Acellus® Essential Math II

INTERNATIONAL ACADEMY OF SCIENCE Essential Math II Course Curriculum

Unit 1 Number Conce Detterns and Algebraic Thinking	45 Colving Two Stop Equations
Unit 1 - Number Sense, Patterns, and Algebraic Thinking	45 Solving Two-Step Equations
Describing Patterns Variables and Expressions	46 Solving Inequalities 47 Functions and Equations
·	·
3 Powers & Exponents	48 Graphing Functions
4 Order of Operations	Unit 6 - Ratios, Proportions, Percents
5 Equations & Mental Math	49 Ratios
6 Perimeter and Area of Rectangles	50 Rates
Unit 2 - Decimal Operations	51 Slopes
7 Comparing and Ordering Decimals	52 Writing and Solving Proportions
8 Rounding Decimals	53 Solving Proportions by Cross Products
9 Adding & Subtracting Decimals	54 Scale Drawings and Models
10 Multiplying Decimals	55 Percents and Fractions
11 Dividing Decimals	56 Percents and Proportions
12 Multiplying & Dividing by Powers of 10	57 Percents and Decimals
13 Scientific Notation	58 Translating Percent Sentences
14 Measuring in Metric Units	59 Circle Graphs
15 Converting Metric Units	60 Percent of Increase & Decrease
Unit 3 - Number Patterns and Fractions	61 Discounts, Markups, Sales Tax, and Tips
16 Prime Factorization	62 Simple Interest
17 Greatest Common Factor	Unit 7 - Geometric Figures
18 Equivalent Fractions	63 Angles
19 Least Common Multiple	64 Pairs of Angles on Parallel Lines
20 Comparing & Ordering Fractions	65 Triangles
21 Mixed Numbers and Improper Fractions	66 Polygons
22 Fractions and Decimals	67 Sum of Interior Angles - Convex Polygons
23 Adding & Subtracting Fractions	68 Similar and Congruent Polygons
24 Adding & Subtracting Mixed Numbers	69 Using Proportions with Similar Polygons
25 Multiplying Fractions & Mixed Numbers	70 Identifying Transformations
26 Dividing Fractions & Mixed Numbers	71 Line and Rotational Symmetry
27 Length in Customary Units	72 Translations and Reflections
28 Weight in Customary Units	73 Rotations
29 Capacity in Customary Units	Unit 8 - Measurement, Area, and Volume
Unit 4 - Integers	74 Square Roots
30 Comparing and Ordering Integers	75 Approximating Square Roots
31 Adding Integers	76 Pythagorean Theorem
32 Subtracting Integers	77 Area of Parallelograms
33 Multiplying Integers	78 Area of Triangles
34 Dividing Integers	79 Area of Trapezoids
35 Negative Exponents	80 Circumference of a Circle
36 Rational Numbers and Properties	81 Area of a Circle
37 Distributive Property	82 Area of Similar Polygons
38 Graphing on the Coordinate Plane	83 Classifying Solids
Unit 5 - Expressions, Equations, Inequalities, and Functions	84 Sketching Solids
39 Writing Expressions	85 Nets
40 Writing Equations	86 Surface Area of Prisms
41 Simplifying Expressions	87 Surface Area of Cylinders
42 Inverse Operations	88 Volume of Prisms
40. Fountions Addition and Outstanding	89 Volume of Cylinders
43 Equations - Addition and Subtraction 44 Equations - Multiplication and Division	90 Volume of Similar Solids

Acellus® Essential Math II

INTERNATIONAL ACADEMY OF SCIENCE Essential Math II Course Curriculum

Unit 9 - Data, Statistics, and Probability	108 Using Vertex Edge Graphs 2
91 Mean, Median, Mode, and Range	109 Using Vertex Edge Graphs 3
92 Bar Graphs	110 Making Fair Decisions
93 Line Graphs	Unit 11 - Bonus Lessons: Number Sense and Patterns and Algebra
94 Stem-and-Leaf Plots	111 Tables of Multiples & Squares
95 Box-and-Whisker Plots	112 Cube Roots
96 Histograms	113 Inverse Nature of Powers and Roots
97 Appropriate Data Displays	114 Estimating Cube Roots
98 Introduction to Probability	115 Equations with Variables on Both Sides
99 Probability - Intersections and Unions	116 Linear vs. Exponential Growth
100 Tree Diagrams	Unit 12 - Bonus Lessons: Geometry and Measurement
101 The Counting Principle	117 Planes
102 Permutations & Combinations	118 Planes Intersecting Solids
103 Disjoint Events	119 Tessellations
104 Independent & Dependent Events	120 Fractals
Unit 10 - Bonus Lessons: Data Analysis, Probability, and Discrete	121 Dilations
Mathematics	122 Dilation Effects on 2D Shapes
105 Counting Using Venn Diagrams	123 Dilation Effects on 3D Shapes
106 Sampling and Drawing Conclusions	124 Surface Area of Spheres
107 Using Vertex Edge Graphs 1	125 Volume of Spheres

Copyright International Academy of Science 2009 – 2011 All rights reserved