



Switched-On
SCHOOLHOUSE® 2011 EDITION

Curriculum Catalog

Mathematics 700

Welcome to Switched-On Schoolhouse!

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

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UNIT 1: INTEGERS

Assignment Titles

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|--|--|
| 1. Course Overview | 18. Alternate Quiz 3—Form A: Multiplying and Dividing Integers |
| 2. Integers on the Number Line | 19. Alternate Quiz 3—Form B: Multiplying and Dividing Integers |
| 3. Comparing and Ordering Integers | 20. The Real Number System |
| 4. Absolute Value | 21. Real Number Properties |
| 5. Quiz 1: Integers | 22. The Distributive Property |
| 6. Alternate Quiz 1—Form A: Integers | 23. Order of Operations |
| 7. Alternate Quiz 1—Form B: Integers | 24. Exponents and the Order of Operations |
| 8. Adding Integers with the Same Sign | 25. Quiz 4: The Real Number System |
| 9. Adding Integers with Different Signs | 26. Alternate Quiz 4—Form A: The Real Number System |
| 10. Subtracting Integers | 27. Alternate Quiz 4—Form B: The Real Number System |
| 11. Quiz 2: Adding and Subtracting Integers | 28. Special Project |
| 12. Alternate Quiz 2—Form A: Adding and Subtracting Integers | 29. Review |
| 13. Alternate Quiz 2—Form B: Adding and Subtracting Integers | 30. Test |
| 14. Multiplying Integers | 31. Alternate Test—Form A |
| 15. Dividing Integers | 32. Alternate Test—Form B |
| 16. Using Integers | 33. Glossary and Credits |
| 17. Quiz 3: Multiplying and Dividing Integers | |

UNIT 2: FRACTIONS

Assignment Titles

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|---|---|
| 1. Fractions and Mixed Numbers | 14. Comparing and Ordering Fractions |
| 2. Equivalent Fractions | 15. Multiplying Fractions |
| 3. Divisibility Rules and Prime Factorization | 16. Dividing Fractions |
| 4. Greatest Common Factor and Least Common Multiple | 17. Quiz 3: Multiplying and Dividing Fractions |
| 5. Quiz 1: Working with Fractions | 18. Alternate Quiz 3—Form A: Multiplying and Dividing Fractions |
| 6. Alternate Quiz 1—Form A: Working with Fractions | 19. Alternate Quiz 3—Form B: Multiplying and Dividing Fractions |
| 7. Alternate Quiz 1—Form B: Working with Fractions | 20. Project: Chef for a Day |
| 8. Adding and Subtracting Fractions with Like Denominators | 21. Special Project |
| 9. Adding and Subtracting Fractions with Unlike Denominators | 22. Review |
| 10. Reducing Fractions | 23. Test |
| 11. Quiz 2: Adding and Subtracting Fractions | 24. Alternate Test—Form A |
| 12. Alternate Quiz 2—Form A: Adding and Subtracting Fractions | 25. Alternate Test—Form B |
| 13. Alternate Quiz 2—Form B: Adding and Subtracting Fractions | 26. Glossary and Credits |

UNIT 3: DECIMALS

Assignment Titles

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|---|--|
| 1. Comparing and Ordering Decimals | 11. Scientific Notation |
| 2. Rounding and Estimating Decimals | 12. The Metric System |
| 3. Adding and Subtracting Decimals | 13. Quiz 2: Applying Decimals |
| 4. Multiplying and Dividing Decimals | 14. Alternate Quiz 2—Form A: Applying Decimals |
| 5. Quiz 1: Decimals and Their Operations | 15. Alternate Quiz 2—Form B: Applying Decimals |
| 6. Alternate Quiz 1—Form A: Decimals and Their Operations | 16. Special Project |
| 7. Alternate Quiz 1—Form B: Decimals and Their Operations | 17. Review |
| 8. Terminating and Repeating Decimals | 18. Test |
| 9. Fractions as Decimals | 19. Alternate Test—Form A |
| 10. Using Decimals | 20. Alternate Test—Form B |
| | 21. Glossary and Credits |

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UNIT 4: PATTERNS AND EQUATIONS

