



**Switched-On**  
SCHOOLHOUSE

# Course Catalog

Mathematics 300

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COURSE OVERVIEW

Math 300 is a full-year elementary math course focusing on number skills and numerical literacy. In it, students will gain solid experience with number theory and operations, learning how to apply these in measurement situations. This course also integrates geometric concepts and skills throughout the units, as well as introducing students to statistical concepts.

By the end of the course, students will be expected to do the following:

- Understand place value and know how to compare and order numbers.
- Perform addition and subtraction, carrying and borrowing on whole numbers.
- Know basic multiplication facts.
- Understand representations in fraction and mixed number forms.
- Understand concepts of likelihood and basic probability.
- Understand concepts of shape, symmetry, and perimeter.
- Understand measurement concepts, including time and temperature.
- Understand representations using decimals and money.

UNIT 1: WHOLE NUMBERS				
Assignment Titles				
MATHEMATICS 300	1.	Course Overview	16.	Quiz 3
	2.	Patterns: Digits and Number Words	17.	Adding with Carrying
	3.	Place Value	18.	Cardinal and Ordinal Numbers
	4.	Single-Digit Addition	19.	Standard Measurement for Time
	5.	Single-Digit Subtraction	20.	Calendar Time
	6.	Addition Problems	21.	Quiz 4
	7.	Subtraction Problems	22.	Unit Concept Review 1
	8.	Quiz 1	23.	Unit Concept Review 2
	9.	Numbers on a Number Line	24.	Practice: Addition and Subtraction
	10.	Pattern for Expanded Notation	25.	Quiz 5
	11.	Adding Multi-digit Numbers	26.	Special Project*
	12.	Quiz 2	27.	Review Game
	13.	Subtracting 3-Digit Numbers	28.	Test
	14.	Measurement	29.	Alternate Test*
	15.	Operation Symbols	30.	Reference

UNIT 2: NUMBER PATTERNS				
Assignment Titles				
MATHEMATICS 300	1.	Family of Facts	14.	Money
	2.	Adding Ones, Tens, and Hundreds	15.	Review: Borrowing
	3.	Subtracting Ones, Tens, and Hundreds	16.	Addition: Checking Answers
	4.	Quiz 1	17.	Subtraction: Checking Answers
	5.	Place Value and Number Words	18.	Quiz 4
	6.	Addition with Carrying	19.	Review: Number Order and Place Value
	7.	Skip Counting and Number Words	20.	Review: Addition and Subtraction Facts
	8.	Quiz 2	21.	Quiz 5
	9.	Skip Counting and Addition with Carrying	22.	Special Project*
	10.	Fractions	23.	Review Game
	11.	Subtracting with Borrowing	24.	Test
	12.	Quiz 3	25.	Alternate Test*
	13.	Shapes	26.	Reference

UNIT 3: WHOLE NUMBERS AND FRACTIONS	
Assignment Titles	
MATHEMATICS 300	1. Fact Families, Mental Math, and Addition
	2. Column Addition
	3. Addition: With and Without Carrying
	4. Quiz 1
	5. Measurements: Weight and Volume
	6. Fact Family, Place Value, and Number Order
	7. Checking Addition Problems
	8. More Checking Addition Problems
	9. Quiz 2
	10. Subtraction with Borrowing
	11. Number Sentences and Symbols
	12. Subtraction with Borrowing and Checking
	13. Quiz 3
	14. Fractions
15. Fractions - Continued	
16. Addition Practice	
17. Time: AM and PM	
18. Quiz 4	
19. Review: Addition, Subtraction, and Money	
20. Review: Story Problems, Lines, Shapes, and Measurement	
21. Quiz 5	
22. Special Project*	
23. Review Game	
24. Test	
25. Alternate Test*	
26. Reference	

UNIT 4: PLACE VALUE	
Assignment Titles	
MATHEMATICS 300	1. Numbers to Thousands Place
	2. Addition and Skip Counting
	3. Quiz 1
	4. Rounding and Estimation
	5. Subtraction with Borrowing
	6. Measurement
	7. Quiz 2
	8. Number Words and Place Value
	9. Number Patterns
	10. Addition and Subtraction: Horizontal Form
	11. Quiz 3
	12. Adding and Subtracting Fractions
13. Roman Numerals	
14. Review: Subtraction with Borrowing	
15. Quiz 4	
16. Review: Fractions	
17. Review: Word Problems and Money	
18. Quiz 5	
19. Special Project*	
20. Review Game	
21. Test	
22. Alternate Test*	
23. Reference	

