TABLE OF CONTENTS

A TRIBUTE TO MARY

CHAPTER 1:	LEARNING ENVIRONMENT	1.1 - 1.20
	Introduction	1.1
	Messing About	1.1
	Math Their Way Environment	1.3
	Setting the Tone for Questions	1.4
	Appropriate Questions	1.4
	Kinds of Activities	1.5
	Whole Class / Small Group Lessons	1.6
	Rationale	1.6
	When You Plan a Group Session	1.6
	Tubbing Stations	1.8
	Rationale	1.8
	Teacher's Role	1.9
	Record Keeping	1.9
	Tubbing Station Management	1.10
	Classroom Organization	1.11
	Introduction to the Tubs	1.12
	Free Exploration Experiences	1.14
	Reproducing and Recording Designs at the T	Tubbing Stations 1,15
	Remember	1.18
	Free Exploration Tubbing Stations	1.19
	·····	
CHAPTER 2:	PARENT INVOLVEMENT	2.1 - 2.10
	Class Newsletter	2.2
	Video Tapes	2.3
	Parent Meetings	2.3
	Initial Meeting	2.3
	Back to School Night	2.4
	Suggested Activities for Parent Meetings	2.5
	Pennies in the Pocket Lesson	2.5
	Examples of Meaningful Paper Work	2.7
	Math Night Activities	2.8
	Classroom Visitation	2.8
	Homework Assignments	2.9
CHAPTER 3:	ASSESSMENT	3.1 - 3.18
	Why Assess?	3.1
	Assessment Limitations	3.2
	Three Assessment Levels	3.2
	Assessment Schedule	3.2
	Scheduling Assessment Time	3.3
	Grade Level Assessment Schedules	3.3
	Administering the Assessments	3.4
	If This Is Your First Experience	3.4
	Assessment Packet	3.5
	After Assessing the Class	3.6

	Assessment Descriptions	3.7
	Prenumber Concepts	3.7
	Counting by Rote Memory	3.7
	One-to-One Correspondence	3.7
	Instant Recognition	3.8
	Conservation of Number	3.9
	Counting Backwards	3.10
	Estimation of Objects	3.11
	Numeral Recognition	3.11
	Numeral Form	3.12
	Number Operations (Simple Addition and Subtraction)	3 13
	Concent Level	3 13
	Connecting Level	3 13
	Symbolic Level	3.10
	Vieuelization	2 14
		3.14
	Place value	3.14
	Building Large Numbers with Manipulatives	0.45
	Concept Level	3.15
	Connecting Level	3.15
	Symbolic Level	3.15
	Regrouping (Addition and Subtraction)	
	Concept Level	3.16
	Connecting Level	3.16
	Symbolic Level	3.17
CHAPTER 4:	THE OPENING	4.1 - 4.14
	When You Plan Your Class's Opening Activities	4.1
	How to Make the Opening Activities	4.2
	Straw Count	4.3
	Number Line	4.3
	Dav Sequence	4.4
	Balloon Calendar	4.4
	Monthly Calendar	4.4
	Odd & Even Chart	4 5
	Tally Count	4.5
	Birthday Cake Granh	4.5
	Tooth Graph	4.5
	Toolin Graph Tomporeture Creph	4.5
	Temperature Graph	4.0
	Westher Craph	4.6
	Weather Graph	4.6
	Weather Graph Right Hand	4.6 4.6
	Weather Graph Right Hand Opening Supplies	4.6 4.6 4.7
	Weather Graph Right Hand Opening Supplies Opening Procedures	4.6 4.6 4.7 4.8
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count	4.6 4.6 4.7 4.8 4.8
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line	4.6 4.6 4.7 4.8 4.8 4.8 4.8
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions	4.6 4.6 4.7 4.8 4.8 4.8 4.8 4.9
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence	4.6 4.6 4.7 4.8 4.8 4.8 4.8 4.9 4.10
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar	4.6 4.6 4.7 4.8 4.8 4.8 4.8 4.9 4.10 4.10
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar	4.6 4.6 4.7 4.8 4.8 4.8 4.9 4.10 4.10 4.11
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart	4.6 4.6 4.7 4.8 4.8 4.8 4.9 4.10 4.10 4.11 4.12
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count	4.6 4.6 4.7 4.8 4.8 4.8 4.9 4.10 4.10 4.11 4.12 4.12
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count Commercial Calendar	4.6 4.6 4.7 4.8 4.8 4.8 4.9 4.10 4.10 4.10 4.11 4.12 4.12 4.13
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count Commercial Calendar Birthday Cake Graph	4.6 4.6 4.7 4.8 4.8 4.8 4.9 4.10 4.10 4.10 4.11 4.12 4.12 4.13 4.13
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count Commercial Calendar Birthday Cake Graph Tooth Graph	4.6 4.6 4.7 4.8 4.8 4.9 4.10 4.10 4.10 4.11 4.12 4.12 4.13 4.13 4.14
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count Commercial Calendar Birthday Cake Graph Tooth Graph Temperature Graph	4.6 4.6 4.7 4.8 4.8 4.9 4.10 4.10 4.10 4.11 4.12 4.12 4.13 4.13 4.14 4.14
	Weather Graph Right Hand Opening Supplies Opening Procedures Straw Count Number Line Number Line Extensions Day Sequence Balloon Calendar Monthly Calendar Odd and Even Chart Tally Count Commercial Calendar Birthday Cake Graph Tooth Graph Temperature Graph Weather Graph	4.6 4.7 4.8 4.8 4.9 4.10 4.10 4.10 4.11 4.12 4.12 4.13 4.13 4.14 4.14

