Mathematics

Mathematics reflects the order and unity in God's universe and deals with truth; therefore, it plays an integral role in the Catholic school.

Mathematics also contributes to the development of the whole person by enriching one's life and providing a practical tool for daily living.

Every student needs an understanding and knowledge of the basics of mathematics which play a role in the pursuit of other academic career subjects.

Contemporary society demands mathematical knowledge which helps students develop their ability to reason and to think critically and logically, as well as to discover creative ways of solving problems.

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PROGRAM GOAL I: **NUMBERS, NUMERATION, OPERATIONS**

PROGRAM OBJECTIVES:

A. Learns the basics of whole numbers
B. Adds whole numbers
C. Subtracts whole numbers
D. Multiplies whole numbers
E. Divides whole numbers
F. Learns the basics of fractions
G. Adds fractions
H. Subtracts fractions
I. Multiples fractions
J. Divides fractions
K. Learns the basics of decimals
L. Adds decimals
M. Subtracts decimals
N. Multiplies decimals
O. Divides decimals
P. Learns the basics of percents
Q. Understands and uses the properties of numbers
R. Learns basics of exponents
S. Understands and uses a calculator

SKILL LEVELS

I-Introduce
D-Develop
M-Master/Maintain

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	LEARNS BASICS OF WHOLE NUMBERS									
A1.	Recognizes groups of objects with the same number of objects or the group which has more or less	I/D	M	M	M	M				
A2.	Recognizes and writes numbers to 20	I/M	M	M	M	M				
A3.	Orders numbers to 10	I/M	M	M	M	M				
A4.	Recognizes and uses ordinal numbers	I	D	D	M	M				
A5.	Recognizes and writes numbers to 99	I/D	D	M	M	M				
A6.	Identifies which number is greater or less using numbers to 99	I	D	M	M	M				
A7.	Writes the standard form for tens and ones	I	D	D	D	M				

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A8.	Orders two numbers to 99		I	D	M	M				
A9.	Recognizes and writes the standard form and expanded form for numbers greater than 100		I	D	D	D	M	M	M	M
A10.	Orders or compares numbers greater than 100		I/D	D	D	M	M	M		
A11.	Rounds numbers				I	D	D	M	M	M
A12.	Differentiates between odd and even numbers		I	D	M	M	M			
A13.	Recognizes and understands symbols +, -, =, <, >	I	D	D	M	M	M	M		
A14.	Recognizes and understands symbols x, ◑			I	D	D	M	M	M	
A15.	Understands place value	I	I	D	D	D	D	M	M	M
A16.	Predicts numbers in a pattern		I	D	D	D	D	D	M	M
A17.	Recognizes I, V, X, L, C, M as Roman Numerals			I	D	D	M	M	M	M
A18.	Reads and writes Roman Numerals through M				I	D	M	M	M	M
A19.	Learns appropriate names for all operations		I	I	I	D	D	M	M	M
B.	ADDS WHOLE NUMBERS									
B1.	Understands basic concepts of addition	I	D	M	M	M				
B2.	Adds 2 or 3 numbers with sums to 10	I	D	M	M					
B3.	Adds 2 or 3 numbers with sums to 18		I/D	M	M	M				
B4.	Adds a 2-digit and 1-digit number		I/D	M	M	M				
B5.	Adds 3 or more 1-digit numbers		I/D	M	M	M				
B6.	Adds two or three 2-digit numbers with no regrouping		I/D	M	M	M				
B7.	Adds 2 or more 2-digit numbers with regrouping			I/D	D	M	M	M		
B8.	Adds two or three 3-digit numbers with no regrouping		I	D	M	M				

