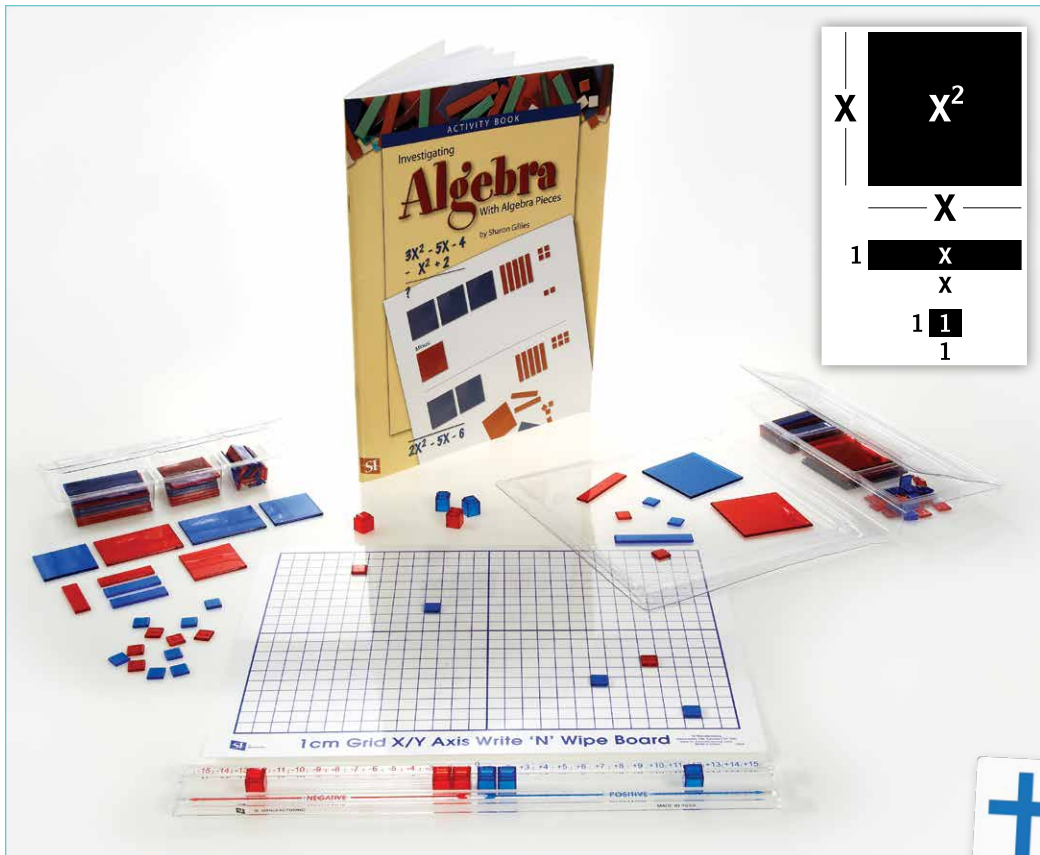
206591 \$39.00



Algebra Lab Gear 10-Piece Corner Set

Set of 10 corner pieces to be used with the Algebra Lab Gear.

206592 \$13.95



2 Colour Algebra Pieces Kit

Algebra Pieces are used to build concrete area representations of abstract algebraic concepts. The concrete representations help students become comfortable with using symbols to represent algebraic concepts.

Kit includes:

- 15 Single Variable Overhead Algebra Pieces with Tray
 - 15 "XY" Double Unknown Variable Algebra Pieces with Tray and Activity Tasks
 - 15 Integer Overhead Number Line Ruler with 1 cm Cubes and Activity Tasks
 - 15 "XY" Axis Write-on/Wipe-off 1 cm Grid Board
 - 1 Algebra Pieces Resource Book (52 pages)
- All packed into a storage container.
206320 \$199.95

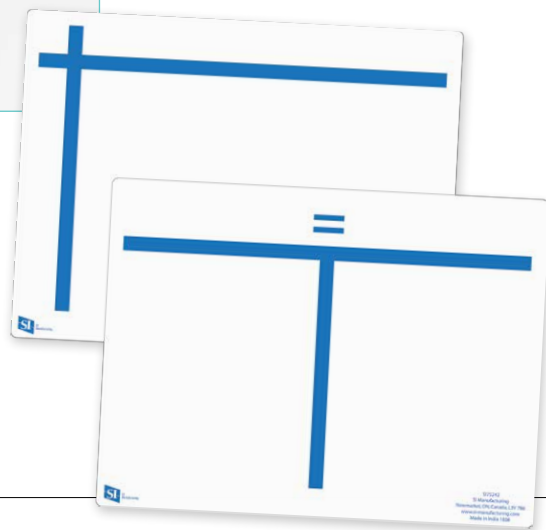


Algebra Pieces Simple Solution

2 sets of algebra pieces in a container with snapping lid. 10 X², 20 X and 40 units.
206913 \$9.65

SPECTRUM Algebra Pieces Write 'N' Wipe, 2-Sided Boards, Set of 10

Our Algebra dry-erase boards will help students explore algebraic factoring equations and algebraic solving equations. One side of the board has a "t" factor to set up factoring equations. The other side has a "T" for solving equations. The boards are designed for tactile modelling using algebra pieces and dry-erase markers. Measures 22.9 cm x 30.5 cm.
206779 \$13.30



4 Colour Algebra Pieces with Working/Storage Tray

9-12 Includes 1 set of overhead 4 colour algebra pieces (70 pieces).
205612 \$2.95 Great Price!



SPECTRUM Magnetic Algebra Pieces, Set of 72

Students will explore and learn algebraic concepts with our 72 magnetic algebra pieces set. The largest piece measures 12.8 cm x 12.8 cm.
206778 \$10.90

Why use The Algebra Game?

Because everyone who plays wins! Here's how students and educators alike will benefit from The Algebra Game:

Students will...

- ✓ recognize connections between different card features
- ✓ understand how cards relate and write about those relationships
- ✓ build conjectures to support observations
- ✓ improve problem-solving skills
- ✓ develop proficiency in recognizing algebraic equations

Teachers and tutors will...

- ✓ encourage cooperative learning
- ✓ gain additional ways to assess student achievement
- ✓ save time with ready-to-go lessons and worksheets
- ✓ be able to accommodate different learning styles
- ✓ help students actively build knowledge with understanding



Linear Graphs Card Set

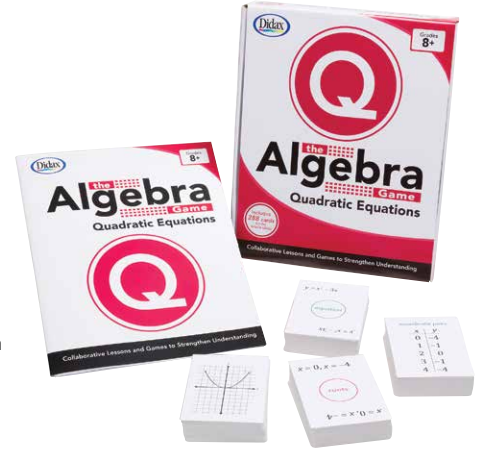
Students can make sense of linear equations by matching slope and y-intercept cards. They will quickly grasp the interconnections between cards and how the distinct parts - graphs, point, pair, slope, and y intercept - fit together with equations. All decks used together provide a greater variety of parallel and perpendicular line pairs for extra practice or added challenge. Contains 5 decks of 60 cards each, including 12 graphs with 5 matching components for each graph, plus a 60-page teacher manual.

204028 \$65.50

Quadratic Equations Card Set

The quadratic formula is demystified as students piece together and match up the various parts - vertex, axis of symmetry, discriminant and quadratic formula. The goal is to match these cards to the factor, root, point pair, and graph cards to discover the connections to the quadratic equation. All decks have a sampling of non-function parabolas and include several parabolas that are in translated positions. Contains 8 decks of 60 cards each, including 12 graphs with 6 matching components for each graph, plus a 60-page teacher manual.

205816 \$65.50



Conic Sections Card Set

By using all of the conic section decks together, students become proficient at recognizing conic equation characteristics for circles, parabolas, ellipses and hyper-bolas. When each deck is used separately, Algebra Game players can study equation and graph characteristics - including foci, eccentricity, point pair, and standard form rotation - in greater depth. All of the decks have three examples of conic equations with translated origins. Contains 5 decks of 60 cards each, including 12 graphs with 5 matching components for each graph, plus a 70-page teacher manual.

205818 \$65.50



Trig Functions Card Set

All three trig functions - sine, cosine and tangent - and their reciprocals have matching graphs, point pairs, and equations. Clues about a graph's amplitude and period are embedded in equations so students learn how the equation effects the related graph. Contains 4 decks of 60 cards each, including 12 graphs with 5 matching components for each graph, plus a 64-page teacher manual.

205820 \$65.50



The Integer Overhead Number Line Rule



Integer Clear Number Line Rule

Combining the Integer Line Rule with the Integer 1 cm Cubes This algebraic rule demonstrates the connection between the integer line and integer 1 cm cubes. The blue cubes represent a positive value and move to the right on the integer line. The red cubes represent a negative value and move to the left on the integer line. This set includes 1 integer overhead number line rule, 30 each of the red and blue overhead stackable 1 cm cubes, and activity tasks.

206144 \$4.75



1 cm Clear Spare Cubes
50 red and 50 blue cubes.
206148 \$3.95

Integer Number Line Ruler

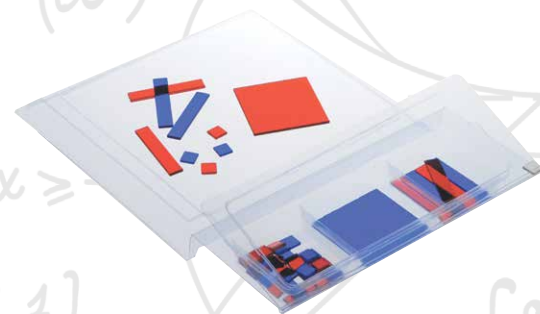
Our 2-sided dry-erase integer number line ruler has a colourful graphic vertical number line on one side and a text side with a horizontal number line. Both number lines have numbers -50 to 100. A valuable visual tool to help students construct understanding and form generalizations about integer arithmetic concepts. Each of the integer number line ruler measures 45 cm. Packs of 10.

