AVENTA LEARNING

Alignment Document

State of Alaska
And
Aventa Learning Consumer Math

Consumer Math
2005-2007 Benchmark Blueprint

State Standard Number	State Standard Area / Description	Unit Name	Course Topic Description
A	A student should understand mathematical facts, concepts, principles, and theories.		
A.1	understand and use numeration		
A.1.a	numbers, number systems, counting numbers, whole numbers, integers, fractions, decimals, and percents	All about jobs	Multiplication and Division of Whole Numbers and Decimals
		All about jobs	Percents to Decimals or Fractions
		All about jobs	Percent of a Number
		Wages	Division of Fractions
		Wages	Time Sheets And Time Cards
		Wages	Multiplication of Fractions
		Personal Finances	Purchasing Power
		Personal Finances	Budgets
		Personal Finances	Budgeting Expenses
		Recreation and Spending	Health Clubs and Fitness Classes
		Transportation	Busses, Trains, Subways, and Taxis
		Automobile Expenses	Buying a New Automobile
A.1.b	irrationals and complex numbers		

A.2	select and use appropriate systems, units, and tools of measurement, including estimation	Buying Food and Eating Out	Computing Unit Cost
		Transportation	Computing Distance
		Transportation	Cost Per Gallon
		Wages	Forms and Time Cards (time units)
A.3	perform basic arithmetic functions, make reasoned estimates, and select and use appropriate methods or tools for computation or estimation including mental arithmetic, paper and pencil, a calculator, and a computer	All About Jobs	Decimal Review
		All About Jobs	Working with Wages
		All About Jobs	Review of Percents
		All About Jobs	Order of Operations
		All About Jobs	Wages and Tips
		Wages	Review of Fractions
		Wages	Forms and Time Cards
		Wages	Review of Equations
		Wages	Salary and Commission
A.4	represent, analyze, and use mathematical patterns, relations, and functions using methods such as tables, equations, and graphs	Wages	Solving Equations: Multiplication and Division
		Wages	Solving Two-Step Equations
		Wages	Review of Equations
		Wages	Salary and Commission
		Wages	Solving Equations: Addition and Subtraction
		Wages	Commission
		Deductions, Taxes, and Insurance	Life Insurance
		Recreation and Spending	Movies and Shows
		Personal Finances	The Costs of Raising a Family
		Checking and Savings Accounts	Exponential Equations
A.5	construct, draw, measure, transform, compare, visualize, classify, and analyze the relationships among geometric figures	Housing	Decorating and Remodeling
		Housing	Scale Drawings

A.6	collect, organize, analyze, interpret, represent, and formulate questions about data and make reasonable and useful predictions about the certainty, uncertainty, or impossibility of an event.		
B	A student should understand and be able to select and use a variety of problem-solving strategies.		
B.1	use computational methods and appropriate technology as problem-solving tools	Recreation and Spending	Eating Out
		Recreation and Spending	Movies and Shows
		Recreation and Spending	Parks and Sports
		Recreation and Spending	Costs of Recreation
		Transportation	Taking a Road Trip
B.2	use problem solving to investigate and understand mathematical content	All Units	Unit Open Response
B.3	formulate mathematical problems that arise from everyday situations	Checking and Savings Accounts	Checking Accounts
		Checking and Savings Accounts	The Check Register
		Checking and Savings Accounts	Savings Accounts
		Automobile Expenses	Used Cars
B.4	develop and apply strategies to solve a variety of problems	Recreation and Spending	Eating Out
		Recreation and Spending	Movies and Shows
		Recreation and Spending	Parks and Sports
		Recreation and Spending	Costs of Recreation
		Transportation	Taking a Road Trip
B.5	check the results against mathematical rules		
B.7	apply what was learned to new situations		
B.8	use mathematics with confidence	Recreation and Spending	Costs of Recreation
		Transportation	Taking a Road Trip

