



Switched-On
SCHOOLHOUSE® 2011 EDITION

Curriculum Catalog

Mathematics 600

Welcome to Switched-On Schoolhouse!

We are excited that you are including Switched-On Schoolhouse as part of your program of instruction, and we look forward to serving you and your students.

Switched-On Schoolhouse comes complete with a full, multimedia-rich curriculum for grades 3-12 in five core subjects and electives.

Thanks for choosing us!

Alpha Omega Publications Curriculum Development Team

Alpha Omega Publications Technical Support

Alpha Omega Publications' technical support is Switched-On Schoolhouse's full-service technical support system. We exist to promote and preserve our customers' satisfaction. Our services include:

- Technical Support
- Product Configuration and Update Management

Please use the following information to contact Alpha Omega Publications' technical support:

Telephone:

Toll Free: 1-866-444-4498

Monday – Friday, 7 a.m. to 5 p.m. (CT)

Email:

techsup@aop.com

Table of Contents – Mathematics 600

UNIT 1: NUMBERS AND PLACE VALUE	1
UNIT 2: OPERATIONS WITH WHOLE NUMBERS	1
UNIT 3: ADVANCED PRACTICE WITH WHOLE NUMBERS.....	1
UNIT 4: DECIMAL NUMBERS	1
UNIT 5: BEGINNING FRACTIONS	2
UNIT 6: MULTIPLYING AND DIVIDING FRACTIONS.....	2
UNIT 7: DECIMALS AND FRACTIONS	2
UNIT 8: GEOMETRY AND MEASUREMENT	2
UNIT 9: STATISTICS AND GRAPHING	3
UNIT 10: REVIEW.....	3

UNIT 1: NUMBERS AND PLACE VALUE	
Assignment Titles	
1. Reading and Comparing Numbers	9. Prime Factorization
2. Place Value Through the Billion's Place	10. More Prime Factorization
3. Roman Numerals	11. Number Relationships
4. Ways of Looking at Numbers	12. Quiz 2
5. Quiz 1	13. Special Project
6. Expanded Notation	14. Review Game
7. Exponential Notation	15. TEST
8. Exponents and Expanded Notation	16. ALTERNATE TEST

UNIT 2: OPERATIONS WITH WHOLE NUMBERS	
Assignment Titles	
1. Basic Mathematical Operations	11. Factors, Multiples, and Whole Number Multiplication
2. Properties of Addition	12. Division of Whole Numbers
3. More Practice with Properties of Addition	13. Division of Whole Numbers
4. Operations and Their Opposites	14. More Division of Whole Numbers
5. Subtraction of Whole Numbers	15. Equations Using Multiplication and Division
6. Introduction to Equations	16. Quiz 2
7. Estimating	17. Special Project
8. Quiz 1	18. Review Game
9. Commutative and Associative Properties of Multiplication	19. TEST
10. Multiplication of Whole Numbers	20. ALTERNATE TEST

UNIT 3: ADVANCED PRACTICE WITH WHOLE NUMBERS	
Assignment Titles	
1. Sums and Differences	11. Properties of Addition and Multiplication
2. More Sums and Differences	12. Quiz 2
3. Still More Sums and Differences	13. Patterns and Numbers Sequences
4. Estimating Products	14. Rounding and Missing Number Patterns
5. Estimating Quotients	15. Problem Solving
6. More Estimating Quotients	16. Quiz 3
7. Quiz 1	17. Special Project
8. Calculator Practice: Addition and Subtraction	18. Review Game
9. More Calculator Practice: Addition and Subtraction	19. TEST
10. Divisibility Rules	20. ALTERNATE TEST

UNIT 4: DECIMAL NUMBERS	
Assignment Titles	
1. Positioning the Decimal Point	14. Review: Rules of Multiplication and Division
2. Comparing Decimal Numbers	15. More Review: Multiplication and Division
3. Rounding Whole Numbers and Decimal Numbers	16. Multiplication of Decimals
4. More Rounding Whole Numbers and Decimal Numbers	17. Multiplication of Whole and Decimal Numbers
5. Rounding Decimal Numbers	18. Multiplying Decimals
6. Decimal Numbers	19. Quiz 3
7. Equivalent Decimals	20. Division Using 10, 100, 1,000
8. Quiz 1	21. Review: Division
9. Adding and Subtracting Decimals	22. Division of Decimal Numbers
10. Adding Decimal Numbers	23. Quiz 4
11. Decimal Numbers and Operations	24. Special Project
12. Review: Adding, Subtracting, and Multiplying Decimal Numbers	25. Review Game
13. Quiz 2	26. TEST
	27. ALTERNATE TEST

Mathematics 600 (cont.)

