



HIGH SCHOOL COURSE OUTLINE

Department	Mathematics			Course Title	Career Mathematics 1-2 SDC		
Course Code	5452	Grade Level	11-12	Course Length	2 semesters	Credits/ Semester	5
Required for Graduation		No	Meets H.S. Grad Requirement		No	Elective Credit	Yes
Prerequisites	Elective OR to take in place of Algebra, the IEP must state that student is on a Certificate of Completion track and not on Diploma Track						
Articulated with LBCC			No	Articulated with CSULB			No
Meets UC "a-g" Requirement			No	Meets NCAA Requirement			No

COURSE DESCRIPTION

Career Math SDC 1-2 is designed specifically for the needs of students with mild/moderate disabilities who are at the beginning, early, and intermediate levels of listening, speaking, reading, and writing proficiency. This course is designed to help students extend their knowledge of mathematics and develop appropriate consumer and career mathematical skills. Course content will cover such topics as computation, money skills, counting, classifying, sorting, budgeting, basic number operations, ratio, percent, algebra and geometry concepts, probability, measurement, and many real life applications. Technology will be integrated. This course is designed to meet the individual needs of the student as indicated on his/her Individual Education Plan and in addition, to extend student learning beyond the IEP. Students in this course cover the essential content and utilize the same basic textbook as their general education counterparts supplemented with content-parallel materials at a simplified reading level. It is designed to provide depth versus breadth of the content standards, and provide more modified content, comprehensible input, and literacy development in the content area.

The goal of this course is to enable the student with exceptional needs to improve his/her ability in all functional and basic math skills so that he/she can function as independently as possible at home, at school, in a vocational setting and in the community. A goal of mathematics is to teach students to use a calculator as a tool to interpret results in addition to obtaining an answer. Students in Career Math are encouraged to use a scientific or a four-function calculator throughout the course. Activities and topics covered in Functional Academics/Math may be contained in the California Alternate Performance Assessment (CAPA) and are included in California's Content Standards across the areas of Mathematics and Career Development.

GOALS: (Student needs the course is intended to meet)

Students will review and extend their mathematical knowledge of concepts from the California State Standards for Grades 6 and 7. CAHSEE review will be provided as needed. Improvement in reading and analyzing skills will be emphasized, along with both verbal and written communication of math concepts.

Students need to develop their number sense and apply it to functional tasks, to develop basic algebra concepts in order to interpret algorithms, sort objects by various attributes, and solve real life situations, to develop thinking skills in patterning and problem solving in order to describe and analyze patterns to represent real world phenomena.

Students will demonstrate an understanding of measurement and measurement tools including standard and nonstandard units of measure, in order to assist with activities in daily life tasks. They will use concrete models to learn about shape and dimension.

Students learn to apply mathematics to everyday life in order to make wise decisions in their personal finances, become more intelligent consumers, apply technology to real life situations, and become aware of the wide array of mathematically related career choices.

Academic Literacy in Content-Area Classes

- Completion of content courses is an essential requirement for students to receive a high school diploma.
- Content area classes play an important role in developing and strengthening students' progress towards reading, writing, listening and speaking.
- Students should be encouraged to expand their vocabulary and other language skills.
- When content-area information and materials have been made comprehensible through instruction in the content area class, special education students will progress through phases of developing academic literacy.
- The students' degrees of literacy will significantly affect the pace that students move through these phases.

The following are stages of literacy development and instructional components that will help teachers determine the appropriate pathway for developing literacy.

Emergent (Kinder- 2nd grade literacy level)

Students have beginning literacy skills.

A student who exhibits some of the following behaviors may be considered an emergent reader:

- decoding cvc, cvvc, cvce words
- reads and writes 0-200 sight words
- answers basic, literal comprehension questions (i.e., who, where)
- writes using inventive or phonetic spelling, basic sight words
- writes using simple sentences
- begins most sentences with the same pattern (I..., My dog...)
- uses few adjectives
- writing is off topic or strays

Students progressing through this level will:

- participate in modified group/class projects, discussions and oral presentations with non-verbal responses (e.g., gestures, drawings, graphic organizers) and/or single words or phrases with assistance (e.g., word walls, language structure walls).
- begin to participate orally in some content area reading strategies (especially pre-reading, KWL, and anticipation guides presented orally), with single words or phrases to analyze concepts from explicitly taught texts and other course reading materials.
- respond to Curriculum Embedded Assessment prompts (read to them and clarified for them) non-verbally (e.g., graphic organizers with drawings) and/or orally with single words or phrases.
- begin to use the alphabet to write in teacher-guided learning logs, selected homework and interactive notebooks, and to organize and record expository information on pictures, lists, charts and tables using single words or phrases.

- understand the need for using modified test-taking strategies (using previously taught vocabulary) on the required district/state assessments, such as, End of Course Exams (with alternate presentation and response), and STAR.

Early (2nd-3rd grade literacy level)

Students have little or no academic proficiency and varying levels of academic literacy skills and concepts.