	COUNTING	51 50
CHAFTER 5.	COUNTING Boto Counting	5.1-5.0
	Role Counting Boyond Pote Counting	5.1
	Beyond Role Counting	5.2
	Group Counting Activities	5.5
	Bote Counting	5.5
	Role Counting	5.5
	Count and Clap	5.3
	Close Your Eyes and Jump	5.4
	Additional Role Counting Activities	5.4
	Attaching Quantitative meaning to the Counting	Sequence 5.4
	Slide and Check	5.4
	Grow and Shrink	5.5
	People and Things In the Room	5.0 Maaning 5.7
		re meaning 5.7
	Counting materials	5.8
		5.8
CHAPTER 6:	NUMERAL WRITING	6.1 - 6.12
	Group Numeral Writing Experiences	6.1
	Large Numeral Card Activities	6.2
	Chalkboard Activities	6.3
	Independent Activities	6.4
	Numeral Recognition	6.4
	Clav Numerals	6.4
	Rub-Over Numerals	6.4
	Yarn Numerals	6.4
	Geoboard Numerals	6.5
	Salt Box	6.5
	My Turn. Your Turn	6.5
	Numeral Writing	6.6
	Dot-to-Dot Templates	6.6
	Writing Papers	6.6
	Numeral Templates	6.6
	Tic-Tac-Toe	6.6
	Numeral Dice Toss	6.7
	Numeral Sequences	6.7
	Numeral Writing Materials	6.8
	Edible Play Dough Recipes	6.8
	Homemade Play Dough	6.8
	Large Numeral Cards	6.8
	Bub-Over Numerals	6.8
	Individual Chalkboards	6.9
	Numeral Cards	6.9
	Numeral Sequence Cards	6.9
	My Turn Your Turn Gamehoard	6.9
	Geoboard Numeral Panere	6.9 6.10
	Numeral Writing Dice	6.10 6.10
	Salt Box	6.10 6.10
	Numeral Templates	6.10 6.10
	Numeral remplaces Not-to-Not Templates	6 11
	Purple-Green Numeral Papers	6.11
		. . .
CHAPIER /:	MEASUKEMENI	7.1 - 7.32
	Nonstandard Measurement	7.1
	Mathematical Concepts & Processes	/.1
	How to Begin	7.3
	Measurement Materials to Collect	7.4
	Quantity: Solid and Liquid Amounts	7.6
	Comparing Containers	7.6
	Comparing Scoops	7.7
	I ally Activities	7.9

