CALVERT™ HOMESCHOOL

Mathematics 400

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Mathematics 400 Course Overview

Math 400 is a full-year elementary math course focusing on number skills and mathematical literacy. In it, students will gain solid experience with number theory and operations, including decimals and fractions. This course also integrates geometric concepts and skills throughout the units, teaches measurement skills, and introduces students to statistical concepts.

- **Unit 1:** Use place value, fact families, and number patterns

- **Unit 2:** Use knowledge of patterns and operations to round and estimate

- **Unit 3:** Identify whole numbers and compare fractions

- **Unit 4:** Identify the qualities of shapes and angles, and review various concepts

- **Unit 5:** Use strategies for division and multiplication, and use units of measurement for capacity, weight, and length

- **Unit 6:** Use multiplication strategies and fractions to solve problems

- **Unit 7:** Use patterns to add, subtract, compare, and convert fractions

- **Unit 8:** Use division strategies and fractions to solve problems

- **Unit 9:** Read, write, and compare decimals and fractions

- **Unit 10:** Collect and interpret data using different types of graphs, and review various concepts

Unit 1: Number Sense and Place Value	
Assignments	
1. Course Overview	15. Cardinal and Ordinal Numbers
2. Place Value to 1,000's (1)	16. Quiz 3: Number Order and Patterns
3. Single-Digit Addition	17. Reading and Writing Fractions
4. Single-Digit Subtraction	18. Practice Multiplication
5. Multi-Digit Addition	19. Counting Money
6. Multi-Digit Subtraction	20. Operations
7. Place Value to 1,000's (2)	21. Quiz 4: Fractions, Operations, and Money
8. Quiz 1: Number Sense and Place Value	22. Review: Numbers
9. Multiplication Facts	23. Story Problems
10. Family of Facts	24. Quiz 5: Review
11. Telling Time	25. Special Project*
12. Quiz 2: Fact Families and Time	26. Test
13. Number Words	27. Alternate Test*
14. Patterns	28. Glossary and Credits

Unit 2: Rounding and Estimation

Assignments

1.	Operations	15.	Quiz 3: Fractions and Rounding; Review
2.	Multiplication Facts: 6-10 and Review	16.	Equivalent Fractions
3.	Using Standard Measures	17.	Rounding Numbers to 100's
4.	Quiz 1: Operations and Measures	18.	Estimating Answers to 100's
5.	Place Value to 10,000's	19.	Review: Computation
6.	Relation Symbols	20.	Quiz 4: Equivalent Fractions and Estimation; Review
7.	Missing Number Equations	21.	Review: Bar Graphs and Fractions
8.	Review: Even and Odd Numbers	22.	Review: Fractions
9.	Quiz 2: Place Value, Relations, and Equations	23.	Quiz 5: Bar Graphs and Fractions; Review
10.	Adding and Subtracting Fractions	24.	Special Project*
11.	Estimating Sums and Differences of Fractions	25.	Test
12.	Rounding Numbers to 10's	26.	Alternate Test*
13.	Estimating Answers to 10's	27.	Glossary and Credits
14.	Review: Math Symbols		

Unit 3: Whole Numbers and Fractions

Assignments

1.	Place Value	14.	Check Your Answers
2.	Rounding Numbers to 10's, 100's, and 1,000's	15.	Quiz 3: Estimation, Relations, and Fractions
3.	Multiply with Carrying to 10's	16.	Equivalent Fractions
4.	Multiplication Practice	17.	Learn Numbers to 100,000's
5.	Quiz 1: Place Value and Multiplication	18.	Equations
6.	Multi-Digit Addition and Subtraction	19.	Quiz 4: Equivalent Fractions and Equations
7.	Rounding and Estimating	20.	Reading and Solving Story Problems
8.	Fractions Equal to Whole Numbers	21.	Using Stem and Leaf Plots to Solve Word Problems
9.	Quiz 2: Addition and Subtraction, Rounding, and Fractions	22.	Line Graphs
10.	Estimate Answers to 1,000's	23.	Quiz 5: Story Problems
11.	Relation Symbols	24.	Special Project*
12.	Fractions	25.	Test
13.	Add and Subtract to 10,000's	26.	Alternate Test*
		27.	Glossary and Credits

Unit 4: Lines and Shapes

Assignments

1.	Plane and Solid Shapes	13.	Angles in Shapes
2.	Quiz 1: Plane and Solid Shapes	14.	Angles in Circles
3.	Practice Addition and Subtraction	15.	Review: Operation and Relation Symbols
4.	Place Value and Rounding	16.	Quiz 4: Fractions; Review
5.	Multiply with Carrying to 100's	17.	Review: Expanded Notation and Estimation
6.	Quiz 2: Number Sense	18.	Review: Fractions and Place Value
7.	Lines, Segments, Endpoints, Rays, Angles	19.	Quiz 5: Review
8.	Lines, Directions, and Maps	20.	Special Project*
9.	Quiz 3: Lines and Maps	21.	Test
10.	Review: Plane and Solid Shapes	22.	Alternate Test*
11.	Fractions	23.	Glossary and Credits
12.	Missing Number Problems		