A student who exhibits some of the following behaviors may be considered an early reader:

- reads cvc, cvvc, cvce words
- decodes blends, diagraphs, multisyllabic words
- reads and writes 200-300 sight words
- answers literal comprehension questions (i.e., why, how) and is beginning to consciously use comprehension strategies (predicting, rereading, summarizing, etc.)
- writes using correct cvc, cvvc, cvce spelling, sight words, attempts multi-syllabic words
- writes using simple sentences and attempts some complex sentences
- is beginning to use descriptive language
- writing is simple, on topic

Students progressing through this level will:

- participate in group/class projects, discussions and presentations with non-verbal responses (e.g., gestures, drawings, graphic organizers, role-playing) and/or oral or written single words, phrases and simple sentences with assistance (i.e., using the academic participation cards).
- participate orally in some content area reading strategies (especially pre-reading, KWL, academic participation cards, anticipation guides) or write using single words, phrases and/or simple sentences to analyze concepts from texts and other course reading materials.
- respond to Curriculum Embedded Assessment prompts (read to them and clarified for them) non-verbally (e.g., graphic organizers with drawings) and/or orally with single words, phrases and simple sentences in an outline format.
- use writing in a variety of ways such as, but not limited to, guided class note-taking, learning logs, interactive notebooks, representing information on pictures, lists, charts and tables using single words, phrases or simple sentences, and completing student handouts, selected homework, and modified class projects.
- understand the need for using test-taking strategies (using taught vocabulary) on the required district/state assessments, such as, End of Course Exams (with alternate presentation and response), and STAR.

Intermediate (4th and 5th grade literacy level)

Students have some academic proficiency about topics that have been explicitly taught to them.

A student who exhibits some of the following behaviors may be considered an intermediate reader:

- reads cvc, cvvc, cvce words, blends, and diagraphs
- decodes multisyllabic words
- reads and writes 400-500 sight words
- answers literal and inferential comprehension questions and consciously uses comprehension strategies (predicting, rereading, summarizing, etc.)
- writes using correct cvc, cvvc, cvce spelling, sight words, most multi-syllabic words
- writes using both simple and complex sentences

- uses descriptive language
- writing is on topic and interesting

Students progressing through this level will:

- participate in group/class projects, discussions and presentations with simple sentences and many attempts at more complex sentences.
- use content area reading strategies (especially pre-reading, KWL, academic participation cards, anticipation guides, Reciprocal Teaching and Question/ Answer Relationships) to analyze concepts from taught texts and other course reading materials.
- respond to Curriculum Embedded Assessment prompts (read to them and clarified for them) orally and with simple and some complex sentence structures in at least three paragraphs.
- use writing in a variety of ways such as, but not limited to, class note-taking, learning logs, interactive notebooks, response logs, and completing student handouts, homework, and class projects.
- understand the need for using test-taking strategies (using taught vocabulary) on the required district/state assessments, such as, End of Course Exams (with alternate presentation and response), and STAR.

**Should you have a student who is functioning higher than the above levels (i.e., fluent), it is suggested that you hold an IEP and discuss alternate options such as RSP placement or mainstreaming for content areas.

CALIFORNIA CONTENT STANDARDS:

Grade 6	Number Sense (NS)
1.0	Compare and order positive and negative fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages:
1.1	Compare and order positive and negative fractions, decimals and mixed numbers and place them on a number line.
1.2	Interpret and use ratios in different contexts.
1.3	Use proportions to solve problems.
1.4	Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned, and tips.
2.0	Students calculate and solve problems involving addition, subtraction a multiplication, and division:
2.1	Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation/
2.2	Explain the meaning of multiplication and division of positive fractions and perform the calculations.
Grade 6	Mathematical Reasoning (MR)
2.1	Use estimation to verify the reasonableness of calculated results.
Grade 6	Statistics, Data Analysis, and Probability (SDAP)
1.1	Compute the mean, median and mode of data sets.
2.5	Identify claims based on statistical data and, in simple cases, evaluate the validity of the claims.
3.0	Students determine theoretical and experimental probabilities and use these to make predictions about events:
3.1	Represent all possible outcomes for compound events in an organized way (e.g., tables, grids, tree diagrams) and express the theoretical probability of each outcome.
3.3	Represent probabilities as ratios, proportions, decimals between 0 and 1, and percentages between 0 and 100 and verify that the probabilities computed are reasonable; know that if P is the probability of an event, 1-P is the probability of an event not occurring.
3.5	Understand the difference between independent and dependent events.
Grade 6	Algebra and Functions (AF)
2.0	Students analyze and use tables, graphs, and rules to solve problems involving rates and proportions
2.1	Convert one unit of measurement to another