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
B9.	Adds 2 or more 3- to 6-digit numbers with regrouping			I	D	D	M	M	M	M
C.	SUBTRACTS WHOLE NUMBERS									
C1.	Understands basic concepts of subtraction	I	D	M	M	M				
C2.	Subtracts from numbers to 10	I	D	M	M					
C3.	Subtracts from numbers 11 - 18		I/D	D	D	M	M			
C4.	Subtracts two 2-digit numbers with no regrouping		I/D	M	M	M				
C5.	Subtracts two 2-digit numbers with			I/D	D	M	M	M		
C6.	Subtracts a 1-digit number from a 2-digit number		I/D	M	M	M				
C7.	Subtracts two 3-digit numbers with no regrouping		I	D/M	M	M				
C8.	Subtracts two 3- to 6-digit numbers with regrouping			I/D	D	D	M	M	M	M
D.	MULTIPLES WHOLE NUMBERS									
D1.	Understands basic concept of multiplication	I	I	D	D	M	M	M		
D2.	Counts by 2's, 3's, or 5's to 100	I	D	M	M					
D3.	Uses addition to develop multiplication facts and understands relationship		I	D	D	M				
D4.	Multiplies a 1-digit number by a 1-digit number from memory			I	D	M	M	M		
D5.	Multiplies a 1-digit number by 2, 3, or 5 using facts to 20			I	D	M				
D6.	Multiplies a 2-, 3-, or 4-digit number by a 1-digit number with regrouping				I	D	M	M		