Assignment Titles

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|--|---|
| 1. Working with Variables and Expressions | 17. Solving Equations Using Multiplication and Division |
| 2. Translating Word Sentences | 18. Quiz 3: Solving Equations |
| 3. Evaluating Expressions | 19. Alternate Quiz 3—Form A: Solving Equations |
| 4. Using Formulas to Solve Problems | 20. Alternate Quiz 3—Form B: Solving Equations |
| 5. Quiz 1: Variable Expressions | 21. Solving Two-Step Equations |
| 6. Alternate Quiz 1—Form A: Variable Expressions | 22. Working with Inequalities |
| 7. Alternate Quiz 1—Form B: Variable Expressions | 23. Solving One-Step Inequalities |
| 8. Identifying Number Patterns | 24. Quiz 4: Equations and Inequalities |
| 9. Describing Number Patterns | 25. Alternate Quiz 4—Form A: Equations and Inequalities |
| 10. Identifying Functions | 26. Alternate Quiz 4—Form B: Equations and Inequalities |
| 11. Identifying Function Rules | 27. Special Project |
| 12. Quiz 2: Patterns and Functions | 28. Review |
| 13. Alternate Quiz 2—Form A: Patterns and Functions | 29. Test |
| 14. Alternate Quiz 2—Form B: Patterns and Functions | 30. Alternate Test—Form A |
| 15. Solving Equations Using Mental Math | 31. Alternate Test—Form B |
| 16. Solving Equations Using Addition and Subtraction | 32. Glossary and Credits |

UNIT 5: RATIOS AND PROPORTIONS

Assignment Titles

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|--|--|
| 1. Ratios | 15. Percent of a Number |
| 2. Rates | 16. Percent of Change |
| 3. Proportions | 17. Solving Percent Problems Using Proportions |
| 4. Quiz 1: Ratios, Rates, and Proportions | 18. Solving Percent Problems Using Equations |
| 5. Alternate Quiz 1—Form A: Ratios, Rates, and Proportions | 19. Quiz 3: Fractions, Decimals, and Percents |
| 6. Alternate Quiz 1—Form B: Ratios, Rates, and Proportions | 20. Alternate Quiz 3—Form A: Fractions, Decimals, and Percents |
| 7. Converting Customary Units | 21. Alternate Quiz 3—Form B: Fractions, Decimals, and Percents |
| 8. Converting Metric Units | 22. Special Project |
| 9. Similarity | 23. Review |
| 10. Scale Drawings | 24. Test |
| 11. Quiz 2: Using Proportions | 25. Alternate Test—Form A |
| 12. Alternate Quiz 2—Form A: Using Proportions | 26. Alternate Test—Form B |
| 13. Alternate Quiz 2—Form B: Using Proportions | 27. Glossary and Credits |
| 14. Converting Between Fractions, Decimals, and Percents | |

UNIT 6: PROBABILITY AND GRAPHING

Assignment Title

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|---|--|
| 1. Theoretical Probability | 11. Direct Variation |
| 2. Experimental Probability | 12. Quiz 2: Functions |
| 3. Sample Space | 13. Alternate Quiz 2—Form A: Functions |
| 4. Independent and Dependent Events | 14. Alternate Quiz 2—Form B: Functions |
| 5. Quiz 1: Probability | 15. Special Project |
| 6. Alternate Quiz 1—Form A: Probability | 16. Review |
| 7. Alternate Quiz 1—Form B: Probability | 17. Test |
| 8. Graphing Ordered Pairs | 18. Alternate Test—Form A |
| 9. Graphing Linear Equations | 19. Alternate Test—Form B |
| 10. Slope | 20. Glossary and Credits |

Mathematics 700 (cont.)