2.2	Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity.
2.3	Solve problems involving rates, average speed, distance and time.
Grade 7	Number Sense (NS)
1.1	Read, write, and compare rational numbers in scientific notation (positive and negative powers of 10) with approximate numbers using scientific notation.
1.2	Add, subtract, multiply, and divide rational numbers (integers, fractions, and terminating decimals) and take positive rational numbers to whole-number powers.
1.3	Convert fractions to decimals and percents and use these representations in estimations, computations, and applications.
1.6	Calculate the percentage of increases and decreases of a quantity.
1.7	Solve problems that involve discounts, markups, commissions, and profit and compute simple and compound interest.
2.1	Understand negative whole-number exponents. Multiply and divide expressions involving exponents with a common base.
2.2	Add and subtract fractions by using factoring to find common denominators.
2.3	Multiply, divide, and simplify rational numbers by using exponent rules.
2.4	Use the inverse relationship between raising to a power and extracting the root of a perfect square integer; for an integer that is not square, determine without a calculator the two integers between which its square root lies and explain why.
2.5	Understand the meaning of the absolute value of a number; interpret the absolute value as the distance of the number from zero on a number line; and determine the absolute value of real numbers.
Grade 7	Measurement and Geometry (MG)
1.1	Compare weights, capacities, geometric measures, times, and temperatures within and between measurement systems (e.g., miles per hour and feet per second, cubic inches to cubic centimeters).
1.2	Construct and read drawings and models made to scale.
1.3	Use measures expressed as rates (e.g., speed, density) and measures expressed as products (e.g., person-days) to solve problems; check the units of the solutions; and use dimensional analysis to check the reasonableness of the answer.
2.1	Use formulas routinely for finding the perimeter and area of basic two-dimensional figures and the surface area and volume of basic three-dimensional figures, including rectangles, parallelograms, trapezoids, squares, triangles, circles, prisms and cylinders.
2.2	Estimate and compute the area of more complex or irregular two- and three-dimensional figures by breaking the figures down into more basic geometric objects.
2.3	Compute the length of the perimeter, the surface area of the faces, and the volume of a three-dimensional object built from rectangular solids. Understand that when the lengths of all dimensions are multiplied by a scale factor, the surface area is multiplied by the square of the scale factor and volume is multiplied by the cube of the scale factor.
2.4	Relate the changes in measurement with a change of scale to the units used (e.g., square inches, cubic feet) and to conversions between units ($1 \text{ square foot} = 144 \text{ square inches}$ or $[1 \text{ ft}^2] = [144 \text{ in.}^2]$, 1 cubic inch is approximately $16.38 \text{ cubic centimeters}$ or $[1 \text{ in.}^3] = 16.38 \text{ cm}^3$).
3.2	Understand and use coordinate graphs to plot simple figures, determine lengths and areas related to them, and determine their image under translations and reflections.
3.3	Know and understand the Pythagorean theorem and its converse and use it to find the length of the missing side of a right triangle and the lengths of other line segments and, in some situations, empirically verify the Pythagorean theorem by direct measurement.
3.4	Demonstrate an understanding of conditions that indicate two geometrical figures are congruent and what congruence means about the relationships between the sides and angles of the two figures.

OUTLINE OF CONTENT AND RECOMMENDED TIME ALLOTMENT:

Community-Based Instruction (CBI):

Due to the difficulty this group of students have in generalizing and transferring learning, it is imperative that students practice their numeracy skills in the environments in which they will be using them. Community-Based Instruction becomes an invaluable tool for assisting the student with a severe cognitive impairment to learn, retain and master the skills needed to become an effective and logical consumer.

Assistive Technology (AT) and Augmentative/Alternative Communication (AAC):

Assistive Technology (AT) and Augmentative/Alternative Communication (AAC) devices and materials that have been assigned to the student through IEP documentation need to be integrated into the program whenever possible/appropriate.

Content sequencing and time allocations are only suggestions and may be adjusted to suit school site curriculum plans and student needs.

Symbols used in this document:

AGS # Refers to the pages in the text: Harmeyer, Kathleen M. Consumer Mathematics. Minnesota: American Guidance Service, Inc. (AGS) Publishing 2003.

SF # Refers to the pages in the supplemental text: Bolster, L. Carey, Gipson, Joella H., and Woodburn, H. Douglas. Consumer and Career Mathematics. Illinois: Scott Foresman and Company, 1989

Whole Numbers, Decimals, and Fractions

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6-NS-1.1, Gr. 7 NS 1.2	Rounding whole numbers and decimals	AGS 15-16, 50 SF 4-5	Pages 1-24 (Grade 7 Number Sense)	Decimal Denominator Estimate Factor Greatest common factor Hundred Numerator Product Quotient Reasonable Answer Round Solution Sum Ten Thousand Whole Number	2 Weeks
Gr. 6-NS-1.2, Gr. 7 NS 1.2	Adding & Subtracting whole numbers & decimals	AGS 12, 14, 24, 36-38 SF 6-7			
Gr. 6-NS-1.2, Gr. 7 NS 1.2	Multiplying Whole Numbers and Decimals	AGS 2-3, 12-14, 17, 20, 39 SF 8-9			
Gr. 6-MR-2.1	Estimation	AGS 3, 6-7, 20 SF 10-11, 168-169			
Gr. 6-NS-2.3, Gr. 7 NS 1.2	Dividing whole numbers & decimals	AGS 18, 42-44, 46, 48 SF 12-13			
Gr. 6-NS-1.1, Gr. 7 1.3	Comparing & Renaming Fractions & Mixed Numbers	AGS 66-67 SF 14-15			
Gr. 6-NS-2.1, Gr. 7 NS 1.2	Multiplying and Dividing Fractions & Mixed Numbers	SF 16-17			
Gr. 6-NS-2.1, Gr. 7 NS 1.2	Adding & Subtracting Fractions & Mixed Numbers	AGS 4-5 SF 18-19			

Expressions, Equations, Proportions, and Percents

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 7 1.2, Gr. 7 AF 2.0	Adding & Subtracting Equations	SF 24-25	Pages 25-43 (Grade 7 Algebra & Functions)	Cross-product Decrease Discount Increase Lowest terms Mark-up Percent Percentage Proportion Rate Ratio	2 Weeks
Gr. 7 AF 2.0	Multiplication & Division Equations	SF 26-27			
Gr. 7 AF 2.0	Two Step Equations	SF 28-29			
Gr. 6-SDAP-3.3	Ratio & Proportion	AGS 142-146 SF 30-31	Pages 1-24 (Grade 7 Number Sense)		
Gr. 6-SDAP-3.3 Gr. 7 NS 1.2 & 1.3	Writing Decimals & Fractions as Percents	SF 32-33			
Gr. 6-SDAP-3.3, Gr. 7 NS 1.2 & 1.3	Writing Percents as Decimals & Fractions	AGS 19 SF 34-35			
Gr. 6-SDAP-3.3, Gr. 7 NS 1.2 & 1.3	Finding Percent of a Number	AGS 58, 62 SF 36--41			
Gr. 6-SDAP-3.3, Gr. 7 NS 1.7	Percent of Increase & Decrease	AGS 61 SF 42-43			
Gr. 6-MR-2.1	Estimating Answers to Percent Problems	SF 44-45			