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
D7.	Multiplies a 2-digit number by a 2-digit number					I	D	M	M	M
D8.	Multiplies a 3-digit number by a 2-digit number					I	D	M	M	M
D9.	Multiplies a 3- or 4-digit number by a 3-digit number						I	D	M	M
D10.	Multiplies by 10, 100, 1000				I	D	M	M	M	M
E.	DIVIDES WHOLE NUMBERS									
E1.	Understands basic concepts of division			I	D	D	M	M		
E2.	Uses subtraction to develop division concept and understands relationship between division and multiplication				I	D	M	M		
E3.	Divides using facts to 81				I	D	M	M		
E4.	Divides a 2-digit number by a 1-digit number with a remainder				I	D	M	M		
E5.	Divides a 3- to 5-digit number by a 1-digit number with a remainder				I	D	M	M		
E6.	Uses short division method with a 1-digit				I	D	D	M		
E7.	Divides a 2- to 5-digit number by a 2-digit number					I	D	D	M	M
E8.	Divides a 3- to 6-digit number by a 3-digit number						I	D	M	M
E9.	Checks a division problem using multiplication				I	D	D	M	M	M
E10.	Divides by 10, 100, 1000					I	D	M	M	M
E11.	Learns rules for divisibility by 2, 3, 4, 5, 6, 7, 8, 9 10						I	D	M	M
E12.	Writes a remainder as a fraction						I	D	M	M
E13.	Writes a remainder as a decimal						I	D	M	M
F.	LEARNS BASICS OF FRACTIONS									
F1.	Understands basic concept of fractions	I	D	D	D	D	D	M		
F2.	Identifies and defines mathematical	I	I	I	I/D	D	D	M	M	M
F3.	Recognizes 2, a, 3, b, etc.	I	D	D	D	M	M	M	M	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
F4.	Writes a fraction or mixed number for the shaded parts of regions or the indicated parts of groups or objects		I	D	D	D	M	M		
F5.	Identifies the numerator and the denominator of a fraction			I	D	D	M	M		
F6.	Finds the least common multiple of two or more numbers					I	D	D	M	M
F7.	Finds the factors of a number, determines if a number is prime or composite, or writes the prime factorization of a number						I	D	D	M
F8.	Finds the greatest common factor of two or more numbers					I	D	D	D	M
F9.	Writes the simplest form for a fraction					I	D	D	M	M
F10.	Lists equivalent fractions				I	D	D	M	M	M
F11.	Compares fractions with like denominators				I	D	D	M	M	M
F12.	Compares fractions with unlike denominators					I	D	M	M	M
F13.	Writes a mixed number as a fraction					I	D	M	M	M
F14.	Writes a fraction as a mixed number					I	D	M	M	M
F15.	Locates fractions or mixed numbers on a number line						I	D	M	M
G.	ADDS FRACTIONS									
G1.	Adds fractions with like denominators with no regrouping				I	D	M	M		
G2.	Adds fractions with like denominators with regrouping				I	D	M	M	M	M
G3.	Adds fractions with unlike denominators with no regrouping					I	D	M	M	M
G4.	Adds fractions with unlike denominators with regrouping					I	D	D	M	M
G5.	Adds mixed numbers with like or unlike denominators with regrouping					I	D	D	M	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
H.	SUBTRACTS FRACTIONS									
H1.	Subtracts fractions with like denominators				I	D	M	M		
H2.	Subtracts fractions with unlike denominators					I	D	D	M	M
H3.	Subtracts mixed numbers with unlike denominators with no regrouping					I	D	M	M	M
H4.	Subtracts a fraction or a mixed number from a whole number						I	D	M	M
H5.	Subtracts mixed numbers with unlike denominators with regrouping						I	D	M	M
I.	MULTIPLES FRACTIONS									
I1.	Finds the fractional part of a whole number						I	D	M	M
I2.	Multiples a whole number and a fraction						I	D	M	M
I3.	Multiplies two fractions						I	D	M	M
I4.	Multiplies a mixed number by a fraction, whole number, or another mixed number						I	D	M	M
J.	DIVIDES FRACTIONS									
J1.	Finds the reciprocal of a fraction and relates division by a whole number to multiplication by its reciprocal						I	D	M	M
J2.	Divides a fraction by a fraction						I	D	M	M
J3.	Divides a fraction by a fraction						I	D	M	M
J4.	Divides a fraction or mixed number by a whole number						I	D	M	M
J5.	Simplifies complex fractions						I	D	M	M
J6.	Divides a mixed number by a fraction						I	D	M	M
J7.	Divides a fraction or mixed number by a whole number						I	D	M	M
J8.	Divides a mixed number or a whole number by a mixed number						I	D	M	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
K.	LEARNS BASICS OF DECIMALS									
K1.	Reads and writes decimals				I	D	D	M	M	M
K2.	Identifies and defines mathematical terminology				I	D	D	M	M	M
K3.	Writes a fraction or mixed number with denominators 10, 100, 1000 as a decimal					I	D	M	M	M
K4.	Writes a decimal as a fraction or a mixed number					I	D	M	M	M
K5.	Rounds decimals				I	I/D	D	M	M	M
K6.	Compares and orders decimals				I	I/D	D	M	M	M
L.	ADDS DECIMALS									
L1.	Adds decimals				I	I/D	D	M	M	M
M.	SUBTRACTS DECIMALS									
M1.	Subtracts decimals				I	I/D	D	M	M	M
N.	MULTIPLIES DECIMALS									
N1.	Multiplies a decimal by a whole number						I	D	M	M
N2.	Multiplies two decimals						I	D	M	M
N3.	Writes a number in scientific notation and writes the standard form for a number in scientific notation						I	D	D	M
O.	DIVIDES DECIMALS									
O1.	Divides a decimal by a whole number						I	D	M	M
O2.	Divides a whole number or a decimal by a decimal						I	D	M	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
O3.	Writes a fraction as a terminating decimal, repeating decimal, or as a decimal rounded to the nearest hundredth						I	D	D	M
P.	LEARNS BASICS OF PERCENTS									
P1.	Writes fractions with denominators of 100 as percents						I	D	D	M
P2.	Identifies and defines mathematical terminology						I	D	M	M
P3.	Writes decimals as percents						I	D	D	M
P4.	Writes percents as fractions or decimals						I	D	D	M
P5.	Finds a percent of a number						I	D	D	M
P6.	Finds the percent one number is of another						I	D	D	M
P7.	Finds a number if the percent of the number is known						I	D	D	M
P8.	Finds the percent of change between two numbers							I	D	D
P9.	Understands the relationship between fractions, decimals, and percents						I	D	D	D
Q.	UNDERSTANDS AND USES PROPERTIES OF NUMBERS									
Q1.	Identifies and defines mathematical terminology					I	I	D	M	M
Q2.	Recognizes and uses identity property (one and zero)					I	I	D	M	M
Q3.	Recognizes and uses commutative property (order)					I	D	D	M	M
Q4.	Recognizes and uses associative property (grouping)					I	D	D	D	M
Q5.	Recognizes and uses distributive property							I	D	M
Q6.	Recognizes and uses inverse property							I	D	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
R.	LEARNS BASICS OF EXPONENTS									
R1.	Identifies and defines mathematical						I	D	D	M
R2.	Understands raising a base to a positive						I	D	D	M
R3.	Understands raising a base to a negative								I	D
R4.	Recognizes and finds the powers of 10						I	D	D	M
R5.	Multiplies and divides by the powers of 10						I	D	D	M
R6.	Writes the standard form for numbers in exponential notation						I	D	D	M
R7.	Writes numbers in expanded notation for numbers in standard notation and vice versa						I	D	D	M
R8.	Finds perfect squares and their square roots					I	D	D	D	M
R9.	Writes numbers in scientific notation						I	D	D	D
S.	UNDERSTANDS AND USES A CALCULATOR									
S1.	Uses a calculator for whole number operations			I	D	M	M	M		
S2.	Uses a calculator for decimal number					I	D	M	M	M
S3.	Uses a calculator for fraction operations					I	I	D	M	M
S4.	Uses a calculator for percent operations						I	I/D	D	M