206740 \$18.15

Algebra Tips Posters

These posters will help ease the burden of teaching the challenging subject of algebra. Helps students think for themselves. Whenever possible, the posters try to show the how and why of a concept, because students only remember what they truly understand. Topics include functions, absolute values, radicals, quadratic formula, and more. Each poster measures 48 x 63 cm. Set of 12 posters. 206355 \$70.95

See pages 30-33 for a full selection of Algebra Tile sets



SOLUTIONS OF A QUADRATIC EQUATION

THE DISCRIMINANT CAN TELL YOU WHAT SORT OF X YOU'RE SOLVING FOR.

Quadratic Formula: $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Discriminant	Solutions
$b^2 - 4ac > 0$	Two real solutions
$b^2 - 4ac = 0$	One real solution
$b^2 - 4ac < 0$	No real solutions

NEW! BE ABLE TO BE POSITELY DISCOMFORTING AT HOW MANY REAL SOLUTIONS!

4 HELPFUL HINTS FOR GRAPHING LINEAR INEQUALITIES

- Make a point of knowing your inequality sign:
 - the paired or smaller side is the "less than" side.
 - the open or larger side is the "greater than" side.
- Keep an open mind about dots on a number line:
 - the closed dot for \leq or \geq
 - the open dot for $<$ or $>$
- Give your graph the proper shade of meaning:
 - shading above the line for $>$ or \geq
 - shading below the line for $<$ or \leq
- Draw distinctions:
 - Use a solid line for \leq or \geq
 - Use a dashed line for $<$ or $>$

Give yourself a "thumbs up" for expressing radicals in the simplest form.

Be careful of a radical's sign!

To simplify: $\sqrt{4+13} = \sqrt{17}$

A radical is a square root of a number.

THE SQUARE ROOT OF A NUMBER IS ALWAYS POSITIVE!

CONTRADICTORY! NEVER OUT OF ORDER!

*Remember: Any numeral or expression under a radical sign.

Why memorize the Quadratic Formula?

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

- You can solve any quadratic equation (of the form $ax^2 + bx + c = 0$) without having to "complete the square."
- By looking at the discriminant ($b^2 - 4ac$), you can determine whether a solution is real, complex or rational.
- The Quadratic Formula is useful in solving many real-world problems.

AND HERE'S ANOTHER THING TO REMEMBER: YOU'RE REALLY SPECIAL!

Don't be functionally illiterate. KNOW YOUR TERMS.

A FUNCTION IS A SPECIAL KIND OF RELATION...

...IN WHICH EVERY ITEM IN THE DOMAIN HAS EXACTLY ONE CORRESPONDING ITEM IN THE RANGE.

Relation: Any set of ordered pairs (a, b) such as (1, 2), (3, 4), (5, 6), (7, 8), (9, 10)

Function: The set of all ordered pairs in a relation such that no two ordered pairs have the same first coordinate.

Range: The set of all second coordinates in a relation.

Domain: The set of all first coordinates in a relation.

CROSS MULTIPLICATION IS A SHORTCUT TO SOLVING PROBLEMS OF PROPORTION.

IF $\frac{a}{b} = \frac{c}{d}$ means $\frac{a}{b}$ and $\frac{c}{d}$ are extremes THEN $ad = bc$

TO BE ON THE CUTTING EDGE FOR SOLVING PROPORTIONAL EQUATIONS...

...DON'T FORGET THE ORDER OF THE EXTREMES EQUALS PRODUCT OF THE MEANS!

*Prove for yourself that the shortcut is faster by multiplying each proportion by both denominators and then cancelling.

Be on the lookout for two perfect squares and a MINUS sign.

Factoring the difference of two squares: $x^2 - 36 = (x-6)(x+6)$

REMEMBER: Two perfect squares and a plus sign are not factorable.

LINEAR EQUATIONS

A line by all its names is still a line.

Standard Form: $Ax + By = C$

Slope-Intercept Form: $y = mx + b$

Point-Slope Form: $y - y_1 = m(x - x_1)$

Two-Point Form: $y - y_1 = \frac{y_2 - y_1}{x_2 - x_1}(x - x_1)$

Two-Intercept Form: $\frac{x}{a} + \frac{y}{b} = 1$

m = slope a = x-intercept b = y-intercept A , B , and C represent integers. A and B are not both zero.

FUNCTION NOTATION IS JUST A FANCY WAY OF WRITING Y.

$f(x) = y$

REMEMBER: THE NUMBER INSIDE THE PARENTHESES IS THE VALUE OF THE FUNCTION. NOT f ITSELF.

USE f TIMES x .

Don't let negative or zero exponents scare you. Just rewrite the equation.

For negative exponents, move the expression above or below the line from where it was, and then change the sign of the exponent to positive.

For zero exponents, remember that any nonzero number divided by itself equals 1. Example: $x^0 = x^x \cdot x^{-x} = 1$

Absolute Values won't put up with negativity.

Put any value but zero, behind bars and the results will always be absolutely positive.

REMEMBER: If a variable appears inside the absolute sign as in $|x| = 7$, there are two possible values for x : $x = 7$, $x = -7$.

Tried & true translation tips for solving word problems

English words:	Math operations:
sum, plus, more than, increased by	+ addition
difference, minus, less than, decreased by	- subtraction
product, times, doubled, multiplied by	\times multiplication
quotient, divide, halved, divided by	\div division

ANIMAL: HAVE I CAN TALK AN TEACHER AND BEING ME FOREIGN LANGUAGE CREAT.

EXONENTS DON'T HAVE TO PLAY BY EVERYONE ELSE'S RULES.

- When the bases add or subtract, the exponents play the same. Ex: $x^2 \cdot x^3 = x^5$
- When the bases multiply or divide, the exponents add or subtract. Ex: $x^2 \cdot x^3 = x^6$
- When the bases are raised to a power, multiply the exponents. Ex: $(x^2)^3 = x^6$

SCIENTIFIC NOTATION

If too many zeros are getting you down...

00004931

You can multiply by a power of ten.

1.031 $\times 10^4$

A FOIL-proof method for multiplying binomials.

$(x + 2)(x + 6)$

FOIL: First, Outer, Inner, Last

Round out your ability to graph circles by learning the center-radius equation.

$(x-h)^2 + (y-k)^2 = r^2$

Center: (h, k)

Radius: r

Express your love for polynomials by learning these terms of endearment.

Polynomial Expression: $ax^2 - 2x^3 - 7x + 3$

Terms: ax^2 , $-2x^3$, $-7x$, 3

Monomial: ax^2

Binomial: $-2x^3 - 7x$

Trinomial: $ax^2 - 7x + 3$

A logarithmic function has two forms but only one shape.

$x = a^y \iff y = \log_a x$

Graphs of $y = a^x$ and $y = \log_a x$ are reflections of each other across the line $y = x$.

SURPRISE! The letter e is also a number.

$e \approx 2.71828$

It is an irrational number. An irrational number is a number that cannot be expressed as a quotient of two integers.

"Like" terms have two things in common.

THE SAME VARIABLES.

THE SAME POWERS.

Slope is easy & fun, just remember: RISE over RUN.

In all terms, add.

Develop a pair for completing the square.

Step 1: Find 1/2 of the coefficient of x .

Step 2: Square it.

Step 3: Add the result to both sides.

Step 4: Factor the perfect square trinomial.

THE COORDINATE PLANE: Where math becomes art.

Quadrant I: $x > 0, y > 0$

Quadrant II: $x < 0, y > 0$

Quadrant III: $x < 0, y < 0$

Quadrant IV: $x > 0, y < 0$

Complex numbers combine the real with the imaginary.

$a + bi$

$i^2 = -1$

The special properties of logarithms make solving equations a snap.

$\log_a a = 1$

$\log_a x^y = y \log_a x$

$\log_a \frac{x}{y} = \log_a x - \log_a y$

$\log_a xy = \log_a x + \log_a y$

$\log_a \sqrt{x} = \frac{1}{2} \log_a x$

MULTIPLYING BY THE COMPLEX CONJUGATE CAN MAKE THE 'i's VANISH.

$(4+3i)(4-3i) = 16 - 9i^2 = 16 - 9(-1) = 16 + 9 = 25$

BE SURE YOUR ALGEBRA IS NOT X-BATED.

$x^2 = 3 \cdot x$

$x^2 - 3x = 0$

$x(x-3) = 0$

$x = 0$ or $x = 3$

Any way you group them, they still add up.

ASSOCIATIVE PROPERTY OF ADDITION & MULTIPLICATION

$(a+b)+c = a+(b+c)$

$(a \cdot b) \cdot c = a \cdot (b \cdot c)$

FOUR STEPS FOR GRAPHING LINEAR EQUATIONS.

- Put the equation in slope-intercept form ($y = mx + b$).
- Mark b on the y-axis. This is the y-intercept.
- Mark m in this case, $\frac{1}{2}$. This is the slope.
- Draw the line through the y-intercept and the point $(2, 1)$.

DOUBLE YOUR TREASURE! TWO ROOTS IN ONE.

$\sqrt{x^2} = |x|$

When x is positive, $\sqrt{x^2} = x$.

When x is negative, $\sqrt{x^2} = -x$.

Some things you can do to equations to get a different look.

Adding/Subtracting the same number to both sides.

Multiplying/Dividing both sides by the same non-zero number.

ONE-TO-ONE FUNCTIONS ARE MASTERS OF THE INVERSE.

Inverse Function: A function f is one-to-one if and only if it passes the horizontal line test.

One-to-One Function: A function f is one-to-one if and only if it passes the horizontal line test.

ANATOMY of a MATRIX

Row: $[2 \ 3 \ 1]$

Column: $\begin{bmatrix} 2 \\ 3 \\ 1 \end{bmatrix}$

Element: 2

Use the vertical line test to test your relations for functionality.

A relation is a function if and only if it passes the vertical line test.