Measurement and Geometry

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 7 MG-1.0	Customary Units of Length	AGS 68-71, 96 SF 50-51	Pages 44-57 (Gr. 7 Geometry & Measurement)	Angles: Acute, Right, Obtuse, Straight Centimeter/cm Circle: Center, Diameter, Radius, Circumference Cup/C., Pint/Pt. Dozen Fluid Ounce/fl. Oz. Foot /Ft., Yard/Yd. Gallon/Gal. Gram/g. Hour/Hr., Day, Week/Wk., Year/Yr. Inch/ In. Kilogram/kg. Kilometer/km Length, Height Liter/L; Meter/m Milligram/mg. Milliliter/ML. Millimeter/mm Minute/Min. Ounce/Oz Parallel, Intersecting Perimeter/P, Area/A Perpendicular Point, Line, Plane Polygons: Triangle, Quadrilateral, Pentagon, Hexagon, Octagon Pound/Lb. Quart/Qt., Second/Sec. Segment, Ray Square Inch/sq. in. Square foot/sq. ft. Square yard/sq. yd Temperature Celsius/°C Fahrenheit/°F Ton Volume Watt, Kilowatt	4 Weeks
Gr. 7 MG-1.0	Metric Units of Length	AGS 98 SF 52-53			
Gr. 7 MG-1.0	Customary Units of Capacity & Weight	AGS 34-35, 37 SF 54-55			
Gr. 7 MG-1.0	Metric Units of Capacity & Mass	SF 56-57			
Gr. 7 MG-1.1	Temperature & Time	AGS 140 SF 58-89			
Gr. 7 MG 2.4	Converting Units	AGS 142, 155			
Gr. 7 MG-1.1	Computing with Measures	AGS 72 SF 60-61			
Gr. 7-MG 1.0	Lines & Angles	SF 62-63			
Gr. 7-MG-2.0	Polygons and Circles	SF 64-65			
Gr. 7-MG-2.0	Perimeter & Area of a Polygon	AGS 176-179 SF 66-67			
Gr. 7 MG- 2.1	Circumference & Area of a Circle	SF 68-69			
Gr. 7 MG- 2.1	Volume of a Rectangular Solid	SF 70-71			

Managing a Household

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 MR-2.1, Gr. 7 NS 1.2	Renting a Home	AGS 82-83, 106 SF 320-323	Pages 1-24 (Grade 7 Number Sense)	Adjustable rate Amortization table Annual Net Income Assessed valuation Closing costs Commission Coverage rate Estimate Financed Insurance Kilowatt-hour Landlord Lease Market value Meters or dials Mortgage Property Insurance Rate of Assessment Real Estate Tax Rent Renter's insurance Tax rate Term Interest Units Utilities Variable Rate	2 Weeks
Gr. 7 MR-2.1	Buying a Home	AGS 84-93 SF 304-343			
Gr. 6 NS 1.4	Adjustable and Fixed-Rate Mortgage	AGS 88-93 SF 344-351			
Gr. 6 NS 1.4	Mortgage/Homeowner's Insurance	AGS 102-105 SF 352-353			
Gr. 6 NS 1.4	Real Estate Taxes	SF 354-355			
Gr. 6 MR-2.4, Gr. 7 NS 1.2	Utilities	AGS 94-101 SF 326-327			
Gr. 6 MR-2.1, Gr. 7 NS 1.2	Insurance	AGS 102-106 SF 324-325			

Improving Your Home

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 7-MR-2.1	Buying Furniture and Appliances	AGS 170-175	Pages 1-24 (Grade 7 Number Sense)	Area Coverage Fee, inches Fertilizer Gallons Insulation Materials Scale Drawing Sq. Ft./Sq. In. Square Foot/Feet Surveyor	2 Weeks
Gr. 7 MR-2.1	Surveyor	SF 364-365			
Gr. 7 MR-2.1	Cost of Installing a Driveway	SF 370-371			
Gr. 7 MR-1.1	Bricklayer	SF 372-373			
Gr. 6 MR-2.1, Gr. 7 NS 1.2	Flooring	AGS 188-193, 202 SF 328-329			
Gr. 6 MR-2.1, Gr. 7 NS 1.2	Painting and Wallpaper	AGS 180-187 SF 330-333			
Gr. 6 MR-2.1	Additions	AGS 194-197			
Gr. 6 MR-2.1	Lawns and Fencing	AGS 198-202			

Probability

California Content Standards	Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommend. Aids	Time
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California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 SDAP-3.1	Tree Diagrams	SF 100-101	Pages 58-74 (Grade 7 Statistics, Data Analysis, and Probability, Mathematical Reasoning)	Dependent Events Experiment Experimental Probability Favorable Outcomes Fundamental Counting Principal Independent Events Odds Outcomes Permutation Sample Space Tree Diagram Unfavorable Outcomes	2 Weeks