PROGRAM GOAL II: MEASUREMENTS

PROGRAM OBJECTIVES:

A. Learns units of measurements
B. Measures various items
C. Learns basics of telling time
D. Recognizes parts of a calendar
E. Learns basics of temperature
F. Recognizes money and solves consumer math problems

SKILL LEVELS

I-Introduce
D-Develop
M-Master/Maintain

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	LEARNS UNITS OF MEASUREMENT									
A1.	Identifies and defines mathematical terminology	I	D	D	D	D	D	D	D	D
A2.	Decides which of 3 objects is largest, smallest, longest, or shortest	I/D	D	D	D	D	D	D	D	D
A3.	Determines the appropriate metric unit for measuring length using centimeter, meter, or kilometer		I	D	D	D	D	M	M	M
A4.	Determines the appropriate metric unit for measuring length using decimeter or millimeter			I	D	D	D	D	M	M
A5.	Determines the appropriate metric unit for liquid measure using liter		I	D	D	D	M	M	M	M
A6.	Determines the appropriate metric unit for liquid measure using milliliter				I	D	D	M	M	M
A7.	Determines which object is lighter or heavier by comparison	I	D	M	M					
A8.	Determines the appropriate metric unit for measuring mass (weight) using gram or kilogram		I	D	D	D	D	M	M	M
A9.	Determines the appropriate unit for measuring length using inch, foot, yard, or mile		I	D	D	M	M	M		
A10.	Determines the appropriate unit for measuring liquid using cup, pint, quart, or gallon	I	D	D	D	M	M	M		
A11.	Determines the appropriate unit for measuring mass (weight) using ounces or pounds	I	I	D	D	M	M	M		

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A12.	Determines the appropriate unit for measuring mass (weight) using ton				I	D	M	M		
A13.	Estimates lengths in metric and customary systems	I	D	D	D	D	D	M		
A14.	Converts between different units of measurement within the same system				I	D	D	M	M	M
B.	MEASURES VARIOUS ITEMS									
B1.	Measures length using informal units	I/D	D	D	M	M				
B2.	Measures length using centimeters or millimeters		I	D	D	D	M	M	M	M
B3.	Measures length using inches	I	D	D	D	M	M	M		
B4.	Measures length using fractions of inches			I	D	D	D	M		
B5.	Measures and draws angles						I/D	D	M	M
C.	LEARNS BASICS OF TELLING TIME									
C1.	Identifies and defines mathematical terminology	I	D	D	D	M	M	M		
C2.	Tells time using digital clock	I	D	D	M					
C3.	Identifies hour and minute hand	I	D	D	M					
C4.	Tells time to the hour and half hour	I	I/D	D	M					
C5.	Tells time to the quarter hour interval			I	D	M	M			
C6.	Tells time to the five minute interval			I	D	M	M	M		
C7.	Tells time using minutes			I	D	D	M	M		
C8.	Identifies the use of AM, PM		I	D	D	M	M	M		
C9.	Identifies hours in a day, minutes in an hour, seconds in a minute		I	D	D	M	M	M		
C11.	Tells elapsed time			I	D	D	M	M		