	Quantity: Counting Objects Comparing Handfuls Comparing Lids & Bottle Caps Comparing Containers Weight Comparing Common Objects Comparing Common Objects to Nonstandard Units Comparing Volume Linear Measurement Measuring and Comparing Items	7.11 7.12 7.13 7.15 7.16 7.17 7.18 7.18
	Measure by Units	7.10
	Time	7.21
	Time Intervals	7.21
	Telling Time	7.23
	Money	7.25
	Introduction to the Coins	7.25
	Experiences Throughout the Year	7.26
	Comparing Materials	7.29
	Calibrated Jar	7.29
	Duration Cards	7.29
	Funnels	7.30
	String Sticks	7.30
	Milk Carton Scales	7.30
	wore / Less Spiriners	7.51
		0 1 0 10
CHAFTER 0.	Sorting and Classifying	0.1 - 0.12
	Venn Diagrams	8.2
	Real-Life Sorting Activities	8.2
	Sorting Items Collected on a Class Trip	8.2
	Sorting Walk Books	8.2
	Sorting Items From Home	8.3
	Junk Box Sorting	8.3
	Additional Classification Activities	8.7
	Graphing	8.8
	How to Begin	8.8
	Graphing Experiences	8.9
	People Graphs	8.9
	Classroom Management	8.9
	Graph One Item Several Different Ways	8.9
	Ongoing Classroom Graphs	8.9
	Poil Other Classrooms or Family Members	8.10
	Additional Graphing Activities	8.10 8.10
	Granhing Materials	8 11
	Graphing Plastic	8.11
	Egg Carton Graphs	8.11
	Milk Carton Graphing Boxes	8.11
	Two-Column Chart	8.11
	Junk Boxes	8.12
CHAPTER 9:	PATTERN	9.1 - 9.16
	How to Begin	9.2
	Whole Group Pattern Activities	9.3
	Rhythmic Clapping	9.3
	Dot Chart	9.3
	Additional Beginning Group Pattern Activities	9.4
	More Challenging Group Pattern Activities	94
		5.4
	Pattern Station Activities	9.4

Pattern Extensions	9.7
Symmetry Activities	9.7
Mirrors and Shapes	9.7
Pattern Blocks and Mirrors	9.8
Recording Pattern Block Symmetry Patterns	9.8
Unifix Cubes and Mirrors	9.9
Mirrors, Letters and Numerals	9.9
Surrounding Patterns	9.10
Paper Squares	9.10
Unifix Cubes or Colored Wooden Cubes	9.11
Recording Surrounding Patterns	9.11
Symmetry Art	9.12
Pattern Materials	9.13
Pattern Block Wall Cards	9.13
Junk Box Pattern Cards	9.14
Geoboard-Unifix Pattern Cards	9.15
Large Individual Snap / Clap Cards	9.16
Dot Pattern Strips	9.16
Mylar Mirrors	9.16

CHAPTER 10:	NUMBER OPERATIONS	10.1 - 10.25
	Levels of Abstraction	10.3
	Concept Level	10.3
	Connecting Level	10.3
	Symbolic Level	10.3
	Visualization	10.4
	Word Problems	10.4
	Acting Out Situations	10.4
	Using Manipulatives and a Work Space	10.6
	Additional Story Problem Activities	10.13
	Junkjob Sequence	10.7
	Counting	10.7
	Exploring Number Operations	10.7
	Activities Not Found in Math Their Way	10.10
	Cave	10.10
	Listen and Count	10.10
	Magic Box	10.11
	Equation Dice Toss	10.11
	Addition with Unifix Cubes	10.12
	Geoboards Designs	10.12
	Additional Activities	10.13
	Small Group Number Activities	10.13
	Independent Number Activities	10.14
	Exploring Number at the Stations	10.15
	How to Begin at the Number Stations	10.16
	Range Card	10.17
	Group Activities	10.18
	Introduction to Number Stations (Concept)	10.18
	Number Books (Connecting Level)	10.19
	Rebuilding at the Number Stations (Symbolic Leve	el) 10.20
	Modeling Math Concepts at the Number Stations	10.20
	Recording at the Number Stations	10.21
	Number Recordings	10.21
	Tiny Number Books Blackline Recordings	10.21
	Number Materials	10.22
	Cave Cards	10.22
	Junkjobs Cards	10.22
	Magic Box	10.22
	Magic Box Cards	10.22
	Subtraction and Addition Equation Cards	10.23
	Subtraction Flip Cards	10.23
	Number Tubbing Stations	10.24

CHAPTER 11:	PLACE VALUE	11.1 - 11.23
	Introduction	11.1
	Place Value Manipulatives	11.2
	Concrete Materials	11.2
	Representational Materials	11.2
	Choose Appropriate Manipulatives	11.3
	Use a Variety of Bases	11.4
	Teach Regrouping and Non-Regrouping	
	Addition and Subtraction Together	11.4
	Emphasize the Importance of Patterns	11.5
	Place Value Schedule	11.6
	Kindergarten	11.6
	First Grade	11.6
	Second Grade	11.6
	Exploring Place Value in a Variety of Groupings	11.7
	Group Activities	
	Searching for Patterns	11.7
	Random Practice	11.8
	Independent Activities	
	Random Practice	11.11
	Searching for Patterns	11.13
	Base Ten Work	11.15
	Group Activities	11.15
	Searching for Patterns	11.15
	Random Practice	11.15
	Sample Teaching Strategy — Visualization	11.16
	Independent Activities	11.17
	Searching for Patterns	11.17
	Random Practice	11.18
	Station Activities	11.19
	Place Value Materials	11 20
	Place Value Board	11 20
	Place Value Number Flins	11 20
	Place Value Tubbing Stations	11 21
	Place Value Addition Board	11.23

