



2017-2018 Curriculum Catalog

Mathematics 300

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

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

Unit 6: Multiplication, Addition, and Subtraction	
Assignments	
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	
Assignments	
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	
Assignments	
Mathematics 300	1. Shapes, Measurement, and Addition
	2. Time and Measurement
	3. Quiz 1
	4. Fractions, Odd and Even Number Patterns
	5. Decimals
	6. Money Problems
	7. Quiz 2
	8. Fractions, Place Value, and Measurement
	9. Directions
	10. Quiz 3
	11. Multiplication Facts
	12. Multiple Concept Practice
	13. Review: Addition With Checking
	14. Quiz 4
	15. Word Problems
	16. Using Graphs
	17. Quiz 5
	18. Special Project*
	19. Review Game
	20. Test
	21. Alternate Test*
	22. Reference

Unit 9: Review: Multiple Concepts	
Assignments	
Mathematics 300	1. How Numbers Work
	2. Math Facts
	3. Add/Subtract with Checking
	4. Multiplication
	5. Quiz 1
	6. Equivalent Fractions
	7. Reading and Writing Fractions
	8. Fraction Computation
	9. Quiz 2
	10. Measure: Length, Perimeter, and Area
	11. Measure: Money, Time, and Temperature
	12. Measure: Weight and Volume
	13. Quiz 3
	14. Symmetry and Shapes
	15. Roman Numerals
	16. Quiz 4
	17. Likelihood and Graphing
	18. Problem Solving
	19. Quiz 5
	20. Special Project*
	21. Review Game
	22. Test
	23. Alternate Test*
	24. Reference

Unit 10: Basic Math Review	
Assignments	
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 alternative assignment