Algebra Poster Set

Help students grasp difficult math concepts and correct common algebra mistakes. These posters zero in on areas such as slope, the coordinate plane, graphing, scientific notation, "like" terms, and multiplying binomials. Also included are posters to help with some common mental mistakes. Each poster measures 48 x 63 cm. Set of 12 posters. 206357 \$70.95

Advanced Algebra Poster Set

Provide help to students struggling to learn new algebra concepts. These posters reinforce concepts students have already learned in pre-algebra and first-year algebra. At the same time, the posters introduce new topics such as complex numbers, matrices, the number E, and logarithms. Learning new algebra concepts will become less intimidating with the use of definitions, mnemonics, and visual reference. Each poster measures 48 x 63 cm. Set of 12 posters. 206358 \$70.95

MATHEMATICAL GAMES



High School Bingo Game Set

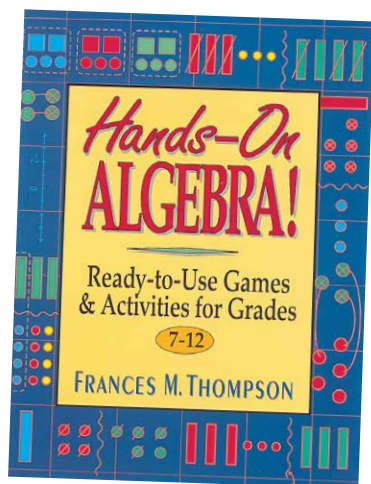
Grade 9+ Encourage students to solve algebra and geometry equations quickly and easily. Topics include solving linear equations, factoring, area and volume, right triangles, and more. Set of 3 secondary/high school bingo games includes: Algebra Equations, Algebra, and Geometry. Each game includes 30 bingo cards (12.5 x 15 cm), 50 problem cards, master answer list, and plastic markers.

206648 \$62.95

Hands-On Algebra!

7-12 A collection of 159 ready-to-use games and activities. Organized into five major sections: Real Numbers, Their Operations, and Their Properties; Linear Forms; Linear Applications and Graphing; Quadratic Concepts; and Special Applications. 640 pages.

203906 \$49.95



Stratego® Original

Two armies clash... who will be victorious? Challenge an opponent and attempt to lead your army to victory. Two players command Napoleonic armies and devise plans to deploy troops, using strategic attacks and clever deception to break through the opponent's line and capture the flag! No stickers to apply! For 2 players.

206873 \$44.95



Complete Chess Kit

A tournament set with plastic pieces, vinyl board and rules, all packaged in a tube for easy transportation. The most popular chess product in Canadian schools, produced by the Chess'n Math Association.

203616 \$32.95

Integer Chess

Integer Chess helps students understand and develop proficiency in skills involving graphing and making vector-like moves on the coordinate plane. This game can be played using simple to complex strategies, challenging novice and masters alike. For 2-4 players.

206176 \$34.95

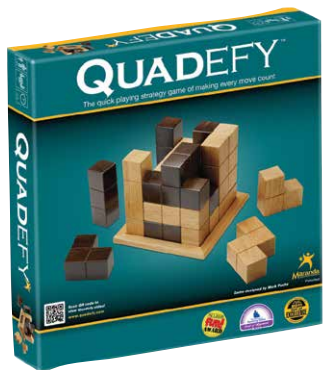


Mancala

Collect as many stones in your Mancala as possible. Place on a playing surface and place 4 stones in each of the bins numbered 1 through 12. Hinged board folds in half and has a box catch to secure the pieces inside. Includes Mancala game board and 48 stones.

206652 \$24.95

MATHEMATICAL GAMES & RESOURCE BOOKS



Quadefy Strategy Game

Quadefy is a fast playing new strategy game played in three dimensions. Quadefy uses visual spatial strategies that will keep you on your toes. Players take turns stacking their entire game piece "in bounds". The first player to force their opponent to have to play out of bounds, wins. Every move is both offensive and defensive.

206758 \$39.95



Pathagon Strategy Game

Pathagon is an exciting, ever changing new strategy game of building paths. Players take turns placing their wooden game pieces on the board in an attempt to build a path from one side of the board game to the other. The first player to complete the path wins.

206756 \$39.95

Hexover Strategy Game

The play pattern consists of trapping and flipping opponent's disks. Because of the hexagonal shape of the game board, players have to stay alert to all directions impacted by each move. Hexover is a game of planning, positioning and risk strategy. The obvious move may not be the best!

206757 \$39.95



Abacan Strategy Game

Abacan provides a depth of strategy that grows with the experience of the players. To play, players alternate turns sliding 1, 2, or 3 beads on the same bar from one side of the game to the other. The winner is the player who forces their opponent to move the last bead.

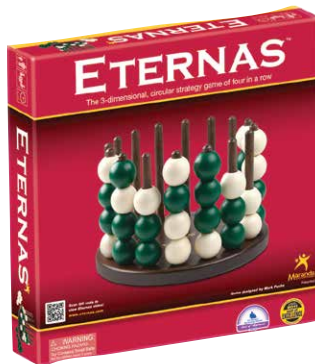
206755 \$39.95



Trappex

Even though Trappex is quick and easy to learn, there is a depth of strategy that will keep you alert from your first move till your last. To play, players will take turns placing their wooden "wall" pieces on the board, attempting to complete squares while preventing their opponent from doing the same. The player with the most completed squares at the end of the game wins.

206759 \$39.95



Eternas Strategy Game

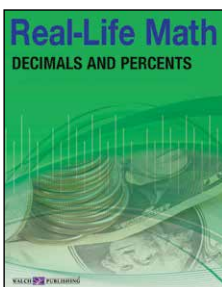
Eternas is a fun new 3-dimensional strategy game of four in a row. The first player to place four beads of their colour in a row, either vertically, horizontally, or diagonally, wins the game. Conceived around the shape of the circle (the symbol for eternity) Eternas was designed for borderless play.

206754 \$39.95

Real-Life Math Decimals and Percents

9-12 Integrate a real-world, problem-solving focus into math classes! Teaches decimal notations, arithmetic with decimals, mixed decimals, and organizing information by percentage. 90 pages.

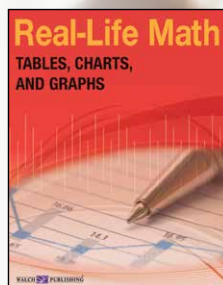
205940 \$30.95



Real-Life Math Tables, Charts, and Graphs

9-12 Teaches students to create, read, and interpret a variety of visual presentations. 78 pages.

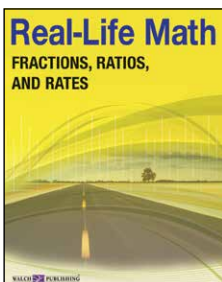
205944 \$30.95



Real-Life Math Fractions, Ratios, and Rates

9-12 Teaches fractions, equivalent fractions, finding patterns, ratio, solving proportions, rates, and unit pricing. 94 pages.

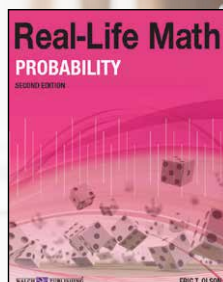
205942 \$30.95



Real-Life Math: Probability

26 activities make data collection and description, outcomes, probability, tree diagrams, multiplying probabilities and odds fun and understandable. Reproducible. 80 pages.

203412 \$30.95



MATHEMATICAL GAMES



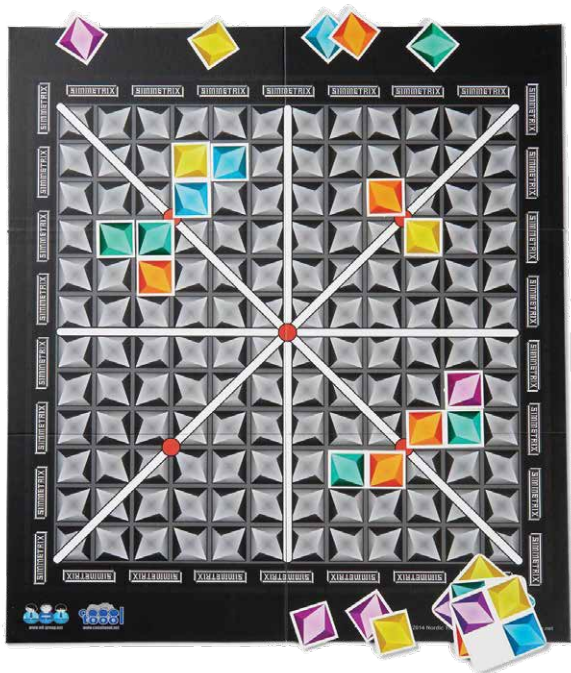
CoolTool Mathrimino Math Game

- Helps students recognize and understand different types of intervals, such as interval notations, inequalities, and number lines.
- Players take turns putting game pieces (triminos) on the board so that one side matches with the side of a trimino already on the board
- Intervals must be represented differently to make a match
- Includes game board, 60 triminos, and rules
- For 2-8 players

206768 \$49.99

Box of 2 Mathrimino Math Games

206769 \$69.99



CoolTool Simmetrix Math Game

- Helps students to form symmetrical figures using a point or lines of symmetry
- Players build symmetrical figures using game pieces of different shapes
- Includes game board, eighteen 1 x 2 cell game pieces, thirty 1 x 1 cell game pieces, 12 L-shaped game pieces, and rules
- For 2-8 players

206770 \$49.99

Box of 2 Simmetrix Math Games

206771 \$69.99



CoolTool Shepherd Math Game

- Teach linear functions, their positions on a coordinate plane, and how to graph and analyze them.
- Use different function graph cards to move dogs across game board to herd sheep
- Players utilize 3 possible strategies (rectangle, triangle, and straight line)
- Includes game board, 15 bonus cards, 30 dog tokens, 15 sheep tokens, 49 function graph tokens, and rules
- For 2-6 players

206772 \$59.99

Box of 2 Shepherd Math Games

206773 \$89.99

CoolTool Solve It Math Game

- A math game that deepens understanding of operations with rational numbers, adding similar members, operations with powers, and basic geometry concepts
- Players or teams respond to a variety of questions and challenges, scoring points for correct answers
- Includes game board, geometry question cards, 100 algebra question cards, 6 pawns, answer key, and instructions
- For 2 or more players