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
D.	NAMES AND RECOGNIZES PARTS OF A CALENDAR									
D1.	Names the four seasons	I	D	M	M					
D2.	Names the days and months	I/D	D	M	M					
D3.	Recognizes days, weeks, months	I/D	D	M	M					
D4.	Completes an outline of a given month	I	D	D	M					
D5.	Understands and uses a calendar	I/D	D	M	M					
E.	LEARNS BASICS OF TEMPERATURE									
E1.	Identifies and defines mathematical terminology	I	D	D	D	D	M	M		
E2.	Relates temperature to weather outdoors	I	D	D	M	M				
E3.	Identifies a thermometer	I	D	M						
E4.	Recognizes the Fahrenheit and Celsius thermometers			I	D	M	M	M		
E5.	Uses a thermometer to measure temperature to degrees Fahrenheit or Celsius	I	D	D	D	D	M	M		
F.	RECOGNIZES MONEY AND SOLVES CONSUMER MATH PROBLEMS									
F1.	Identifies and defines mathematical terminology	I	D	D	D	D	D	D	M	M
F2.	Recognizes the value of pennies, nickels, dimes, quarters, half dollars, and dollars	I	D	D	M	M				
F3.	Recognizes the value of a mixed coin amount	I	D	D	M	M				
F4.	Recognizes and uses the cent and dollar sign	I	D	D	M	M				
F5.	Rounds amounts of money to the nearest dollar			I	D	D	M	M		
F6.	Adds or subtracts with money and makes change			I	D	M	M	M		

SUBJECT OBJECTIVES		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
F7.	Multiplies or divides with money					I	D	M	M	M
F8.	Solves discount and tax problems						I	D	D	M
F9.	Solves problems involving price comparison or cost analysis						I	D	D	M

PROGRAM GOAL III: **PROBLEM SOLVING AND CRITICAL THINKING**

PROGRAM OBJECTIVES:

A. Uses basic operations to solve problems
B. Uses critical thinking skills to solve problems
C. Uses strategies to solve problems
D. Learns and applies formulas

SKILL LEVELS

I-Introduce
D-Develop
M-Master/Maintain

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	USES BASIC OPERATIONS TO SOLVE PROBLEMS									
A1.	Adds or subtracts to solve word problems	I	D	D	D	M	M	M	M	M
A2.	Multiplies or divides to solve word problems			I	I/D	D	M	M	M	M
A3.	Solves word problems involving fractions, mixed numbers, factoring, decimals, or			I	I/D	D	D	D	D	M
B.	USES CRITICAL THINKING SKILLS TO SOLVE PROBLEMS									
B1.	Finds more than one answer			I	D	D	D	D	D	D
B2.	Uses data to solve word problems	I	D	D	D	D	D	D	D	D
B3.	Chooses correct operations to solve word problems	I	D	D	D	D	M	M	M	M
B4.	Determines if a problem has sufficient information or unnecessary information, or if an answer is reasonable		I	D	D	D	D	D	D	D
C.	USES STRATEGIES TO SOLVE PROBLEMS									
C1.	Uses a plan to solve problems	I	I/D	D	D	D	D	D	D	D
C2.	Acts out or uses models	I	D	D	D	M	M	M		
C3.	Uses guess and check to solve problems	I	I/D	D	D	D	D	M	M	M

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
C4.	Makes a model, diagram, table, graph, or list in order to solve problems	I	D	D	D	D	D	D	D	D
C5.	Substitutes simpler numbers in order to check operation						I	D	D	M
C6.	Finds a pattern to solve problems	I	I	D	D	D	D	D	D	D
C7.	Works backwards to solve problems				I	D	D	M	M	M
C8.	Writes and solves an equation		I	D	D	D	D	D	D	D
D.	LEARNS AND APPLIES FORMULAS									
D1.	Solves interest problems							I	D	M
D2.	Writes ratios as fractions						I	D	D	M
D3.	Finds a rate or a unit rate						I	D	D	M
D4.	Solves a proportion						I	D	D	M
D5.	Solves problems involving rate, time, and distance						I	D	D	M