UNIT 7: DATA ANALYSIS

Assignment Title

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|--|---|
| 1. Collecting Data | 16. Bar Graphs |
| 2. Determining Mean, Median, and Mode | 17. Circle Graphs |
| 3. Using Mean, Median, and Mode | 18. Scatter Plots |
| 4. Using Range | 19. Quiz 3: Graphing Data and Making Predictions |
| 5. Quiz 1: Describing Data | 20. Alternate Quiz 3—Form A: Graphing Data and Making Predictions |
| 6. Alternate Quiz 1—Form A: Describing Data | 21. Alternate Quiz 3—Form B: Graphing Data and Making Predictions |
| 7. Alternate Quiz 1—Form B: Describing Data | 22. Special Project |
| 8. Box-and-Whisker Plots | 23. Review |
| 9. Stem-and-Leaf Plots | 24. Test |
| 10. Histograms | 25. Alternate Test—Form A |
| 11. Other Graphs | 26. Alternate Test—Form B |
| 12. Quiz 2: Organizing Data | 27. Glossary and Credits |
| 13. Alternate Quiz 2—Form A: Organizing Data | |
| 14. Alternate Quiz 2—Form B: Organizing Data | |
| 15. Line Graphs | |

UNIT 8: GEOMETRY

Assignment Title

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|---|--|
| 1. Introduction to Geometry | 15. Symmetry |
| 2. Special Pairs of Angles | 16. Reflections |
| 3. Polygons | 17. Translations |
| 4. Circles | 18. Compound Transformations |
| 5. Quiz 1: Basic Geometry | 19. Quiz 3: Transformations |
| 6. Alternate Quiz 1—Form A: Basic Geometry | 20. Alternate Quiz 3—Form A: Transformations |
| 7. Alternate Quiz 1—Form B: Basic Geometry | 21. Alternate Quiz 3—Form B: Transformations |
| 8. Project: Inscribed Polygons | 22. Special Project |
| 9. Triangles | 23. Review |
| 10. Quadrilaterals | 24. Test |
| 11. Similar Polygons | 25. Alternate Test—Form A |
| 12. Quiz 2: Classifying Polygons | 26. Alternate Test—Form B |
| 13. Alternate Quiz 2—Form A: Classifying Polygons | 27. Glossary and Credits |
| 14. Alternate Quiz 2—Form B: Classifying Polygons | |

UNIT 9: MEASUREMENT AND AREA

Assignment Title

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|---------------------------------------|--|
| 1. Perimeter | 14. Alternate Quiz 2—Form B: Area |
| 2. Circumference | 15. Squares and Square Roots |
| 3. Composite Figures | 16. The Pythagorean Theorem |
| 4. Quiz 1: Perimeter | 17. Applying the Pythagorean Theorem |
| 5. Alternate Quiz 1—Form A: Perimeter | 18. Quiz 3: The Pythagorean Theorem |
| 6. Alternate Quiz 1—Form B: Perimeter | 19. Alternate Quiz 3—Form A: The Pythagorean Theorem |
| 7. Area of Parallelograms | 20. Alternate Quiz 3—Form B: The Pythagorean Theorem |
| 8. Area of Triangles and Trapezoids | 21. Special Project |
| 9. Area of Circles | 22. Review |
| 10. Area of Composite Figures | 23. Test |
| 11. Dimension Changes | 24. Alternate Test—Form A |
| 12. Quiz 2: Area | 25. Alternate Test—Form B |
| 13. Alternate Quiz 2—Form A: Area | 26. Glossary and Credits |

UNIT 10: SURFACE AREA AND VOLUME

Assignment Title

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|---------------------------------------|--|
| 1. Classifying and Identifying Solids | 14. Surface Area of Cylinders |
| 2. Nets | 15. Volume of Cylinders |
| 3. Surface Area and Volume | 16. Dimension Changes |
| 4. Quiz 1: Solids | 17. Quiz 3: Cylinders |
| 5. Alternate Quiz 1—Form A: Solids | 18. Alternate Quiz 3—Form A: Cylinders |
| 6. Alternate Quiz 1—Form B: Solids | 19. Alternate Quiz 3—Form B: Cylinders |
| 7. Surface Area of Rectangular Prisms | 20. Special Project |
| 8. Volume of Rectangular Prisms | 21. Review |
| 9. Surface Area of Triangular Prisms | 22. Test |
| 10. Volume of Triangular Prisms | 23. Alternate Test—Form A |
| 11. Quiz 2: Prisms | 24. Alternate Test—Form B |
| 12. Alternate Quiz 2—Form A: Prisms | 25. Glossary and Credits |

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UNIT 11: COURSE REVIEW AND EXAM	
<i>Assignment Title</i>	
1. Course Review 1	4. Alternate Exam—Form A
2. Course Review 2	5. Alternate Exam—Form B
3. Exam	