UNIT 5: BEGINNING FRACTIONS	
Assignment Titles	
1. Introduction to Fractions and Decimals	18. Quiz 3
2. Writing Fractions as Decimals	19. Addition and Subtraction of Fractions with Common Denominators
3. Relating Fractions to Decimals	20. Addition and Subtraction of Mixed Numbers with Common Denominators
4. Fractions to Decimals	21. Addition and Subtraction of Fractions and Mixed Numbers with Unlike Denominators
5. Quiz 1	22. Subtraction of Unlike Fractions and Mixed Numbers with Borrowing
6. Equivalent Fractions	23. Adding and Subtracting Fractions
7. Proper, Improper, and Mixed Fractions	24. Adding Fractions
8. Convert Improper Fractions to Mixed Numbers	25. Quiz
9. Fractions	26. Special Project
10. Reducing Improper Fractions	27. Review Game
11. Converting Mixed Numbers to Improper Fractions	28. TEST
12. Comparing Fractions	29. ALTERNATE TEST
13. Quiz 2	
14. Least Common Multiple	
15. Review: Prime Factoring	
16. Greatest Common Factors	
17. Greatest Common Factors and Lowest Common Multiples	

UNIT 6: MULTIPLYING AND DIVIDING FRACTIONS	
Assignment Title	
1. Multiplication of Fractions	12. Quiz 2
2. Multiplication of Fractions with Reducing	13. Dividing Whole Numbers and Fractions
3. Multiplication of Fractions Times Whole Numbers	14. Dividing Fractions
4. Multiplying Mixed Numbers	15. More Dividing Fractions
5. Multiplying Whole Numbers Times Fractions	16. Multiplying and Dividing with Fractions
6. Multiplying and Reducing Fractions	17. Multiplying and Dividing with Decimals
7. Quiz 1	18. Quiz 3
8. Reciprocals	19. Special Project
9. Division of Fractions by a Fraction	20. Review Game
10. Division of Fractions with Whole Numbers	21. TEST
11. Division of Fractions with Mixed Numbers	22. ALTERNATE TEST

UNIT 7: DECIMALS AND FRACTIONS	
Assignment Title	
1. Converting Fractions to Decimals and Percents	11. Quiz 2
2. Finding Percentages	12. Greatest Common Factors
3. Equations Using Percent	13. Greatest Common Factors and Least Common Multiple
4. More Equations Using Percent	14. Practice Adding Fractions
5. Changing Fractions to Decimals to Percent	15. Practice Subtracting Fractions
6. Quiz 1	16. Quiz 3
7. Converting Fractions to Decimals	17. Special Project
8. Prime and Composition Numbers	18. Review Game
9. Prime Numbers and Prime Factors	19. TEST
10. Prime and Composite Practice	20. ALTERNATE TEST

UNIT 8: GEOMETRY AND MEASUREMENT	
Assignment Title	
1. Two and Three Dimensional Shapes	16. Review Formulas: Area, Perimeter, Circumference, and Volume
2. Three Dimensional Shapes	17. More Review of Formulas
3. Shapes	18. Quiz 3
4. Circles	19. The Metric System
5. Quiz 1	20. Converting Metric Units to English Units
6. Lines, Angles, and Congruency	21. Customary Units of Measure
7. Lines, Rays, and Angles	22. Add and Subtract Units of Measure, Time Zones
8. Angles	23. Multiplication and Formulas
9. Project: Angles	24. Quiz 4
10. Angles and Shapes	25. Special Project
11. Quiz 2	26. Review Game
12. Perimeter, Volume, and Area	27. TEST
13. More Perimeter, Volume, and Area	28. ALTERNATE TEST
14. Equation Basics, Area and Perimeter	
15. Review Formulas: Distance, Area, Perimeter, and Amount	

Mathematics 600 (cont.)

UNIT 9: STATISTICS AND GRAPHING	
Assignment Title	
1. Prediction and Probability	11. Problem Solving
2. Ratios	12. Quiz 3
3. Ratios and Division of Decimals	13. Positive and Negative Numbers
4. Quiz 1	14. Coordinate Graphs
5. Reading Bar Graphs and Line Graphs	15. Quiz 4
6. Reading Picture and Circle Graphs	16. Special Project
7. Quiz 2	17. Review Game
8. Mean, Mode, and Median	18. TEST
9. Statistics: Averaging	19. ALTERNATE TEST
10. Averages, Equalities, and Inequalities	

UNIT 10: REVIEW	
Assignment Title	
1. Operating on Whole Numbers	13. Adding and Subtracting Decimals
2. Basic Operations and Rounding	14. Multiplying Decimals
3. Multiplying and Dividing Whole Numbers	15. Dividing Decimals and Rounding Numbers
4. Quiz 1	16. Quiz 4
5. Fractions, Averages, and Graphs	17. Patterns and Number Sequences
6. Picture, Bar, and Pie Charts	18. Rounding and Missing Number Problems
7. Project: Graph	19. Problem Solving
8. Quiz 2	20. Quiz 5
9. Adding and Subtracting Fractions	21. Special Project
10. Multiplying Mixed Numbers	22. Review Game
11. Dividing Mixed Numbers	23. TEST
12. Quiz 3	24. ALTERNATE TEST