206774 \$79.99

Box of 2 Solve It Math Games

206775 \$99.99



CoolTool Geometric Pattern Math Game

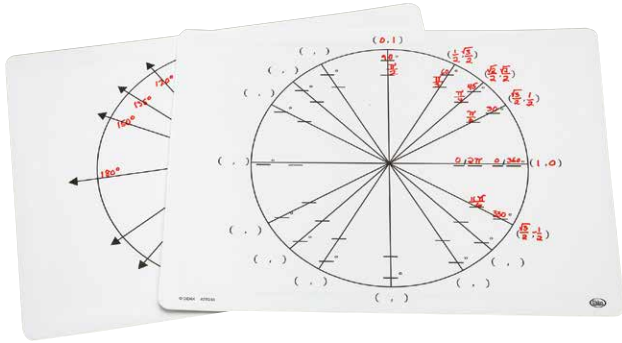
- Deepens understanding of different geometric transformations, including central symmetry, reflection, rotation, translation, and dilation
- Teams must recognize and explain the geometric transformation they see depicted on the picture card
- Teams then use their symbol cards to recreate these transformations
- Offers simple and advanced game options
- Includes game board, 5 cards with different types of geometric transformations, 20 simple picture cards, 20 advanced picture cards, and 6 types of small cards with symbols for building transformation patterns
- For 2 or more players

206776 \$79.99

Box of 2 Geometric Pattern Math Games

206777 \$99.99

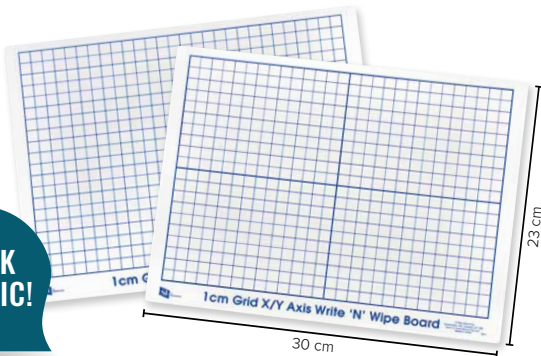




Write-On/Wipe-Off Unit Circle Mats, Set of 10

A great way for students to practice evaluating trig functions, each mat features a unit circle showing all segments on one side and a circle with just x, y segments on the other side. Students can fill in radians, sin, cos, and tan using dry-erase markers. Mats measure 30 cm L x 23 cm H, and are made of tough, flexible plastic.

206725 \$19.90



THICK PLASTIC!

Write 'N' Wipe Boards (Thick Plastic)

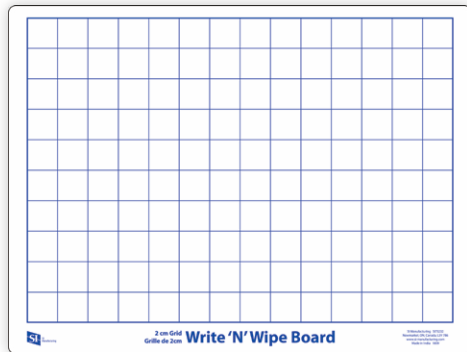
These double-sided, no-tear, plastic boards can be used with dry-wipe or wet marker pens. Blank on one side and available with 1 cm grid for drawing, or X/Y axis for graphing. Sets of 10 and 30 boards.

206180 1 cm grid, Set of 10 \$14.95 206182 X/Y Axis, Set of 10 \$14.95
205456 1 cm grid, Set of 30 \$39.95 205458 X/Y Axis, Set of 30 \$39.95

Write 'N' Wipe 2 cm Grid Boards, Set of 10

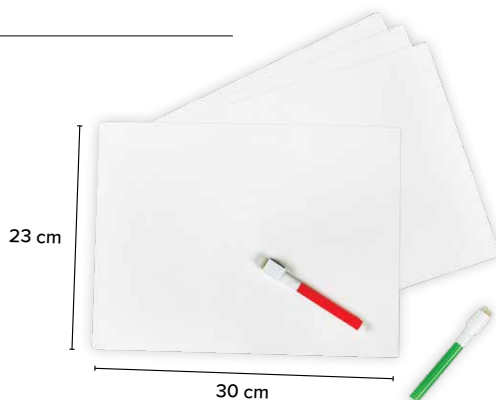
These double-sided, no-tear plastic boards can be used with dry-wipe or wet marker pens. Blank on one side and 2 cm grid on the other. 30 cm L x 23 cm H.

206879 \$13.30



Blank Dry-Erase Sheets

Set of 6.
206880 \$11.95



Spectrum Colour-Coded Activity Pouch
Our dry-erase pouches are suitable for every grade level, allowing students and teachers to insert pages of suggested activities, open-ended problem solving and discussions on assessments. When you are done with the inserted page, simply erase the work and reuse the pouch for the next lesson!

205778 Set of 5 pouches: one each of red, yellow, purple, green and blue \$11.50
205782 Set of 10 pouches: 2 each of red, yellow, purple, green and blue, and 4 Spectrum Dry-Erase Markers (206608) \$20.60

Spectrum Dry-Erase Pouch

Our Dry-Erase Pouch is suitable for every grade level, allowing students and teachers to insert pages of suggested activities, open-ended problem-solving exercises, and discussions on assessments. When you are done with the inserted page, simply erase the work and reuse the Pouch for the next lesson!

206604 Set of 5 \$8.25
206606 Set of 10 with 4 Spectrum Dry-Erase Markers (206608) \$15.95



Frameless Magnetic Dry Erase Board - Blank 9" x 12"

Multipurpose magnetic, dry erase board. Blank on both sides. 22.9 cm x 30.5 cm.
206767 \$7.23

MATHEMATICAL RESOURCES

Graphing Tools

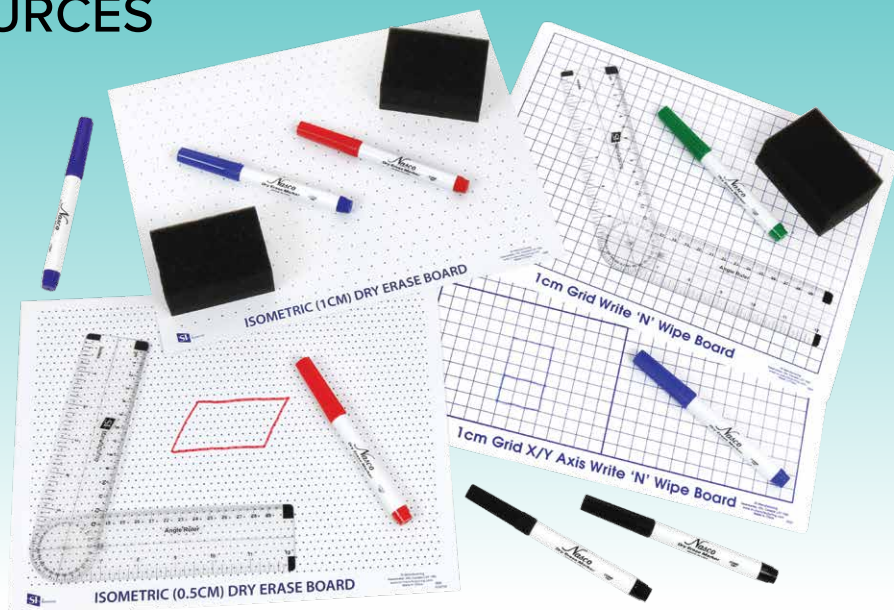
Spectrum Dry-Erase Board Kit

30 (XY) 1cm grid boards, 30 (1cm) grid boards, 30 isometric (0.5cm/1cm) grid boards, 10 dry-erase erasers, dry-erase markers, 6 of each of: red, green, black, blue, and purple markers, and 10 angle rulers.

206881 \$151.52

DRY ERASE MATH BOARDS

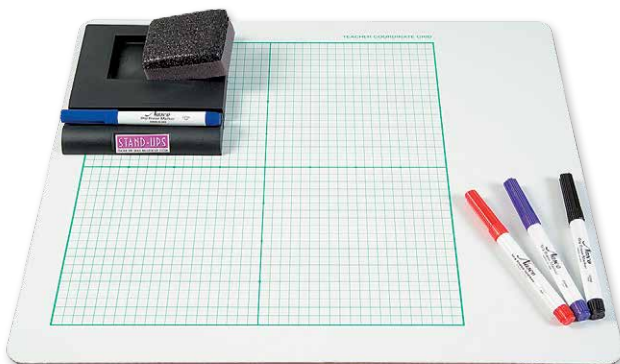
- Special UV coating to reduce ghosting
- Eliminates paper waste
- Perfect for monitoring and assessing students progress



Spectrum's Double-Sided Teacher Math Board

The perfect visual aid to demonstrate important math concepts. One side features board includes stand, 4 markers (purple, black, blue, red), and eraser.

Size: 46.3 x 37.5 cm.
206275 \$26.95



Spectrum Dry-Erase Markers

Dry-erase markers with fine tips. Set of 4, with felt tips on each marker. Colours: black, blue, red, and green.

206608 Set of 4 \$2.60

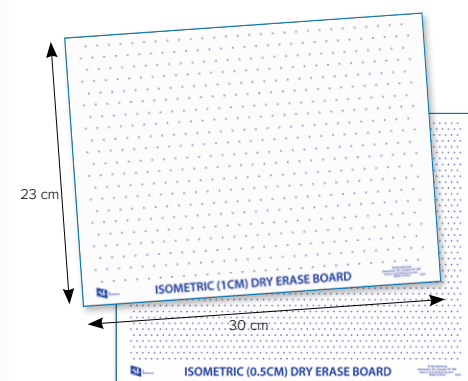


Spectrum's Double-Sided 1 cm Grid Magnetic Dry-Erase Math Boards

Double-sided boards are magnetic on both sides. Both sides are blank with write-on/wipe-off surfaces.

Size: 30 x 22.5 cm. Classroom Kit includes: 30 boards, 40 markers, and 30 washable student erasers.

206277 Classroom Kit \$255.00



Isometric 2-Sided Dry-Erase Boards

Each of the dry-erase boards are 0.5 cm isometric dot array on 1-side and the other side is 1 cm isometric dot array. Set of 10.

206678 \$7.95

Spectrum's Double-Sided (XY) Axis cm Grid Dry-Erase Math Boards Size: 30 x 22.5 cm.