Statistics

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 SDAP-3.1	Organizing Data	SF 106-117	Pages 58-74 (Grade 7 Statistics, Data Analysis, and Probability, Mathematical Reasoning)	Bar Graph Broken-line Graph Central Angles Circle Graphs Frequency Table Histogram Leaf Mean Measure of Central Tendency Median Mode Random Sample Range Raw Data Statistics Stem Stem & Leaf Plot	2 Weeks
Gr. 6 SDAP 1.2	Reading and Interpreting Data	AGS 250, 254			
Gr. 6 SDAP 1.1	Average	AGS 98-99			
Gr. 6 SDAP-3.1	Bar Graphs & Histograms	SF 118-119			
Gr. 6 SDAP 3.1	Broken-Line Graphs	SF 120-121			
Gr. 6 SDAP 3,1	Circle Graphs and Pictographs	AGS 250-254 SF 122-123, 317			
Gr. 6 SDAP 1.3	Measures of Central Tendency	SF 124-125			
Gr. 7 SDAP 1.1	Stem-and-Leaf Plots	SF 126-127			
Gr. 7 SDAP 1.0	Statistics in the Media	SF 128-129			

Income

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.3	Hourly & Overtime Rate	AGS 2-7, 10-11 SF 138-139	Pages 58-74 (Grade 7 Statistics, Data Analysis, and Probability, Mathematical Reasoning)	Commission Deductions Federal Income Tax FICA Gross Pay Hourly rate Net Pay Overtime rate Piecework Salary Social Security Tax Take-home pay Time and a half Tips Wages	2 Weeks
Gr. 6 NS 1.3	Hourly Rate plus Tips	AGS 12 SF 140-141			
Gr. 6 NS 1.3	Piecework	AGS 13-14			
Gr. 6 NS 1.3	Salary	AGS 17-18			
Gr. 6 NS 1.3	Commission	AGS 20-23 SF 142-147			
Gr. 6 NS 2.0	Bookkeeper	SF 144-145			
Gr. 6 NS 2.0	Payroll Deductions	SF 148-149			
Gr. 6 NS 2.1	Payroll Deductions: Social Security Tex	SF 150-151			
Gr. 6 NS 2.1	Net Pay	AGS 24-26 SF 152-153			

Buying Goods and Food

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 2.3	Nutrition	AGS 147-151 SF 160-161	Pages 1-24 (Grade 7 Number Sense)	Bill or check Calorie Catalog Consumer Daily rate Daily value Discount Expiration date Grocery Meal Cost Menu Minimal Charge Notions Nutrient Pattern Recommended dietary allowances Sales tax Seasonal Sales Split the check Trace international units (TIU) Unit price	2 Weeks
Gr. 6 NS 2.3	Calorie Usage	AGS 140-141, 152-157 SF 162-163			
Gr. 6 NS 2.3	Grocery Shopping	AGS 42-43 SF 164-167			
Gr. 6 NS 2.1	Comparing Meal Costs/Comparison Shopping	AGS 32-35, 48-49 SF 168-169			
Gr. 6 NS 2.1	Catalog and Online Buying	AGS 63-65, 76 SF 170-171			
Gr. 6 NS 1.4	Seasonal Sales/Discount/Coupons	AGS 38-41, 60, 62 SF 172-173			
Gr. 6 AF 2.3	Rental Clerk	SF 174-175			
Gr. 6-NS-2.0	Eating Out	AGS 50-52			
Gr. 6-NS-2.0	Making Change	AGS 36-37			
Gr. 6-NS-2.0	Unit Price	AGS 46-47			
Gr. 6-NS-2.0	Sales Tax	AGS 58-59			
Gr. 6-NS-2.0	Making Your Own Clothes	AGS 68-71			
Gr. 6-NS-2.0	Recipes and Food Preparation	AGS 158-164			

Budgeting Your Money

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 MR2.1, Gr. 7 NS 1.2	Average Income	AGS 248-249	Pages 1-24 (Grade 7 Number Sense)	Amount budgeted Annual expenses Balancing a budget Budget Budget Guidelines Circle graph Expenses Fixed monthly expenses Monthly reserve Variable monthly expenses	2 Weeks
Gr. 6 MR 2.1, Gr. 7 NS 1.2	Analyzing Spending Habits	SF 182-185			
Gr. 6 MR 1.2, Gr. 7 NS 1.2	Planning a Budget	AGS 250-256 SF 186-191			
Gr. 6 MR 1.2, Gr. 7 NS 1.2	Balancing a Budget	AGS 257-262 SF 192-193			
Gr. 6 MR 1.2, Gr. 7 NS 1.2	Achieving Goals by Budgeting	AGS 262			

Banking and Investing

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6-NS-2.0, Gr. 7 NS 1.2	Interest	AGS 268-276	Pages 1-24 (Grade 7 Number Sense)	Check Checking account Compound Deposit Interest Rate Reconcile Simple interest	2 Weeks
Gr. 6-NS-2.1, Gr. 7 NS 1.2	Checking Accounts	AGS 277-281 SF 208-217			
Gr. 6-NS-2.1, Gr. 7 NS 1.2	Reconciling Bank Statements	AGS 282-285			
Gr. 6 NS 1.4, Gr. 6 NS 2.0, Gr. 7 NS 1.7	Stocks and Bonds	AGS 286-293 SF 426-427, 432-435			

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.4, Gr. 6 NS 2.0, Gr. 7 NS 1.7	Certificate of Deposit	SF 428-431		Statement Withdraw Automated Teller Machine (ATM) Average Daily Balance Broker Certificate of Deposit Charge account Common Stock Credit Dividends Down Payment Equity Finance Charge Financed Home Equity Loan Income stock Installments Interest Layaway Level-Payment Loan Loss Max out a credit card Minimum Payment Monthly statement Mutual Funds Overdraw Principal Processed Profit Promissory Note Redemption Value Register Savings accounts Savings Bond Shareholders Shares Time Transaction	

