

Scope and Sequence—Level One

Numeration: Base 10 numbers 1–999, amounts of \$0.01–\$999.99, Cardinal vs. Ordinal numbers, and meaning and function of zero in addition.

Operations: Concept of addition, addition facts to 18, single- and multi-digit column addition, regrouping in addition, and the commutative property of addition.

Place Value: Chip trading in Base 10; counting, trading, and recording pennies, dimes, ones, tens, and hundreds; meaning, placement, structures, and functions of ones, tens, and hundreds in Base 10 whole and rational number systems.

Organizational Skills: Formation, orientation, and alignment of numerals; procedure for setting up single- and multi-digit additions; sequence for attacking word problems.

The Checkbook: Sub-skills necessary for keeping a checkbook.

Word Problems: Hierarchical introduction of one-sentence word problems involving concrete language to three-sentence problems involving abstract language (addition).

Money: Reading, writing (to dictation), and making amounts from \$0.01 to \$999.99.

Base 10 Structures: Visual and auditory discrimination exercises that enable students to generate an image of the inner and outer structures of the whole and rational number systems.

Rounding and Estimating: Bigger vs. smaller and ordering 0–9.

Fractions: Pennies and dimes as part of a dollar. Separation of whole and rational numbers concretely.

Building Self Esteem: Special skills, sequence, and memory aides enable students to succeed consistently. Reward system involving chip trading, money, and place value provides immediate and long-term gratification.

Developing Thinking Skills: Participation in Simple Math dialogs requires students to think, compare, analyze, and make decisions at every step of the learning process.

Scope and Sequence—Level Two

Numeration: Expansion of skills from Level 1. Numbers 1,000–999,999,999 and amounts \$1,000–\$999,999,999.99, the complements, Base 10 numbers 001–100, and the meaning and function of zero in subtraction.

Operations: Concept of subtraction, subtraction facts to 18, multi-digit subtractions, regrouping in subtraction, and subtraction with zero. Review of Level I addition.

Place Value: Meaning and function of ones, tens, hundreds, one thousand, ten thousands, hundred thousands, one millions, ten millions, and hundred millions. Review of Level I.

Organizational Skills: The setting up of multi-digit subtractions and attacking of word problems involving subtraction. Review and expansion of Level I procedures.

The Checkbook: The use of checks, deposit slips, checkbooks, and the language of banking systems.

Word Problems: Hierarchical introduction of problems involving concrete and abstract language (subtraction). Teaches clues for determining operation (+ and -). Review of Level I.

Money: Reading, writing (to dictation), and making amounts to \$999,999,999.99 and making change from \$1.00, \$10.00, and \$100.00. Review of Level I.

Base 10 Structures: Continued development of visual and auditory discrimination of inner and outer structures of Base 10 to the millions. Review of Level I.

Rounding and Estimating: Introduction of concept of rounding, rounding to the nearest ten, hundred, and thousand.

Fractions: Concept of part vs. whole as it applies to money.

Building Self-Esteem: Special sequence and memory clues enable students to succeed. A built-in reward system includes the teaching of money, place value, and the checkbook.

Developing Thinking Skills: Dialogs in each lesson require students to think, compare, and make decisions.

Scope and Sequence—Level Three

Numerations: Review and expansion of skills from Levels I and II.

Operations: Concept of multiplication, multiplication facts, long multiplication, regrouping in multiplication, multiplication with zero, and commutative property of multiplication. Review of addition and subtraction.

Place Value: Concepts taught in Levels I and II applied to addition, subtraction, and multiplication.

Organizational Skills: Procedures for setting up long multiplication and attacking word problems involving multiplication. Review of Levels I and II.

Money: Introduction of nickels, half dollars, and five-dollar bills in the change-making process. Interrelation of nickels, half dollars, and five-dollar bills with the Base 10 value structures. Review of Level I and II.

Rounding and Estimating: Review and reinforcement of rounding off skills and concept.

Fractions: Introduction of concept of one-half as it relates to money, shape, and Base 10. Review of Levels I and II.

Building Self-Esteem: Continued employment of success as a motivator with a built-in reward system.

Developing Thinking Skills: Questioning techniques in the form of dialogs require students to think and make decisions.

Scope and Sequence—Level Four

Numeration: Review and expand skills from Levels I, II, and III. Amounts to the billions.

Operations: Review and expand addition, subtraction, and multiplication. Introduce the concept of division, the vocabulary of division, division, long division, remainders, zero in division, and regrouping in division.

Place Value: Review and expand knowledge of place value. Apply previously learned skills to billions; continue associations with people living in houses on Whole Number Street. Use images to help students form an understanding of the concept of place value.

Organizational Skills: Review procedures for setting up and interpreting math problems. Skills presented in a specific sequence induce aptitude for self organization. Scripted dialogs between teacher and student keep student processing at the cognitive level.

The Checkbook: Continued use of the checkbook and the language of the banking system, used in conjunction with a behavior modification program.

Word Problems: Review and expand skills from Levels I, II, and III. Continue building an abstract vocabulary in word problems. Introduce mathematical vocabulary and connect it with Simple Math's image-making vocabulary.

Money: Continue to review and reinforce both abstract and image-making terms. Emphasize the connection between fractions and coins.

Base 10 Structures: Review and reinforce concept of Base 10. Review mnemonics for helping students to understand place value. Mnemonic images bring structures to life.

Rounding and Estimating: Review rounding from previous Levels. Introduce estimating. Use two rounded numbers to estimate total.

Fractions: Review fractions, decimals, and percents. Introduce LCM and LCD. Add, subtract, multiply, and divide like and unlike fractions. Change fractions to decimals, and decimals to fractions. Change mixed numbers to improper fractions, and improper fractions to mixed numbers.

Building Self-Esteem: Use success as a motivator. Continued use of mnemonics and a special sequence of skills enables all students to succeed.

Develop Thinking Skills: The questioning techniques in the form of scripted dialogs require students to pay attention, think, compare, analyze, and make decisions.