Classroom Kit Includes:

- 30 dry-erase, double-sided boards
- 40 cone-tip markers (10 each of black, purple, and blue; 5 green, 5 red)
- 30 washable student erasers
- 2 convenient storage boxes

206561 Classroom Kit \$236.25

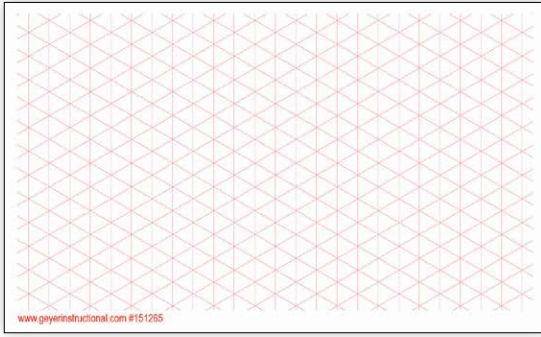


Dry-Erase and Chalkboard Eraser

Ideal for erasing dry-erase marker and chalk.

206722 \$2.35

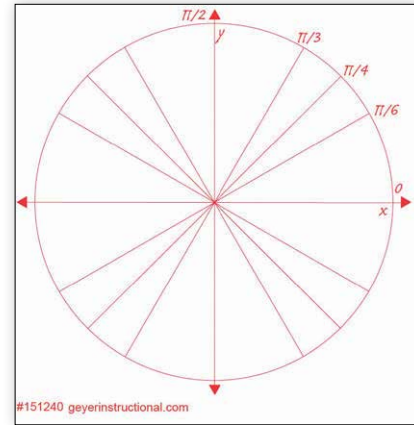




3" x 5" Isometric Grid Graphing Post-It® Notes

These sticky graph notes allow students to easily sketch a diagram or plot points. There are 3,100 sheet pads per set.

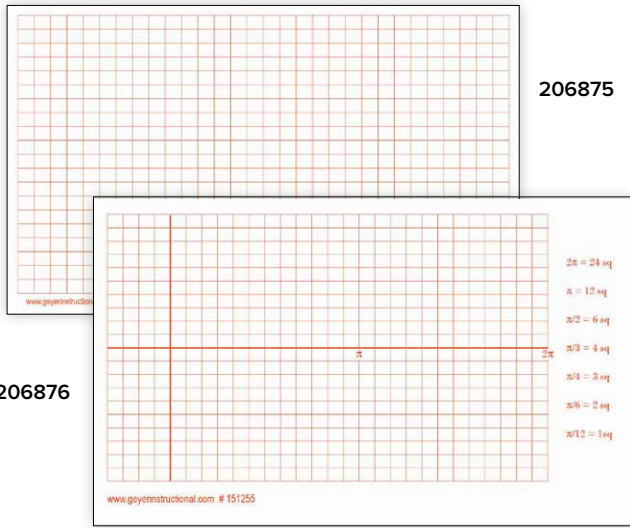
206874 \$21.95



Graphing 3M Post-It® Notes - Unit Circle

These Unit Circle 3M graphing Post-It® notes are perfect for your math class! These sticky graph notes allow students to easily sketch a diagram or plot points. Students can stick the notes in their notebooks or on their desk during class lectures! The graph pads are 3 x 3 in size. There are 4,100 sheet pads per set.

206878 \$17.60



206875

206876

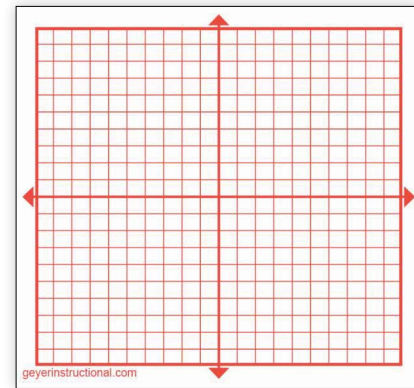
3" x 5" Graphing 3M Post-It® Notes, 20 x 30

These sticky graph notes allow students to easily sketch a diagram or plot points. There are 3,100 sheet pads per set.

206875 \$21.95

3" x 5" Graphing 3M Post-It® Notes, Trigonometry Grid, Radian

206876 \$21.95



Graphing 3M Post-It® Notes - 20 x 20 Square Grid

These 3M graphing Post-It® notes are perfect for your math class! Allows students to easily sketch a diagram or plot points. Students can stick the notes in their notebooks or on their desk during class lectures! The Post-It® note pads are 3 x 3 in size. There are 4,100 sheet pads per set.

206877 \$17.60

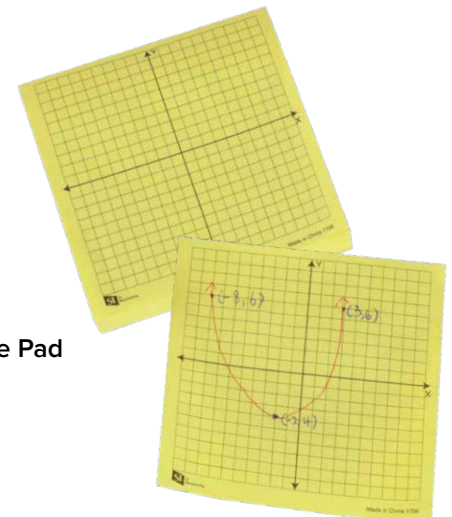
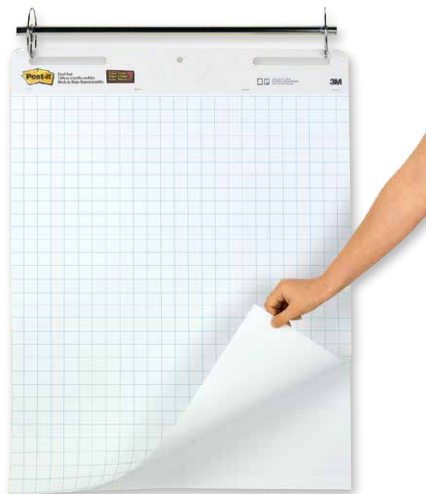
Post-It® Easel Pad – 30 Sheets

Draw charts and graphs easily with this pad featuring a faint blue grid (2.5 cm square).

Adhesive-backed sheets stick safely to most wall surfaces. Paper resists bleed-through.

Pad of 30 sheets measures 62.5 x 75 cm.

206560 \$45.95



XY Sticky Coordinate Pad

400 pages, 7.5 cm x 7.5 cm.

206735 \$13.30

MATHEMATICAL RESOURCES

Graphing Tools

Graph Stickers - 10 x 10 (500 Stickers)

These Graph Stickers are perfect for graphing in math or science classes or sketching a diagram in journals. You can attach graphs next to calculations or within report text. Meridian rays make central angles. Degrees Shown.

• 3.75" x 3.75" in size

206882 \$55.20

Graph Stickers - 1st Quadrant, 20 x 20 (500 Stickers)

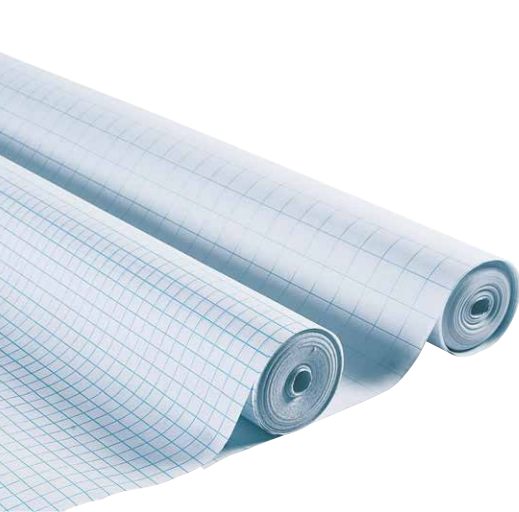
206883 \$55.20

Graph Stickers - Unit Circle, Roll of 500

206884 \$55.20

Graph Stickers - Accentuated XY Axis (500 Stickers)

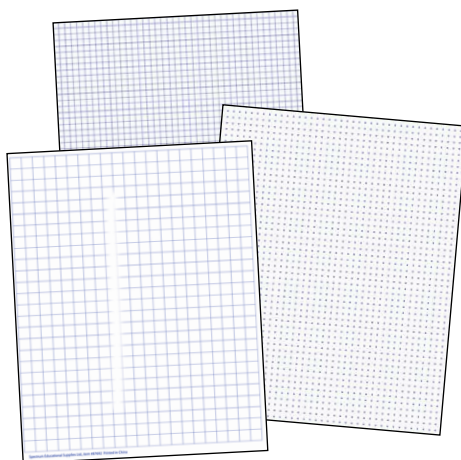
206885 \$55.20



Grid Rolls

Great for graphing activities! Available in 1.25 cm ruled paper. 87.6 x 60.9 cm tablet paper roll.

206562 1.25 cm \$49.95



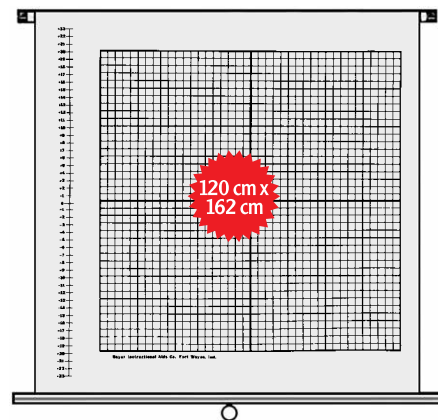
Graph Paper Pads

All of our graph paper have blue lines for easy-to-read notations when using pencil or ink. Pack of 100 (21.6 x 28 cm).

206198 1 cm Squares \$5.95

206200 0.5 cm Squares \$3.84

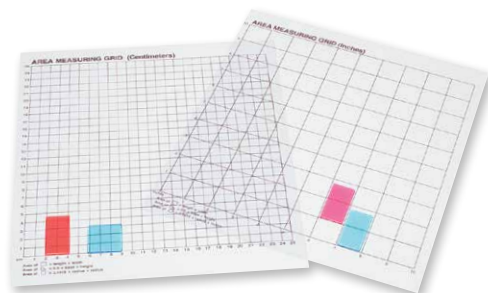
206204 Dotted Graph Paper \$5.95



Write and Wipe Chart

The background surface is white with black grids. Both sides of the chart feature the write and wipe surface. Under rolled to hug the wall. Heavy-duty steel spring roller and pull-down ring. Chart has 2.5 cm squares emphasized in fives with bold X and Y axes. Number scale runs from +21 to -21. Measures 120 x 162 cm.

