Basic Life Skills Math Course Outline Linda Vrijenhoek

I. Course Description

During the course of the year, the student will develop an understanding of basic skills through life situations: expenses/budgeting, salaries, banking, housing, buying/preparing food, sales, owning a vehicle, recreation/travel… Students will practice basic skillwork and then relate it to word problems and practical activities. Students will use estimation, reasoning, and strategies which lead to solutions and generalization.

I. Academic Content Standards

Number Sense	**Q1**	**Q2**	**Q3**	**Q4**
6.1.0 Students compare and order fractions, decimals, and mixed numbers. Students solve problems involving fractions, ratios, proportions, and percentages:		X	X	X
6.1.1 Compare and order fractions, decimals, and mixed numbers and place them on a number line.		X	X	X
6.1.2 Interpret and use ratios in different contexts to show the relative sizes of two quantities, using appropriate notations			X	X
6.1.3 Use proportions to solve problems. Use cross-multiplication as a method for solving such problems, understanding it as the multiplication of both sides of an equation by a multiplicative inverse.			X	X
6.1.4 Calculate given percentages of quantities and solve problems involving discounts at sales, interest earned and tips.			X	X
6.2.0 Students calculate and solve problems involving addition, subtraction, multiplication, and division:	X	X	X	X
6.2.1 Solve problems involving addition, subtraction, multiplication, and division of positive fractions and explain why a particular operation was used for a given situation.			X	X
6.2.2 Explain the meaning of multiplication and division of fractions and perform the calculations.			X	X
6.2.3 Solve addition, subtraction, multiplication, and division problems, including those arising in concrete situations, and combinations of these operations.	X	X	X	X
6.2.4 Determine the least common multiple and the greatest common divisor of whole numbers; use them to solve problems with fractions.		X	X	X
Algebra and Functions				
6.2.0 Students analyze and use tables, graph, and rules to solve problems involving rates and proportions:		X	X	X

6.2.1 Convert one unit of measurement to another.			X	X
6.2.2 Demonstrate an understanding that rate is a measure of one quantity per unit value of another quantity.				X
6.2.3 Solve problems involving rates, average speed, distance, and time.				X
Mathematical Reasoning				
6.1.0 Students make decisions about how to approach problems:	X	X	X	X
6.1.1 Analyze problems by identifying relationships, distinguishing relevant from irrelevant, identifying missing information, sequencing and prioritizing information, and observing patterns.	X	X	X	X
6.1.2 Formulate and justify mathematical conjectures based on a general description of the mathematical question or problem posed.	X	X	X	X
6.1.3 Determine when and how to break a problem into simpler parts.	X	X	X	X
6.2.0 Students use strategies, skills, and concepts in finding solutions:	X	X	X	X
6.2.1 Use estimation to verify the reasonableness of calculated results.	X	X	X	X
6.2.2 Apply strategies and results from simpler problems to more complex problems.	X	X	X	X
6.2.4 Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.	X	X	X	X
6.2.5 Express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language; support solutions with evidence in both verbal and symbolic work.	X	X	X	X
6.2.6 Indicate the relative advantages of exact and approximate solutions to problems and give answers to a specified degree of accuracy.	X	X	X	X
6.2.7 Make precise calculations and check the validity of the results from the context of the problem.	X	X	X	X
6.3.0 Students move beyond a particular problem by generalizing to other situations:	X	X	X	X
6.3.1 Evaluate the reasonableness of the solution in the context of the original situation.	X	X	X	X
6.3.2 Note the method of deriving the solution and demonstrate a conceptual understanding of the derivation by solving similar problems.	X	X	X	X

6.3.3 Develop generalizations of the results obtained and the strategies used and apply them in new problem situations.	X	X	X	X

II. Instructional Plan

During the course of the year, students will improve basic skills through practice using worksheets, organizers, games, activities, videotaping… These basic skills will be applied to life situations in solving multi-step word problems. To accomplish this goal, we will use the textbook, manipulatives, role playing, and hands-on activities.

III. Assessment

Students' progress will be assessed through daily skill practice, classwork, homework, quizzes, and tests. Points will be assigned to each and the percentage of the total points will determine the grade.

IV. Text

Life Skills Math, AGS