

Curriculum Guide for Arithmetic 6

Unit 1: Problem Solving, Numbers, & Algebra

7 Lessons

A6:1, A6:2, A6:11

Objectives	Methods	Resources	Assessment
The students will <ol style="list-style-type: none">1. estimate using rounding2. evaluate expressions using the order of operation3. evaluate numerical and simple algebraic expressions4. use powers and exponents5. solve equations by using mental math	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework• video	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Video – <i>Math Who Needs It</i>• Manipulatives• Base ten blocks• Posters	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 2: Statistics

9 Lessons

A6:1, A6:4, A6:7, A6:8, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. make and interpret frequency tables 2. construct bar and line graphs 3. interpret circle graphs 4. construct stem-and-leaf plots 5. find the mean, median, mode and range to describe a set of data 6. use ordered pairs to locate points and organize data	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework• game	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Newspaper• Beans• Posters• Coordinate Graph	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 3: Adding & Subtracting Decimals

6 Lessons

A6:1, A6:2, A6:4, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. model, read, and write decimals 2. compare decimals and order a set of decimals 3. round decimals 4. estimate decimals sums and differences 5. add and subtract decimals	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Manipulatives• Base 10 blocks• Meter stick• Posters• Grid paper	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 4: Multiplying & Dividing Decimals

9 Lessons

A6:1, A6:2, A6:3, A6:9

Objectives	Methods	Resources	Assessment
The students will 1. compute products using the distributive property 2. multiply decimals 3. find the perimeters and the areas of rectangles and squares 4. divide decimals by whole numbers and by decimals 5. use metric units of mass and capacity 6. change unit within the metric system	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Manipulatives• Base ten blocks• Grid paper• Posters	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 5: Using Number Patterns, Fractions & Ratios

10 Lessons

A6:1, A6:5

Objectives	Methods	Resources	Assessment
The students will 1. find the prime factorization of a composite number 2. find the greatest common factor of two or more numbers 3. express fractions and ratios in simplest form 4. express mixed numbers as improper fractions and vice versa 5. find the least common multiple of two or more numbers 6. express fractions as terminating and repeating decimals	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Manipulatives• Square tiles• Base ten blocks• Geoboards• Posters• Index cards• Scrabble letters• Dice	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 6: Adding & Subtracting Fractions

7 Lessons

A6:1, A6:2, A6:4, A6:5, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. round fractions and mixed numbers 2. add and subtract fractions with like and unlike denominators 3. add and subtract mixed numbers 4. add and subtract measures of time	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Manipulatives• Base ten blocks• Geoboards• Posters• Grid paper• Paper plates	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 7: Multiplying & Dividing Fractions

8 Lessons

A6:1, A6:2, A6:3, A6:4, A6:5, A6:9

Objectives	Methods	Resources	Assessment
The students will 1. multiply fractions and mixed numbers 2. find the circumference of circles 3. divide fractions and mixed numbers 4. change units within the customary system 5. recognize and extend sequences	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Geoboards• Posters• Game boards• Dice	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 8: Exploring Ratio, Proportion & Percent

7 Lessons

A6:1, A6:4, A6:6, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. express ratios and rates as fractions 2. solve proportions by using cross products 3. express percents as fractions and vice versa 4. express percents as decimals and vice versa 5. find the percents of a number	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Posters• Tangrams• Dominoes• Map• Base ten blocks	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 9: Geometry: Investigating Patterns

6 Lessons

A6:1, A6:9, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. classify and measure angles 2. draw angles and estimate measures of angles 3. name two-dimensional figures 4. describe and define lines of symmetry 5. determine congruence and similarity	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Geoboards• Posters• Protractor• Compass• Paper plates• Paint & paper• Mirror	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 10: Geometry: Understanding Area & Volume

6 Lessons

A6:1, A6:9

Objectives	Methods	Resources	Assessment
The students will 1. find the area of parallelograms 2. find the area of triangles 3. find the area of circle 4. identify three-dimensional figures 5. find the volume of rectangular prisms 6. find the surface area of rectangular prisms	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Posters• Grid paper• Geometric solids	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 11: Algebra: Investigating Integers

8 Lessons

A6:1, A6:2, A6:4, A6:10, A6:12

Objectives	Methods	Resources	Assessment
The students will <ol style="list-style-type: none">1. identify, name and graph integers2. compare and order integers3. add and subtract integers using models4. multiply and divide integers using models5. graph ordered pairs of numbers on a coordinate grid	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001• Posters• Counters• Integer Mats• Number line	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 12: Algebra: Exploring Equations

6 Lessons

A6:1, A6:2 A6:4, A6:10 A6:11, A6:12

Objectives	Methods	Resources	Assessment
The students will 1. solve addition and subtractions equations using models 2. solve multiplication and division equations using models 3. solve two-step equations using models 4. complete function tables 5. graph functions from function tables	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test

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Unit 13: Geometry: Using Probability

5 Lessons

A6:1, A6:4 A6:8, A6:9 A6:12

Objectives	Methods	Resources	Assessment
The students will <ol style="list-style-type: none">1. find and interpret the theoretical probability of an event2. predict the actions of a larger group using a sample3. find probability using area models4. find the probability of independent events	<ul style="list-style-type: none">• teacher lecture• teacher working examples on the board• teacher showing problems on overhead projector• student guided practice of problems in book• cooperative learning groups• individual assistance• partner work• worksheets• homework	<ul style="list-style-type: none">• Mathematics: Applications & Connections, Course 1, Glencoe, 2001	<ul style="list-style-type: none">• Completion of homework• Board work• Participations in class activities• Answering questions during class work• Four quizzes• Notebook quizzes• Speed drills• Mid-chapter test• Final test