203698 \$182.50

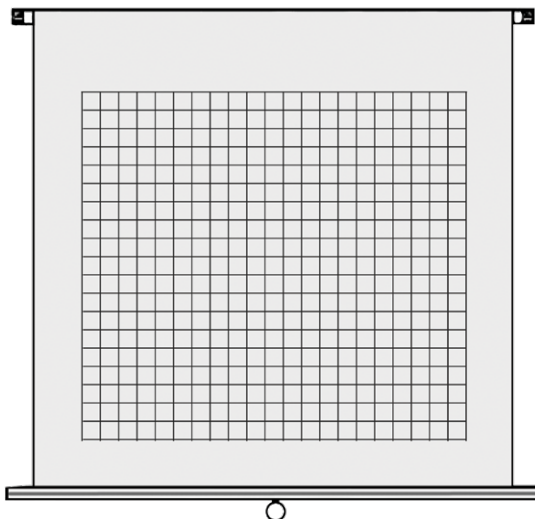


Overhead Graph Grids (Dry-Erase)

Demonstrate graphing, geometric or fractional functions or plot a project along with your class. Activity guide included.

206408 cm \$12.95

206410 inch \$12.95



Write/Wipe Grid Chart – 2" Squares

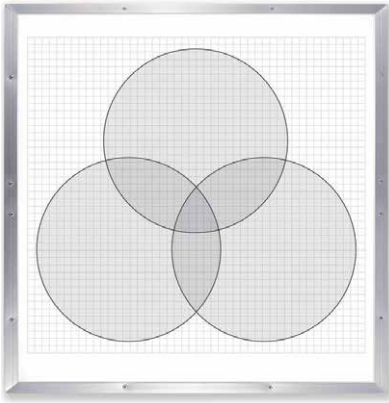
Very convenient for line graphs and bar graphs as well as for histograms.

205966 \$182.50

Features include:

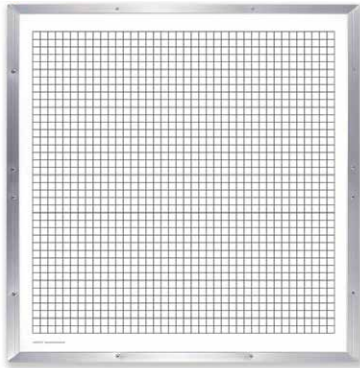
- under rolled to hug wall
- heavy duty 1.25" sturdy spring roller
- pull down ring
- 1.2 m x 1.7 m (48" x 65") size
- chains for hanging when using back side

Note: The write/wipe surface is a special laminated material for use with dry-erase markers. Hard-tipped writing instruments such as ball point pens, lead pencils, and chalkboard chalk will cause permanent damage to the write/wipe surface.



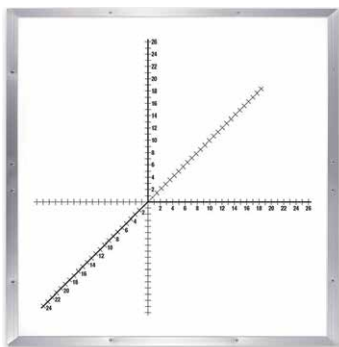
Dry-Erase Grid Whiteboard, Venn Diagram - 1" Square Grid Background, 4' x 4'

Made with high quality materials, 4ft x 4ft double sided dry-erase surface with aluminum frame and sturdy loop hangers on both sides. Portable size makes them easy to transport, display and store. Has three overlapping venn circles with a 1" square grid in the background.
206886 \$262.20



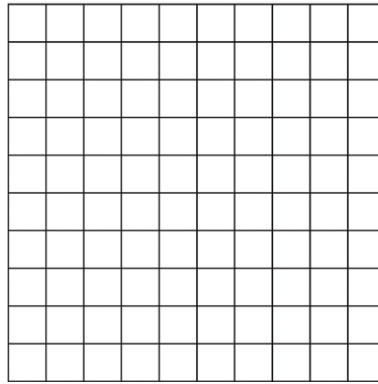
Dry-Erase Grid Whiteboard, 1" Squares, 4' x 4'

Made with high quality materials. 4' x 4' double sided dry-erase surface with aluminum frame and sturdy loop hangers on both sides. Has large 1" squares and is perfect for demonstrating line graphs, bar graphs and histograms to small groups or the entire class.
206887 \$262.20



3D Numbered Grid Whiteboard, 4' x 4'

Made with high quality materials. 4ft x 4ft double sided dry-erase surface with aluminum frame and sturdy loop hangers on both sides. Has large X and Y numbered axis to +26 and Z axis numbered to +24. Perfect for classroom demonstration or at the board work!
206888 \$262.20

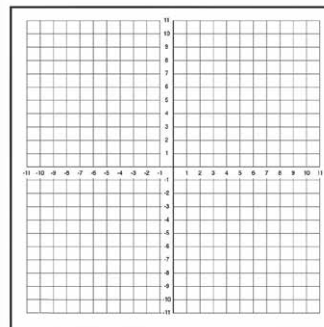


Easy Cling Graph 24" x 24"

Our Dry-Erase Easy Cling Graphs do not require any additional preparation to hang, simply press the film against any smooth, flat surface and you will have a perfect graph in no time. Perfect for at-the-board work or small group activities. Deluxe version of our economical Static Cling Graphs.
 • Easy Cling Graph features 10 x 10, 2" squares
 • Tear resistant, laminated, dry erase graph is made for repeated, long term use
206889 \$49.60

Easy Cling Graph - 20 x 20

• Easy Cling Graph features 20 x 20, 1" squares
206890 \$49.60



Easy Cling Graph - 1" Numbered Axis, 24" x 24"

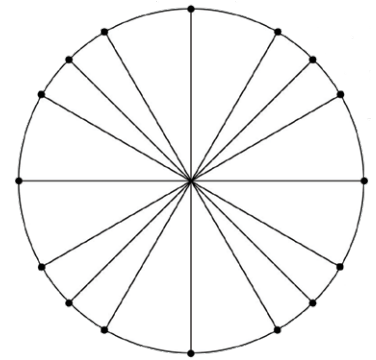
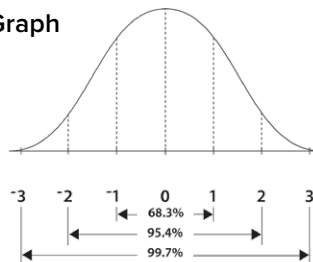
Our Dry-Erase Easy Cling Graphs do not require any additional preparation to hang, simply press the film against any

smooth, flat surface and you will have a perfect graph in no time. Perfect for at-the-board work or small group activities.

• Easy Cling Graph features a numbered X and Y axis ranging from +11 to -11
 • 1" squares on grid
 • Tear resistant, laminated, dry erase graph is made for repeated, long term use
206891 \$41.40

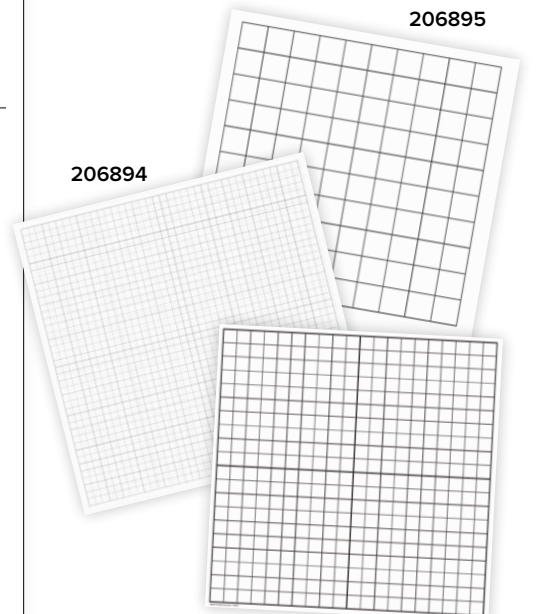
Easy Cling Graph Bell Curve, 24" x 24"

Our Dry-Erase Easy Cling Graphs do not require any additional preparation to hang, simply press the film against any smooth, flat surface and you will have a perfect graph in no time. Perfect for at-the-board work or small group activities. Deluxe version of our economical Static Cling Graphs.
 • Easy Cling Dry Erase Graph features a Bell Curve with normal distribution
 • Tear resistant, laminated, dry erase graph is made for repeated, long term use
206892 \$41.40



Dry-Erase Graphing Magnet - Unit Circle

Our high quality Dry-Erase, Unit Circle Graph Magnet will stick to any metal or magnetic surface; i.e., magnetic white board and chalkboard. This graph features a unit circle, with a radius of 1. The material measures 23" x 24" which is perfect for classroom demonstrations, at the board work or student group activities.
206893 \$49.60



206894

206895

206896

3.5' x 3.5' Dry-Erase Magnet - 1" Squares, XY Axis

Jumbo, Colossal, Oversized, Huge; call it whatever you want, this magnet is large enough for the whole class to see, yet easy to store when not in use. Features a 40 x 40, 1" square grid with XY Axis.
206894 \$99.30

Dry-Erase Graph Magnet - 10 x 10, 2" Squares

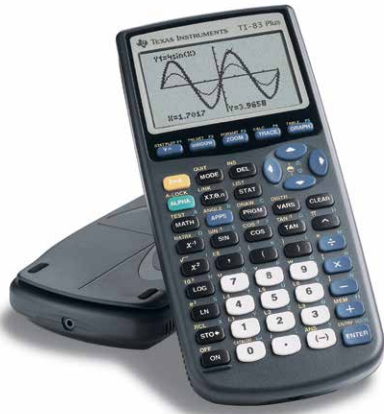
This graph magnet features a black grid with 10 x 10 squares. Each square measures 2". The magnet measures 23" wide x 24" high and is ideal for demonstrations or at-the-board work.
206895 \$49.60

Dry-Erase Graph Magnets - 23" x 24" - 1" Squares, XY Axis

23" wide x 24" high size is ideal for demonstrations or at-the-board work. This graph features an accentuated XY Axis with 1" squares.
206896 \$49.60

MATHEMATICAL RESOURCES

Calculators



TI-83 Plus

Introduce real-world data and lists with available data collection and list editor systems. Input functions, trace graphs and scroll table values simultaneously with the graph-table split-screen feature, plot data, perform advanced statistics and regression analysis.