C	A student should understand and be able to form and use appropriate methods to define and explain mathematical relationships.		
C.1	express and represent mathematical ideas using oral and written presentations, physical materials, pictures, graphs, charts, and algebraic expressions	Wages	Evaluating Expressions and Formulas
		Recreation and Spending	Costs of Recreation
		Recreation and Spending	Catalog Shopping
		Recreation and Spending	Movies and Shows
		Recreation and Spending	Eating Out
		Recreation and Spending	Parks and Sports
		Personal Finances	Net Worth and Purchasing Power
		Personal Finances	Budgeting Expenses
		Personal Finances	The Costs of Raising a Family
		Deductions, Taxes, and Insurance	Life Insurance
		Deductions, Taxes and Insurance	Tables and Graphs
		Wages	Review of Equations
		Transportation	Estimating Using Mileage Charts
		Automobile Expenses	Preventative Maintenance and Repairs
C.2	relate mathematical terms to everyday language		
C.3	develop, test, and defend mathematical hypotheses		
C.4	clarify mathematical ideas through discussion with others	Checking and Savings Accounts	Discussion-Comparing Banks
		Wages	Discussion-Exploring Salaries
		Recreation and Spending	Discussion-Comparing Sales Tax
		Credit	Discussion-Credit Reports
		Automobiles	Discussion-Investigating Car Buying Tips

D	A student should be able to use logic and reason to solve mathematical problems.		
D.1	analyze situations		
D.2	draw logical conclusions		
D.3	use models, known facts, and relationships to explain the student's reasoning		
D.4	use deductive reasoning to verify conclusions, judge the validity of arguments, and construct valid arguments		
D.5	use inductive reasoning to recognize patterns and form mathematical propositions		
E	A student should be able to apply mathematical concepts and processes to situations within and outside of school.		
E.1	explore problems and describe results using graphical, numerical, physical, algebraic, and verbal mathematical models or representations	Recreation and Spending	Open Response-Funding Recreation
		Checking and Savings	Growth and Decay
		Checking and Savings	Comparing Simple and Compound Interest
		Checking and Savings	Discussion-Comparing Banks
		Checking and Savings	Written Assignments 3-Growth of Ticket Prices
		Checking and Savings	Open Response-Managing Checking and Savings
		Personal Finances	Open Response-Comparing Consumer Costs
E.2	use mathematics in daily life	All About Jobs	Working With Wages
		All About Jobs	Wages and Tips
		Wages	Forms and Time Cards
		Wages	Salary and Commission
		Deductions, Taxes and Insurance	Payroll Deductions
		Deductions, Taxes and Insurance	Health and Life Insurance
		Deductions, Taxes and Insurance	Federal Income Tax
		Recreation and Spending	Movies and Events
		Recreation and Spending	Costs of Recreation

		Recreation and Spending	Buying Clothes and Shopping
		Recreation and Spending	Buying Food and Eating Out
		Transportation	Transportation
		Transportation	Taking Road Trips
		Personal Finances	Net Worth and Purchasing Power
		Personal Finances	Budgets
		Checking and Savings	Growth and Decay
		Checking and Savings	Checking Accounts
		Checking and Savings	Savings Accounts
		Credit	Using Credit Cards
		Credit	Loans
		Credit	Installment Buying
		Credit	Credit Reports
		Automobile Expenses	Buying an Automobile
		Automobile Expenses	Operating Expenses
		Automobile Expenses	Auto Insurance
		Automobile Expenses	Other Car Topics
		Housing	Renting an Apartment
		Housing	Buying a House
		Housing	Decorating and Remodeling
E.3	use mathematics in other curriculum areas	Personal Finances	Net Worth and Purchasing Power
		Personal Finances	Budgets
		Checking and Savings	Growth and Decay
		Checking and Savings	Checking Accounts
		Checking and Savings	Savings Accounts
		Housing	Renting an Apartment
		Housing	Buying a House
		Housing	Decorating and Remodeling