Buying and Maintaining a Car

California Content Standards		Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.4, Gr. 6 NS 2.1, Gr. 6 MR 2.1, Gr. 7 NS 1.7	Buying a New or Used Car	AGS 112-115 SF 256-263	Pages 1-24 (Grade 7 Number Sense)	Bodily Injury Coverage Collision Insurance Comprehensive Insurance Depreciation Financing Fuel Economy Rate Liability Insurance Mechanic Net price Odometer Offer Premiums Profit Property Damage Coverage Sticker or Base Price Total Sale Price Trade-in-allowance Transportation	2 Weeks
	Financing a Car	AGS 116-119 SF 264-267			
	Automobile Insurance	AGS 120-121 SF 284-289			
	Computing Miles Traveled	AGS 122-124			
	Computing Gas Mileage	AGS 125-131 SF 276-277			
	Computing the Cost of Repairs	AGS 132-134 SF 278-283, 290-293			

Traveling

California Content Standards		Adopted Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 AF 2.3	Reading/Using Maps	AGS 208-215 SF 300-301	Pages 1-24 (Grade 7 Number Sense)	Bus schedule Distance Exchange rate Expense Itinerary Legend Lodging Peak/Off-peak hours Recreation Rental Scale Single or double occupancy Straight-line distance Time zones Tourist/Peak season	1 Week
	Time Zones and Travel Schedules	AGS 216-217, 235-237 SF 302-303			
Gr. 6 NS 2.1, 2.3	Expenses on the Road/Cab Fares	AGS 218-219, 220, 224 SF 304-305			
Gr. 6 NS 1.4, 2.1	Renting a Car	AGS 229-234 SF 306-307			
Gr. 6 NS 1.4, 2.1	Air Travel	AGS 238-242 SF 308-309			

Paying Taxes

California Content Standards		Adopted Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.4, Gr. 6 NS 2.0	The Federal Budget	AGS 304-309	Pages 1-24 (Grade 7 Number Sense)	Adjusted Gross Assessed value Balance due Deductions Dependents Effective tax rate Exemptions Expenditures Gross Income Income Itemized Deductions Payment Property tax Refund Revenue Tax Liability Taxable interest income Tax-exempt interest income Total Income	2 Weeks
	Paying Taxes	AGS 310-315 SF 384-391, 398-399, 242-243			
	Refund or Balance Due	AGS 316-318 SF 392-395			
	Property Tax and Rates	AGS 319-324			
	State Income Tax	SF 398-399			
	Federal Income Taxes	SF 242-243			

Health and Life Insurance

California Content Standards		Adopted Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.4, Gr. 6 NS 2.0, Gr. 7 NS 1.7	Health Insurance	SF 406-407	Pages 1-24 (Grade 7 Number Sense)	Annual Premium Beneficiaries Benefit Period Cash Value Deductible Disability Income	2 Weeks
	Term Life Insurance	SF 408-409			
	Straight Life Insurance	SF 410-411			
	Disability Income Insurance	SF 412-413			
	Insurance Agent	SF 414-415			

California Content Standards		Adopted Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
	Insurance & Savings Plans	SF 416-419			

Preparing for Careers

California Content Standards		Adopted Textbook Correlation	CAHSEE Practice Workbook Pages	Key Vocabulary and Recommended Aids	Time
Gr. 6 NS 1.4, Gr. 6 NS 2.0, Gr. 7 NS 1.7	Auto Mechanics, Carpenters, Drafters, Electricians, Machine Operators, Sales Clerks	AGS 330-348	Pages 1-24 (Grade 7 Number Sense)	Amps Blueprints Drafters Driven gear Driver gear Ohms Revolutions per minute (RPM) Scale drawing Square root Volts	1 Week
Gr. 6 NS 1.4, Gr. 6 NS 2.0, Gr. 7 NS 1.7	Automobile Mechanic, Automobile Salesperson, Bookkeeper, Bricklayer, Credit Counselor, Economist, Insurance Agent, Interior Designer, Investment Counselor, Nutritionist, Real Estate Agent, Rental Clerk, Steel Salesperson, Tax Consultant, Travel Agent	S 280, 268, 144, 372, 234, 194, 414, 332, 436, 160, 356, 174, 146, 396, 308			

APPLICATION OF COURSE CONTENT

Career Connection:

Related Major Skills & Characteristics - Problem Solving , Organizational Skills, Numerical Computation, Ability to Analyze & Interpret Data, Critical Thinking, Computer Literacy, Logical Thinking, Team Skills Efficient, Systemizing Skills, Advanced Quantitative Skills, Testing Skills