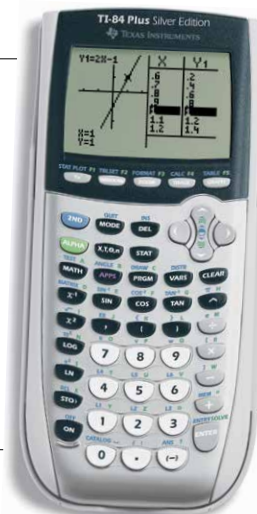
203490 \$188.00

TI-84 Plus

Silver Edition

Comes with 30 preloaded Apps and has 9x the memory of the TI-83 Plus for storing up to 94 Apps. Interchange-able face-plates for a custom look.

204108 TI-84 Plus Silver Edition Teacher, Pack of 10** \$2559.95



TI-84 Plus

Built-in USB port with cable (included) means fast and easy data transfer. Preloaded Apps for algebra, geometry, pre-calculus, history, science and more. Has 3x the memory and 2.5x the speed of the TI-83 Plus. The high-contrast display is easier to read from almost any angle. Fully compatible with CBR™, CBL™ and CBL 2™ data collection systems.

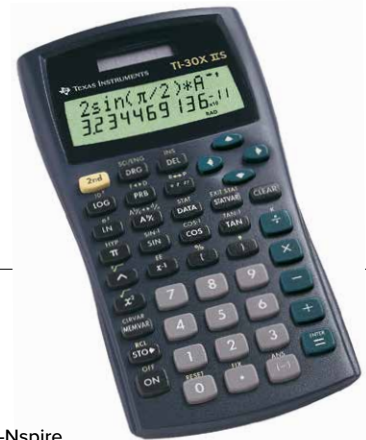
204100 TI-84 Plus Calculator \$215.95

204102 TI-84 Plus Teacher Pack of 10** \$2150.95

TI-30X IIs

New 2-line display scientific calculator.

206072 \$20.90



Calculator-Based Ranger™ (CBR™ 2)

Compatible with TI-73, TI-83+, TI-84, TI-86, TI-89, TI-92, and TI-Nspire

Start collecting and analyzing real work motion data – distance, velocity, and acceleration – through hands-on experiences using the CBR and TI compatible graphing calculator. The CBR kit includes a mounting clamp, a link cable, a teacher's guide, and 4 AA batteries.

203404 \$189.95

Calculator-Based Laboratory™ (CBL™ 2)

203402 \$352.00

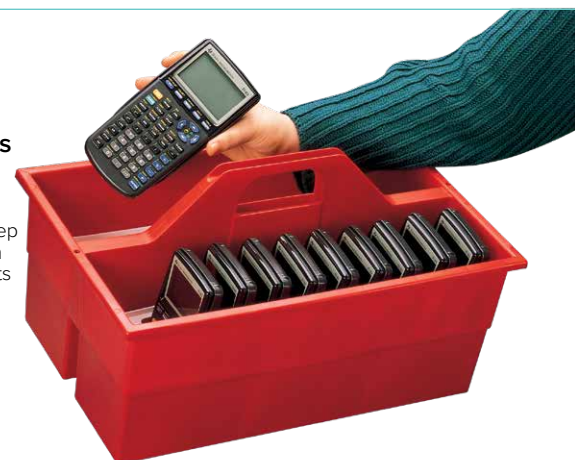


CaddyStack™ with Graphing Calculator Inserts

This CaddyStack™ and inserts holds 20 graphing calculators. An excellent way to keep track of your classroom set, with numbered slots and lockable lid.

203496 CaddyStack™ and Inserts \$28.00

203498 Inserts Only \$9.00





Casio Prizm Graphing Calculator

- Full Colour LCD Screen with over 85,000 Brilliant Colours
- High-resolution colour LCD with full textbook-style display
 - Picture Plot enables learning from real life pictures
 - Multitude of functions that leverage the colour LCD
 - Spreadsheets and Conditional Formatting
 - Conics
 - Extended Battery-life, 140 hours performance
 - USB Connectivity
- 206042 \$195.00**

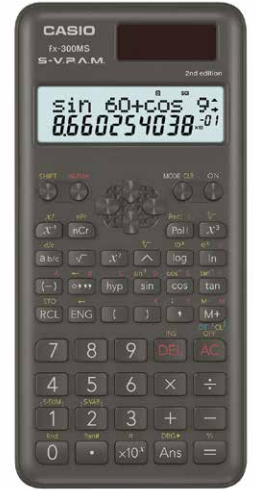
Casio® fx-260 Solar II Calculator

- All-purpose Scientific Calculator offers fraction calculations, trigonometric functions and more. High contrast easy to read display even in poor light conditions.
- 144 Functions
 - Large 10 + 2 Digits
 - One line display
 - Square & cube roots
 - Fixed decimal capabilities
 - Solar Power - no battery to replace
 - PEMDAS enforced user utilizing parenthesis
 - Single variable statistics
 - Standard deviation
 - Permutation, Combination
 - Side-on hard case
 - New case with large plastic keys
 - 1 year limited warranty (manufacturing defects)
- 206897 \$12.95**



Casio® fx-300MS PLUS 2 Calculator

- 240 Built-in functions
 - Two-way power
 - Dot matrix, 2-line display
 - Multi-replay function
 - Fraction calculations
 - Statistics
 - Combination and Permutation
 - 9 Variable memories
 - Slide-on hard case
 - High contrast easy-to-read display
 - See result and equation together
 - Fraction key for easy entry and calculation of fractions
 - Convert fractions and mixed numbers to their decimal equivalents
 - Statistics (standard deviation, regression analysis) random number generator
 - 1 year limited warranty (manufacturing defects)
- 206898 \$19.95**



Casio® fx-991ES PLUS 2 Calculator

- 417 Functions
 - Math input/output
 - Two-way power
 - Dot Matrix Natural Text Display
 - Fraction Calculation
 - List-based STAT data editor
 - Standard deviation, IRQ
 - Combination and Permutation
 - Paired-variable stats regression
 - Logical operations
 - Table function
 - 40 Scientific constants
 - 9 Variable memories
 - Fractions, statistics, complex number calculations, base arithmetic, linear regression, stand deviation, computer science Matrix calculations, equation calculations, Vector calculations, differential calculations, SOLVE function, REF/RREF matrix, solve ratio, derivatives in equations, factorization, LCM, GCD, random number
 - High contrast, easy-to-read display - indicates reoccurring dec.
 - Display integration / differential, equation calculation, matrix calculations / vector calculators, complex number calculation, CALC function / SOLVE function, Base-n, Logarithm
 - Natural textbook display shows formula and results exactly as they appear in the textbook
 - Easy menu function with QR authenticity check
 - 1 year limited warranty (manufacturing defects)
- 206900 \$29.95**

Casio® fx-300ES PLUS 2 Calculator

- 252 Functions
 - Math input/output control
 - Dot matrix natural text display
 - Fraction calculations
 - Logarithm log
 - List-based STAT data editor
 - Standard deviation, IRQ
 - Combination and Permutation
 - Paired-variable stats - regression
 - Table function
 - 9 Variable memories
 - Slide-on hard case
 - Natural textbook display shows formula and results exactly as they appear in the textbook
 - Prime factorization, LCM, GCD
 - List-based STAT data editor
 - Fraction functions
 - Accurate 10 digit, 10 + 2 display
 - 1 Independent & 6 constant memories
 - Multi-replay function, easy menu function
 - 1 year limited warranty (manufacturing defects)
- 206899 \$21.95**

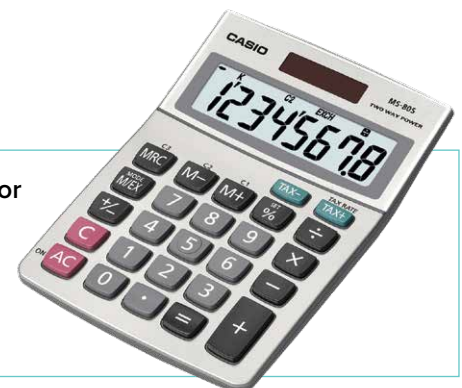


Casio Basic Solar Calculator

- Calculator for Everyday Use
 - Large LCD 8-Digit Display
 - Pocket Size
 - Durable Metal Faceplate
 - Solar Powered with Battery Back Up
 - Auto Shut Off
- 206052 \$9.95**

Casio Desktop Calculator

- Large, 8 - Digit Display
 - Easy Tax Calculations
 - Durable Metal Memory
 - Solar Powered with Battery Back Up
 - Auto Shut Off
- 206060 \$13.95**