PROGRAM GOAL IV: **ESTIMATION**

SKILL LEVELS

PROGRAM OBJECTIVES:

I-introduce
D-Develop
M-Master/Maintain

A. Solves Problems using estimation

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	SOLVES PROBLEMS USING ESTIMATION									
A1.	Understands concept of estimation	I	D	D	D	M	M	M		
A2.	Estimates a sum, difference, product, or quotient of whole numbers			I	D	D	D	M	M	M
A3.	Estimates a sum, difference, product, or quotient of decimals or of a whole number and a decimal					I	D	D	M	M
A4.	Estimates to determine if an answer is reasonable				I	D	D	M	M	M
A5.	Estimates sums, differences, products, and quotients using money			I	D	D	M	M		
A6.	Estimates a sum, difference, product, or quotient of fractions						I	D	D	M
A7.	Estimates percents							I	D	M
A8.	Solves problems using rounding, compatible numbers, front-end estimation, patterns, clustering, and mental math			I	I/D	D	D	D	D	M

PROGRAM GOAL V: **GRAPHS AND CHARTS**

PROGRAM OBJECTIVES:

A. Makes graphs
B. Interprets types of graphs

SKILL LEVELS

I-Introduce
D-Develop
M-Master/Maintain

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	MAKES GRAPHS									
A1.	Constructs a graph from given data	I	D	D	D	D	M	M	M	M
A2.	Collects data and constructs appropriate type of graph	I	I/D	D	D	D	D	M	M	M
A3.	Understands the number line as a dense set of points representing numbers				I	D	D	M	M	M
A4.	Graphs a set of numbers (points) on the number line						I	D	M	M
A5.	Graphs inequities on the number line								I	D
B.	INTERPRETS TYPES OF GRAPHS									
B1.	Interprets a picture graph	I	D	D	M	M	M	M		
B2.	Interprets a table or chart	I	D	D	D	D	M	M	M	M
B3.	Interprets a bar graph, pictograph, or line graph	I	D	D	D	M	M	M	M	M
B4.	Interprets a scale drawing						I	D	D	M
B5.	Interprets a circle graph	I	D	D	D	D	D	D	M	M
B6.	Writes the number pair for a point or names the point for a number pair			I	D	D	D	M	M	M
B7.	Names the point for an ordered pair on the number plane and graphs ordered pairs				I	D	D	D	D	M
B8.	Interprets misleading information from a graph						I	D	D	D
B9.	Makes predictions from a graph						I	D	D	D

PROGRAM GOAL VI: **STATISTICS/PROBABILITY**

PROGRAM OBJECTIVES:

A. Learn basics of statistics
B. Learn basics of probability

SKILL LEVELS

I-Introduce
D-Develop
M-Master/Maintain

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	LEARNS BASICS OF STATISTICS									
A1.	Identifies and defines mathematical terminology					I	D	D	M	M
A2.	Finds the range of a group of numbers						I	D	M	M
A3.	Finds the mode of a group of numbers						I	D	M	M
A4.	Finds the average/mean of a group of numbers					I	D	D	M	M
A5.	Finds the median of a group of numbers						I	D	M	M
B.	LEARNS BASICS OF PROBABILITY									
B1.	Identifies and defines mathematical terminology					I	D	D	D	M
B2.	Understands basic concepts of probability					I	D	D	D	M
B3.	Predicts an outcome based on probability					I	D	D	D	M
B4.	Finds the probability of an outcome using experiments, tree diagrams, and models					I	D	D	D	M

PROGRAM GOAL VII: **GEOMETRY**

PROGRAM OBJECTIVES:

A. Learns geometric words
B. Learns geometric shapes
C. Solves problems involving shapes
D. Constructs geometric shapes

SKILL LEVELS:

I-Introduce
D-Develop
M-Maintain/Master

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	LEARNS GEOMETRIC WORDS									
A1.	Identifies and defines geometric terminology	I	D	D	D	D	D	D	D	D
A2.	Names types of polygons	I	D	D	D	D	M	M	M	M
A3.	Uses simple geometric terms	I	D	D	D	D	D	M	M	M
B.	IDENTIFIES GEOMETRIC SHAPES									
B1.	Identifies circles, triangles, rectangles, squares, and describes characteristics of	I	D	D	D	D	M	M	M	M
B2.	Identifies points, line segments, angles, lines, rays, planes, perpendicular lines, or perpendicular planes				I	D	D	D	M	M
B3.	Determines if an angle is a right angle, acute angle, or obtuse angle				I	D	D	D	M	M
B4.	Classifies triangles, special quadrilaterals, and regular polygons					I	D	D	M	M
B5.	Identifies and describes characteristics of spheres, rectangular boxes, cubes, cones, cylinders, pyramids, or prisms	I	D	D	D	D	D	D	D	D
B6.	Identifies shapes that are symmetrical	I	I/D	D	D	D	M	M	M	M
B7.	Identifies congruent shapes			I	D	D	D	M	M	M
B8.	Identifies similar shapes	I	I/D	D	D	D	M	M	M	M
B9.	Determines the difference between congruent shapes and similar shapes					I	D	D	M	M

SUBJECT OBJECTIVES		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
B10.	Identifies base and corresponding altitude height for triangles and special quadrilaterals						I	D	D	D
C.	SOLVES PROBLEMS INVOLVING SHAPES									
C1.	Finds the perimeter of a polygon			I	D	D	M	M	M	M
C2.	Finds the area and circumference of a circle						I	D	D	M
C3.	Finds the measurements of vertical, adjacent, supplementary, and complementary angles							I	D	D
C4.	Finds the sum of the angles in a triangle or polygon							I	D	D
C5.	Finds the area of geometric shapes			I	D	D	D	D	D	D
C6.	Finds the surface area of geometric solids						I	D	D	D
C7.	Finds the volume of geometric solids				I	I	D	D	D	D
C8.	Finds the missing length of a right triangle by using the rule of Pythagoras							I	D	D
C9.	Finds the missing length of a similar shape							I	D	D
C10.	Locate points outside, inside, and on a plane shape		I	D	M	M	M	M		
C11.	Knows geometric formulas by memory				I	D	D	D	D	D
D.	CONSTRUCTS GEOMETRIC SHAPES									
D1.	Draws plane and space figures	I	D	D	D	D	M	M		
D2.	Constructs parallel lines, perpendicular lines, polygons, and angles	I	I	I	I/D	I/D	D	D	D	M
D3.	Constructs a perpendicular bisector to a line segment							I	D	D
D4.	Constructs an angle bisector							I	D	D
D5.	Constructs congruent angles						I	I	D	D
D6.	Creates tessellations							I	D	D

PROGRAM GOAL VIII: **ALGEBRA**

PROGRAM OBJECTIVES:

A. Uses fundamentals of algebra
B. Solves equations

SKILL LEVELS:

I-Introduce
D-Develop
M-Maintain/Master

SUBJECT OBJECTIVES:		GRADE LEVEL								
		K	1	2	3	4	5	6	7	8
A.	USES FUNDAMENTALS OF ALGEBRA									
A1.	Identifies and defines mathematical terminology							I	D	D
A2.	Finds the square root of a number								I	D
A3.	Finds the opposite of a number						I	D	D	M
A4.	Finds the absolute value of a number and simplifies expressions using absolute values							I	D	D
A5.	Writes inequalities using integers and locates on a number line							I	D	M
A6.	Adds integers							I	D	M
A7.	Subtracts integers							I	D	M
A8.	Multiplies and divides integers							I	D	M
A9.	Compares, adds, subtracts, multiplies, or divides two rational numbers							I	D	M
A10.	Simplifies an expression							I	D	M
A11.	Finds the value of an expression							I	D	M
A12.	Simplifies an expression by combining like terms								I/D	D
A13.	Understands and uses the order of operations						I	D	D	M
B.	SOLVES EQUATIONS									
B1.	Solves equations using addition and substraction						I	D	D	D
B2.	Solves equations using multiplication and division						I	D	D	D
B3.	Solves addition and subtraction equations by combining like terms								I	D