Related Career Titles – Students who major in mathematics will be prepared for any of the following careers.
 *Accountant *Contract Administrator *Information Scientist *Actuary *Cost Estimator/Analyst *Inventory Control Specialist *Aerospace Engineer *Cryptographer/Cryptologist *Investment Banker *Air Traffic Controller *Data Control Administrator *ISO 2000 Specialist *Applications Programmer *Data Processing Manager *Market Research Analyst *Applied Science Technologist *Database Manager
 *Mathematician *Artificial Intelligence Programmer *Demographer *Media Buyer *Astronomer *Econometrician *Meteorologist *Banking/Credit/ Investment Mgr *Economist *Mortgage Researcher
 *Biometrician/ Biostatistician *EDP Auditor *Network Programmer *Commodity Manager *Employee Relations Specialist *Numerical Analyst *Compensation/Benefits Administrator *Engineer *Operations Research Analyst *Computer Consultant *Engineering Lab Technician *Physicist *Computer Engineer
 *Environmental Technologist *Pollution Meteorologist *Computer Facilities Mgr *Estate Planner
 *Production Manager *Computer Installation *External Auditor *Production Support Specialist *Computer Marketing/Sales Rep *Financial Auditor *Psychometrician *Computer Programmer *Financial Consultant
 *Public Health Statistician *Computer Scientist *Financial Manager *Purchasing/Contract Agent *Computer-Aided Design Tech. *Hydro Geologist *Quality Assurance Analyst *Consumer Loan/Credit Officer
 *Hydrologist *Rate Analyst *Cartographer *Software Engineer *Teacher: Science/Math/Computers *Research Analyst *Software Support Specialist *Technical Support Rep. *Risk & Insurance Specialist *Statistician
 *Technical Writer *Risk Analyst *Systems Analyst *Transportation Planner *Robotics Programmer *Systems Engineer *Treasury Management Specialist *Satellite Communications Specialist *Systems Programmer
 *Underwriter *Software Development Specialist *Urban Planner *Value Engineer *Weight Analyst

Service Learning – Students who are Advanced Proficient on the Content Standards Tests or those who are earning an A in the course, can participate in after school tutoring programs to assist other students in learning mathematics. All hours can be credited towards the Service Learning requirement.

METHODS: A variety of instructional strategies will be utilized to accommodate all learning styles including, but not limited to:

Teachers will use a variety of instructional methods and strategies including large, small, and individualized instructional groupings. Methods of instruction should be determined by expected student outcomes, the particular learning goal, and the preferred learning modality of the student. Instructional strategies may include:

- Direct instruction
- Use of realia
- Community Based Instruction
- Generalization of skills over multiple settings with a variety of instructors and materials
- Comprehensible input, modeling, guided practice, independent practice
- Use of a variety of multimedia (including appropriate computer software) to present, practice and reinforce skills
- Teacher demonstration and response
- Small group discussion
- Individual study
- Consumer related materials (checks, deposit slips, etc.)

Lesson Design & Delivery: Teachers will incorporate these components of lesson design during direct instruction and inquiry activities. The order of components is flexible, depending on the teacher’s vision for the individual lesson. For instance, the objective and purpose, while present in the teacher’s lesson plan, are not made known to the students at the beginning of an inquiry lesson.

<p>Essential Elements of Effective Instruction Model for Lesson Design Using Task Analysis</p>	<p>Anticipatory Set Objective Standard Reference Purpose Input Modeling Check for Understanding Guided Practice Closure Independent Practice</p>
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Some components may occur once in a lesson, but others will recur many times. Checking for understanding occurs continually; input, modeling, guided practice and closure may occur several times. There may even be more than one anticipatory set when more than one content piece is introduced.

Active Participation: Teachers will incorporate the principles of active participation and specific strategies to ensure consistent, simultaneous involvement of the minds of all learners in the classroom. Teachers should include both covert and overt active participation strategies, incorporating cooperative learning structures and brain research. Some of the possible active participation strategies include:

COVERT	OVERT (Oral)	OVERT (Written)	OVERT (Gestures)
<ul style="list-style-type: none"> • Recall 	<ul style="list-style-type: none"> • Pair/Share 	<ul style="list-style-type: none"> • Restate in Journals / Notes 	<ul style="list-style-type: none"> • Hand Signals
<ul style="list-style-type: none"> • Imagine 	<ul style="list-style-type: none"> • Idea Wave 	<ul style="list-style-type: none"> • Response Boards 	<ul style="list-style-type: none"> • Model with

			Manipulatives
• Observe	• Choral Response	• Graphic Organizers	• Stand up/ Sit down
• Consider	• Give One, Get One	• Folded Paper	• Point to Examples
	• “Foggiest” point	• Ticket Out of Class	
	• Socratic Seminar		
	• Cooperative Discussion Groups (i.e. Talking Chips, Gambit Chips)		

Literacy and Differentiation Strategies: Learning styles and learning challenges of your students may be addressed by implementing combinations of the following:

<p>Reading Strategies in Mathematics</p> <ul style="list-style-type: none"> ▪ Learning Logs ▪ Pre-teaching ▪ Vocabulary ▪ Pre-reading ▪ Text Structures ▪ Trail Markers ▪ Reciprocal Teaching ▪ Functional Text ▪ Anticipation Guide 	<p>SDAIE Strategies for English Learners</p> <ul style="list-style-type: none"> ▪ Tapping/Building Prior Knowledge (Graphic Organizers, Schema) ▪ Grouping Strategies ▪ Multiple Intelligences ▪ Adapt the Text ▪ Interactive Learning (Manipulatives, Visuals) ▪ Acquisition Levels ▪ Language Sensitivity ▪ Lower the Affective Filter (including Processing Time) ▪ Home/School Connection (including Cultural Aspects) 	<p>Strategies for Special Needs Students</p> <ul style="list-style-type: none"> ▪ Interactive Learning (manipulatives, visuals) ▪ Adapt Text ▪ Homogeneous Grouping ▪ Small Group Instruction ▪ Direct Instruction ▪ Graphic Organizers ▪ Partner ▪ Build Prior Knowledge ▪ Differentiate Instruction ▪ Use of Instructional Accommodations: (i.e., Change of response, scheduling, presentation, and setting) ▪ Modify/Adapt the Curriculum: (i.e., Change quantity, timing, level of support, input, difficulty, output, participation, have alternate goals)
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MATERIALS USED IN TEACHING THE COURSE: In addition to the basic text, a variety of instructional tools will be used to meet the needs of all students

Basic text: Harmeyer, Kathleen M. Consumer Mathematics. Minnesota: AGS Publishing 2003.