INDEX/TERMS & CONDITIONS

Abacan.....	37	Calculators.....	44-45	Geometric Shapes Flip Chart.....	21	Protractors.....	7, 13, 16, 17, 18
Activity Pouches.....	39	Carts.....	5	Geometric Solids.....	6, 11, 12, 21	Pythagorean Theorem Tile Set.....	22
Alge-Tiles™.....	30	Chalkboard Accessories.....	18	Geometric Volumetric.....	5	Quadefy.....	37
Algebra.....	2, 3, 5, 6, 8, 30-35	Chess.....	36	Geometry.....	5, 21-25	Reflect-View Mirror.....	23
Algebra Balance.....	32	Circle Protractor.....	16, 17	Geometry Drawing Template.....	24	Rulers.....	2, 16, 18, 19
Algebra Game, The.....	34	Circle Template.....	23, 24	Geometry Poster.....	23	Scales.....	16, 20
Algebra Lab Gear.....	32	Circles of Descartes.....	23	Geometry Set.....	17	Spinners.....	2, 28
Algebra Pieces.....	31, 33	Clinometer.....	17	Graph Board.....	13	Square Tiles.....	7, 8
Algebra Posters.....	35	Coding.....	6	Graph Grids.....	42	Statistics.....	28-29
Algebra Tiles.....	32	Coins.....	7, 14, 15	Graph Paper Pads.....	42	STEM Math Kit.....	7
Balance.....	4	Colour Tiles.....	4, 12	Graph Stickers.....	42	Stop Watch.....	17
Base Ten.....	8, 11	Compasses.....	17, 18	Graphing Paper.....	41	Storage Box.....	19
Beakers.....	3	Conic Sections.....	23	Graphing Tools.....	40, 41, 42, 43	Stratego® Original.....	36
Bell Curve, Easy Cling Graph.....	43	Connecting Bars.....	13	Grid Boards.....	43	T-Square.....	18
Bills.....	14, 15	CoolTool Games.....	38	Grid Graphing Paper.....	41	Tactile Modeling.....	32, 33, 34
Bingo.....	36	Counters.....	2, 3, 7, 8, 12, 14	Grid Rolls.....	42	Tangrams.....	2, 7, 13
Books (by title)		Cubes.....	4, 12	Hex-a-Link™ Cubes.....	12	Thermometers.....	20
61 Cooperative.....		Cubic Meter Set.....	20	Hexover.....	37	Timer.....	20
<i>Learning Activities</i>	30	Cuisenaire® Rods.....	10	Integer Number Line Rule.....	8	Trappex.....	37
<i>Algebra Teacher's Activities Kit</i>	30	Customary & Metric Units.....		Kits.....	2-7	Triangles.....	18
<i>Consumer Math Success Kit</i>	14	of Measurement Poster.....	17	Linear Graphics.....		Trig Trainer.....	22
<i>Consumer Mathematics</i>	14, 15	Data Management.....	2	Algebra Card Game.....	32	Trigonometry.....	22
<i>Hands-On Algebra!</i>	36	Deci-Blocks™.....	9	Magnetic Board.....	39	Trigonometry Proofs.....	22
<i>Investigating Algebra with Algebra</i>		Deci-Rods.....	10	Mancala.....	36	Trundle Wheels.....	18
<i>Pieces Resource Guide</i>	31	Dice.....	3, 28, 29, 32	Math Carts.....	5, 6	Unit Circle Magnet.....	43
<i>Job Power: Ace the Interview</i>	14	Dissectable Cone.....	23	Math Coding.....	6	Unit Circle Mats.....	39
<i>Job Power: Choose Your Career</i>	14	Dissectable Sphere.....	21	Math-Vu Mirror.....	5	Unit Circle Paper.....	41
<i>Job Power: Master the</i>		Drawing Template.....	24	Measurement.....	2, 3, 4, 5, 7, 16-20	Venn Diagram.....	43
<i>Job Search</i>	14	Dry Erase Board Geometry Set.....	20	Measurement Tapes.....	7, 17	Volume.....	3
<i>Life Project</i>	14	Dry-Erase.....		Micrometer.....	17	Volumetric Solids.....	21
<i>Mathematics of Automobiles and</i>		Boards.....	5, 39, 40, 43	Mirrors.....	11	Weight Sets.....	20
<i>Transportation, The</i>	15	Dry-Erase Markers & Eraser.....	40	Money.....	7, 14, 15	Wind-Up Meter Tapes.....	17
<i>Mathematics of Banking</i>		Dry-Erase Pouches.....	39	Number Balance.....	4, 10	Write 'N' Wipe Board.....	39
<i>and Credit, The</i>	15	Dry-Erase Tools.....	39, 40	Number Line Rule.....	34	Write and Wipe Chart.....	42
<i>Mathematics of Housing</i>		Easel Pads.....	41	Pathagon.....	37	XY Board.....	24
<i>and Taxes, The</i>	15	Essential Tool Kit.....	7	Pattern Blocks.....	12	XY Coordinate Board.....	10
<i>Mathematics of Personal Finance</i>		Eternas.....	37	Pentominoes.....	13	XY Coordinate Pad.....	41
<i>and Investments, The</i>	15	Financial Literacy.....	14, 15	Percent Protractor.....	17	XY Coordinates.....	6
<i>Mathematics of Trades</i>		Fraction Calculator.....	26	Playing Cards.....	4, 29		
<i>and Professions, The</i>	15	Fraction/Decimal Prolific Balance.....	27	Polydron.....	3, 8, 26		
<i>Real-Life Math</i>	37	Fractions.....	2, 3, 5, 26-27	Polyhedra.....	23		
<i>Volumetric Solids</i>		Games.....	36-38	Prisms.....	23		
<i>Teacher's Guide</i>	21	Geoboards.....	7, 22, 24	Probability.....	2, 28-29		

TERMS & CONDITIONS

Prices

For your convenience, all catalogue prices are quoted in Canadian dollars and do not include the cost of transportation or any applicable taxes. These charges will be added to your invoice separately. Prices are FOB Newmarket, Ontario. All items with prices ending in 84 cents are limited in quantities and will be discontinued as soon as current stock level is depleted.

Spectrum Price Change Policy

As our suppliers, at times, make significant price increases during the life of our catalogue, we must reserve the right to change prices without notice. The potential increase in import tariffs imposed by the US Government against products originated from China is another situation when cost increases are out of our control. Whenever possible, SPECTRUM/NASCO Canada will absorb small increases from suppliers and source from within Canada, however, if there is a large cost increase, we will notify you before filling your order. In the rare event of a typographical error, we reserve the right to charge at the correct price.

PST, GST, HST

All applicable provincial taxes will be added to your order at the time of invoicing. GST (or HST) will be added to orders where applicable. For your reference, our GST number is R104958731.

Shipments: FOB Newmarket

All orders will be shipped in the most economical manner (for parcels this is generally UPS Ground) unless otherwise specified by you the customer. Shipments will be FOB Newmarket, Ontario, and shipping & handling charges will be added to your invoice. A minimum \$15.00 shipping charge will be applied to all orders, so we would encourage you to make sure your orders total more than \$50 before shipping charges.

When Spectrum ships to your institution, arrangements normally include delivery to your building's front door or loading dock. If the shipping company's assistance is going to be required to carry the parcels further into your building, Spectrum must be informed in advance and the additional handling charges of the freight forwarder will apply.



This logo on items in the catalogue, indicates that additional shipping charges apply.

Back-orders

Items not in stock at the time of processing your order will be shipped when available and invoiced separately. Please note that back-orders under \$25.00 may be canceled.

Spectrum Guarantee & Return Policies

If within 30 days of receipt of your order, for any reason you are not completely satisfied with any one of our products, simply call our customer service department and we will do everything we can to make you happy with your purchase. In the event that a returned order has any packaging, manuals, accessories, or other items missing, the return may be refused, or we may deduct the value of any of the missing items. Due to copyright laws, CDs, Software, DVDs and videos in opened packaged may only be exchanged for the same item if original purchase is defective. All returns must be authorized by our Customer Service Department (1-800-668-0600), which will provide you with a Return Authorization Number. Please (1) include our invoice number, (2) indicate our Return Authorization Number on the outside of the package being returned, and (3) indicate the reason(s) for returning the goods. For damaged shipments or errors on our part, no restocking charge will apply. On all other returns, a 15% restocking charge will apply. Items with the part number starting in "Z", are considered special order items and a 15% re-stocking charge will apply on returns, unless the item is defective in which case the re-stocking charge will be waived.

Manufacturer's Warranty

SPECTRUM/NASCO Canada will honour all manufacturer's warranties on products purchased from SPECTRUM/NASCO Canada (proof of purchase will be required).

Damaged Goods/Shortages

While our liability ceases after goods are received in good condition by the carrier, we will replace damaged items. If the contents of your delivered boxes are damaged, you must notify the carrier to make a claim for damages. It is important to note any visible damage to your shipment on the delivery carrier's receipt before the driver leaves. If the damage is hidden, please call the carrier immediately to report this. Delays of 2 or 3 days can result in the carrier refusing to pay claims for hidden damage.

Alternative Formats

In accordance with AODA, accessible format may be available upon request. Please contact our Customer Service Department for further information:

Customer Service Department

Mail/In Person: 150 Pony Drive, Newmarket, ON, L3Y7B6
Phone: 1-800-668-0600 ext 2300
Fax: 1-800-668-0602
Email: customerservice@spectrumed.com

GRAPH STICKERS

Graph Stickers - 10 x 10 (500 Stickers)

These Graph Stickers are perfect for graphing in math or science classes or sketching a diagram in journals. You can attach graphs next to calculations or within report text. Meridian rays make central angles. Degrees Shown.

• 3.75" x 3.75" in size

206882 \$55.20

Graph Stickers - 1st Quadrant, 20 x 20 (500 Stickers)

206883 \$55.20

Graph Stickers - Unit Circle (500 Stickers)

206884 \$55.20

Graph Stickers - Accentuated XY Axis (500 Stickers)

206885 \$55.20

206882

206883

206885

CRYSTAL POLYDRON



SPECTRUM Crystal Polydron Clear Pieces Kit

40 square pieces, 20 hexagon pieces, 24 pentagon pieces, 100 equilateral triangle pieces.

206866 \$209.32

LET'S GET STARTED!

Crystal Polydron Basic Start-up Kit

Kit Includes:

- 5 Equilateral Triangle Pieces
- 8 Square Pieces
- 6 Pentagon Pieces
- 4 Hexagon Pieces

206865 \$25.95



THE INTEGER OVERHEAD NUMBER LINE RULE

Integer Clear Number Line Rule

Combining the Integer Line Rule with the Integer 1 cm Cubes

This algebraic rule demonstrates the connection between the integer line and integer 1 cm cubes. The blue cubes represent a positive value and move to the right on the integer line. The red cubes represent a negative value and move to the left on the integer line. This set includes 1 integer overhead number line rule, 30 each of the red and blue overhead stackable 1 cm cubes, and activity tasks.

206144 \$4.75



1 cm Clear Spare Cubes

50 red and 50 blue cubes.

206148 \$5.75

spectrum-nasco.ca



150 PONY DRIVE
NEWMARKET, ON L3Y 7B6
TELEPHONE: 1-800-668-0600
FAX: 1-800-668-0602

We Care
Learn more about this inside!