UNIT 5: MEASUREMENT, SHAPES, AND REVIEW	
Assignment Titles	
MATHEMATICS 300	1. Operation Symbols and Number Sense
	2. Multi-Digit Addition And Subtraction
	3. Cardinal and Ordinal Numbers
	4. Quiz 1
	5. Number Patterns Using Place Value
	6. Measuring Temperature
	7. Quiz 2
	8. Operation Symbols
	9. Shapes and Symmetry
	10. Rounding and Estimating
	11. Finding Perimeter
	12. Quiz 3
	13. Multi-Digit Addition and Subtraction
14. Odd And Even Numbers	
15. Review: Checking Addition	
16. Review: Checking Subtraction	
17. Review: Roman Numerals and Fractions	
18. Quiz 4	
19. Review: Multiple Concepts	
20. Review: Story Problems	
21. Quiz 5	
22. Special Project*	
23. Review Game	
24. Test	
25. Alternate Test*	
26. Reference	

**UNIT 6: MULTIPLICATION, ADDITION, AND SUBTRACTION**

MATHEMATICS  
300

**Assignment Titles**

1. Multi-Digit Addition	13. Lines, Angles, and Temperature
2. Skip Counting and Multiplication	14. Review: Addition and Subtraction
3. Review: Telling Time	15. Quiz 4
4. Quiz 1	16. Story Problems
5. Review: Subtraction	17. Multiple Concept Review
6. Perimeter and Area	18. Review: Calendar
7. Review: Fractions	19. Quiz 5
8. Quiz 2	20. Special Project*
9. Addition and Equivalent Fractions	21. Review Game
10. Money Computation and Roman Numerals	22. Test
11. Quiz 3	23. Alternate Test*
12. Multiplication	24. Reference

**UNIT 7: OPERATIONS, LIKELIHOOD, AND PROBABILITY**

MATHEMATICS  
300

**Assignment Titles**

1. Review: Place Value	13. Quiz 3
2. Review: Subtraction with Borrowing	14. Review: Money
3. Multiplication Facts (1)	15. Multiplication Facts (2)
4. Quiz 1	16. Quiz 4
5. Measurement	17. Multiple Concept Review
6. Practicing Subtraction with Borrowing	18. Quiz 5
7. Mixed Numbers	19. Special Project*
8. Quiz 2	20. Review Game
9. Review: Expanded Notation and Roman Numerals	21. Test
10. Probability and Likelihood	22. Alternate Test*
11. Math Facts	23. Reference
12. Symmetry	

**UNIT 8: MEASUREMENT, FRACTIONS, AND DECIMALS**

MATHEMATICS  
300

**Assignment Titles**

1. Shapes, Measurement, and Addition	12. Multiple Concept Practice
2. Time and Measurement	13. Review: Addition With Checking
3. Quiz 1	14. Quiz 4
4. Fractions, Odd and Even Number Patterns	15. Word Problems
5. Decimals	16. Using Graphs
6. Money Problems	17. Quiz 5
7. Quiz 2	18. Special Project*
8. Fractions, Place Value, and Measurement	19. Review Game
9. Directions	20. Test
10. Quiz 3	21. Alternate Test*
11. Multiplication Facts	22. Reference

**UNIT 9: REVIEW: MULTIPLE CONCEPTS**

MATHEMATICS  
300

**Assignment Titles**

1. How Numbers Work	13. Quiz 3
2. Math Facts	14. Symmetry and Shapes
3. Add/Subtract with Checking	15. Roman Numerals
4. Multiplication	16. Quiz 4
5. Quiz 1	17. Likelihood and Graphing
6. Equivalent Fractions	18. Problem Solving
7. Reading and Writing Fractions	19. Quiz 5
8. Fraction Computation	20. Special Project*
9. Quiz 2	21. Review Game
10. Measure: Length, Perimeter, and Area	22. Test
11. Measure: Money, Time, and Temperature	23. Alternate Test*
12. Measure: Weight and Volume	24. Reference

UNIT 10: BASIC MATH REVIEW	
Assignment Titles	
MATHEMATICS 300	1. Review: Rounding and Estimation
	2. Review: Adding Fractions
	3. Review: Subtracting Fractions
	4. Review: Multiplication Facts
	5. Quiz 1
	6. Review: Mental Math, Graphs, Likelihood
	7. Review: Addition and Subtraction Computation
	8. Quiz 2
	9. Review: Fractions and Decimals
	10. Review: Add and Subtract Mixed Numbers and Fractions
	11. Review: Finding Missing Numbers
	12. Quiz 3
	13. Review: Shapes and Symmetry
	14. Review: Roman Numerals
	15. Review: Measurement
	16. Quiz 4
	17. Review: Number Symbols and Grouping
	18. Review: Perimeter and Area
	19. Review: Problem Solving
	20. Quiz 5
	21. Special Project*
	22. Review Game
	23. Test
	24. Alternate Test*
	25. Reference

(\*) Indicates alternate assignment