Supplemental text: Bolster, L. Carey, Gipson, Joella H., and Woodburn, H. Douglas. Consumer and Career Mathematics. Illinois: Scott Foresman and Company, 1989

Supplementary materials:

- Calculators
- www.practicalmoneyskills.com
- Videos
- Computer software
- Outside resources (banking material, tax preparation material, consumer information)
- Touch Math (PCI)
- Touch Money (PCI)

- Math to Know, Houghton Mifflin/Great Source 2000
- LBUUSD Portfolio Workbook (appropriate levels K-12)
- News-2-You
- Catalogues, advertisements, shopping lists, etc.
- Coins and bills
- Checkbook
- Coin stamps
- Coins for overhead projector
- Number cards, number lines
- Clocks and calendars
- Organizers
- Measuring tools (i.e.: measuring cups, spoons)
- Vocational objects for sorting (i.e.: nuts and bolts, utensils, and buttons)
- Sorting mat
- Manipulatives (i.e.: Unifix Cubes)
- Geometric shapes (2-D and 3-D)
- Geometric solids
- Scales and 10 gram masses
- Base Ten Blocks for overhead projector
- Fraction circles for overhead projector
- Squares for overhead projector
- Pattern Blocks for overhead projector
- Computer software

Related Career Resources

- There are many web sites that will help with career selection such as Eguidance.com, BRIDGES.com, and icouldbe.org. The software package COIN JR also has career information. Video tapes such as the Futures with Jamie Escalante - School to Career shows how math is used in various careers (FASE productions 800-404-FASE). Other videos are Career Futures. Call the Career/Tech Ed Office (562-989-7872 x 291) for more information on careers.

EVALUATION: Student achievement in this course will be measured using multiple assessment tools including but not limited to chapter tests, cumulative tests (including an end-of-course exam), quizzes, homework, classwork, notebooks, and projects.

Textbook	Diagnosis	Monitor	Evaluate
AGS	Practice Exercises	Workbook Activities Practice Exercises Chapter Review	Chapter Test Chapter Project Midterm Mastery Test Final Mastery Test
Scott, Foresman and Company	Warm-Up Review: Cumulative Practice	Classroom Exercises: Checking for Understanding Extra Practice Reteaching Chapter Review	Chapter Test Cumulative Review Cumulative Chapter Test

Scoring Guide for Written Response/Projects

Score	Description
4	The student response thoroughly accomplishes the task. <ul style="list-style-type: none"> • Shows thorough understanding and use of the central mathematical ideas(s) • Includes appropriate and accurate mathematical computations

Score	Description
	<ul style="list-style-type: none"> • Presents mathematical knowledge and ideas clearly and skillfully, using combinations of mathematical symbols and/or visual means as supporting evidence
3	<p>The student response substantially accomplishes the task.</p> <ul style="list-style-type: none"> • Shows an essential grasp of the central mathematical idea(s) • Includes appropriate and generally correct mathematical computations • Presents mathematical knowledge and ideas clearly with supporting evidence
2	<p>The student response partially accomplishes the task.</p> <ul style="list-style-type: none"> • Shows a limited grasp of the central mathematical ideas(s) • May include incomplete and/or misdirected mathematical computations • Presents mathematical knowledge and ideas in an unclear manner or without supporting evidence
1	<p>The student response makes little or no progress toward accomplishing the task.</p> <ul style="list-style-type: none"> • Shows little or no grasp of the central mathematical idea(s) • Includes mathematical computations that are incorrect or inappropriate • Presents mathematical knowledge and ideas in a barely (if at all) comprehensible manner

Special Education Accommodations: Students must participate in assessments using the accommodations documented on their IEP. Common accommodations used in math are:

- Read aloud- read math problems aloud to the student to ensure you are assessing the student's skills in math and not in reading.
- Calculator*- students should use a calculator if they continue to struggle in memorizing or computing math facts. If the student's limited ability in computation is holding them back from learning other content and skills, a calculator may be the accommodation that the student needs to access the remainder of the curriculum. (*Note: For state and district assessments, the use of a calculator is considered a modification).
- Extended time: This accommodation is often misused. Students require this accommodation when, in instruction, they struggle to *complete* a task or an assessment. If students are given additional time and still not completing the assessment because they are unable to do the work- this is not a valid use of extended time. Extended time allows students longer processing time, or additional time to physically write the answers etc.
- Other accommodations: any other accommodations documented in the IEP should be allowed during instruction and assessment. Accommodations are what help the student access the curriculum.

Grading Policy: A common grading policy ensures consistency between schools and classrooms across the district.

Suggested Percent of Grade

Classwork	10-15%
Homework	10%
Notes/Projects	10-15%
Chapter Tests	25% - 30%
Quizzes	20% - 25%
Cumulative Tests/End-Of-Course Exam	10% - 15%

Standard Grading Scale

A =	90% - 100%
B =	80% - 89%
C =	70% - 79%
D =	60% - 69%
F =	Below 60%

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 School/Office: Special Education Curriculum Office
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