CHAPTER 12: INTEGRATING MATHEMATICS

INTO THE CURRICULUM	12.1 - 12.12
How to Begin	12.1
Class Trips	12.1
Seasonal Ideas	12.2
Pumpkin Math	12.2
Attribute Game	12.2
Weight Estimation	12.2
Circumference Estimation	12.3
Vertical Lines Estimation	12.3
Jack-o'lantern Face Graph	12.4
Pumpkin Seed Estimation	12.4
The Hundredth Day of School	12.5
Sorting	12.5
Hundred's Chart	12.5
Quantity	12.5
Length	12.6
Time	12.6
Money	12.7
Language and Writing	12.7
Science	12.7
Art	12.7

Songs and Rhymes	12.8
Other Sources for Rhymes ar	nd Songs 12.9
Children's Literature	Literatura 12.9
Other Sources for Children's Literature	Literature 12.9
	12.10
Geometry	12.10
Graphing	12.10
Measurement	12.11
Money	12.11
Number	12.11
Pattern	12.11
Probability	12.11
Sorting	12.12
Time	12.12
	12.12
NEWSLETTER BLACKLINES	NL 1 - 53
Summary Newsletter Blackline	s A
Blank Tubbing Sheet	1
Student Composite Record	2
Class Composite Weether Green	3
Numeral Carde	4 5 - 7
Numeral Dice Toss	8-9
Numeral Sequences	10
Weighing with Scales	11
Measuring with Containers	11
Scoopfuls	12
Calibrated Jar	13
Estimating Objects in Containe	ers 14
Snap / Clap Cards	15
Surrounding Pattern Base Sam	iples 16
Surrounding Pattern Grid	17
Addition with Unifix Cubes	19
Equation Dice Toss	20
Junkiobs Addition and Subtrac	tion Cards 21
Equation Numeral Cards	22
Vertical Addition Equation Care	ds 23 - 25
Vertical Subtraction Equation C	Cards 25 - 28
Horizontal Addition Equation C	ards 29 - 31
Horizontal Subtraction Equatio	on Cards 31 - 34
Cave Gameboard	35
Cave Game - Symbolic Level W Number Station Bongo Cordo	/orksneet 36
Roh's Ditto	38
Place Value Addition Board	39
Perimeters	40
Measuring Objects	41
Magazine Pictures & Inside/Ou	tside 42
Star Worksheet	43
Hundred's Chart	44
Blank Matrix (10 by 10)	45
Three Matrix Grids	46
3 Column Place Value Strips	4/
Dot Strips (Single HOW Of Dots Dot Strip (Double Bow of Dots)	J 48 40
Dou Sirip (Double Now Of DOIS) General Materials Labels	49 50
Number Station Labels	51
Classroom Supply Labels	52
More / Less / The Same Cards	53

APPENDIX

	A 1 - 11
Integrating Mathematics Their Way with the	
Summary Newsletter	A-1
Mathematic Their Way Materials Directory	A-7

ASSESSMENT REFERENCE CARDS

CARDS	ARC 1 - 12
See Chapter 3 for Assessment Descriptions	
Assessment 1: Rote Counting	1
Assessment 2: One-to-One Correspondence	1 - 2
Assessment 3: Instant Recognition	1
Assessment 4: Conservation of Number	3 - 4
Assessment 5: Counting Backwards	3 - 4
Assessment 6: Estimation of Quantities	3
Assessment 7: Numeral Recognition	5 - 6
Assessment 8: Numeral Writing	5 - 6
Assessment 9: Simple Addition and Subtraction	
9a - Concept Level	5-6
9b - Connecting Level	7
9c - Symbolic Level	7
9d - Visualization	7
Assessment 10: Building Large Numbers with	Manipulatives
10a - Concept Level	9
10b - Connecting Level	9
10c - Symbolic Level	9 - 10
Assessment 11: Regrouping (Addition an	d Subtraction)
11a - Concept Level	11
11b - Connecting Level	11
11c - Symbolic Level	11