Unit 5: Division and Measurement

Assignments

1. Introduction to Division
2. Multiplication
3. Addition and Subtraction
4. Review: Time and Number Sense
5. Quiz 1: Operations; Review
6. Linear Measurement
7. Capacity (Dry and Liquid Measurement)
8. Division Facts
9. Review: Multiplication
10. Quiz 2: Measurements and Division
11. Reading a Calendar
12. Using Models to Find the Formulas for Area and Perimeter
13. Perimeter and Area (1)
14. Perimeter and Area (2)
15. Quiz 3: Perimeter and Area
16. Missing Number Problems
17. Division Practice
18. Roman Numerals
19. Review: Regrouping
20. Patterns
21. Quiz 4: Number Sense and Operations
22. Special Project*
23. Test
24. Alternate Test*
25. Glossary and Credits

Unit 6: Multiplication and Fractions

Assignments

1. Prime and Composite Numbers
2. Multiples
3. Multiplication Facts For 11 and 12
4. Factors and Multiples
5. Division with Remainders
6. Quiz 1: Multiples, Factors, and Multiplication Facts
7. Proper and Improper Fractions
8. Fractions and Mixed Numbers
9. Equivalent Fractions
10. Quiz 2: Fractions and Mixed Numbers
11. Review: Measurements
12. Review: Division and Roman Numerals
13. Review: Rounding and Shapes
14. Quiz 3: Review of Multiple Concepts
15. Equations and Grouping
16. Problem Solving with Equations
17. Quiz 4: Equations
18. Special Project*
19. Test
20. Alternate Test*
21. Glossary and Credits

Unit 7: Fractions and Patterns

Assignments

1. Multiplication and Division
2. Factors, Multiples, and Variables
3. Missing Number Problems
4. Averages and Number Rules
5. Quiz 1: Number Sense, Missing Number Problems, and Averages
6. Fractions (1)
7. Fractions (2)
8. Review: Multiplication and Fractions
9. Fractions and Patterns
10. Quiz 2: Fractions
11. Review: Cardinal and Ordinal Numbers
12. Review: Rounding Numbers and Place Value
13. Review: Measurement
14. Quiz 3: Review of Multiple Concepts
15. Review: Shapes, Perimeter, and Area
16. Review: Operations and Money
17. Quiz 4: Review of Multiple Concepts
18. Special Project*
19. Test
20. Alternate Test*
21. Glossary and Credits

Unit 8: Division and Fractions

Assignments

1. Factoring and Place Value
2. Division (1)
3. Division (2)
4. Quiz 1: Factoring and Division
5. Fractions (1)
6. Fractions (2)
7. Fractions (3)
8. Quiz 2: Fractions
9. Missing Number Problems
10. The Metric System
11. Quiz 3: Missing Number Problems and the Metric System
12. Review: Time
13. Review: Multiplication
14. Review: Operations and Rounding
15. Review: Roman Numerals, Measurement, and Symbols
16. Quiz 4: Review of Multiple Concepts
17. Special Project*
18. Test
19. Alternate Test*
20. Glossary and Credits

Unit 9: Decimals and Fractions

Assignments

1. Decimals
2. Place Value and Number Comparison with Whole Numbers and Decimals
3. Equivalent Fractions and Decimals
4. Add and Subtract Decimals
5. Computation with Whole Numbers and Decimals
6. Money
7. Money Management
8. Project: Money Management
9. Quiz 1: Decimals and Money
10. Review: Fractions
11. Fractions with Unlike Denominators
12. Mixed Numbers
13. Quiz 2: Fractions and Mixed Numbers
14. Multiply and Divide
15. Multiplication of Whole Numbers
16. Division and Averages
17. Quiz 3: Multiplication and Division
18. Estimation
19. Ordered Pairs
20. Multiple Concept Review
21. Quiz 4: Estimation and Coordinate Pairs; Review
22. Special Project*
23. Test
24. Alternate Test*
25. Glossary and Credits

Unit 10: Graphing and Review

Assignments

1. Data Collection and Random Sampling
2. Project: Collecting Data
3. Project: Predicting and Reporting Data
4. Graphs
5. Quiz 1: Data Collection, Random Sampling, and Graphs
6. Whole Numbers
7. Decimal Numbers
8. Quiz 2: Operations with Whole and Decimal Numbers
9. Problem Solving with Fractions
10. Review: Fractions
11. Quiz 3: Fractions
12. Shapes
13. Word Problems and Equations
14. Quiz 4: Shapes, Equations, and World Problems
15. Special Project*
16. Test
17. Alternate Test*
18. Glossary and Credits

(*) Indicates alternative assignment