

Section 1							
Overview: To introduce materials that will be used throughout the year, such as pattern blocks, coins, and other manipulatives; to develop counting skills through multisensory activities and games; to build familiarity with the numbers 0-9; to introduce sorting by attributes; to introduce patterning through multisensory activities; to introduce graphing by creating age and birthday graphs; to explore measurement by comparing lengths; to introduce volume through sand and water play; to establish Ongoing Daily Routines							
	California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
1♦1	MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more). <i>MG 1.0</i>	Compare lengths using appropriate vocabulary.		length, match, compare, bigger, smaller, longer, shorter, same length		Strips of cardstock: save year to year	
1♦2	MG 2.0 Students identify common objects in their environment and describe the geometric features. MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone). <i>MG 2.2</i>	Use Pattern Blocks to identify and describe shapes.	LIT: <i>Changes, Changes</i>	shape, triangle, square, rhombus, trapezoid, hexagon, pattern		Bags of selected Pattern Blocks	
1♦3	NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). <i>NS 1.0</i>	Use varied sensory stimuli to develop 1:1 correspondence when counting.	<i>Simon Says</i> provides the first opportunity to emphasize positional language. Continue to insert this vocabulary into your routines and/or play games such as <i>Simon Says</i> and <i>Hokey-Pokey</i> (TGA p93) more frequently.		<i>Simon Says</i>	Coins, washers, bottle lids, small wooden cubes; coffee can	
1♦4	NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). <i>MR 1.2</i>	Recognize zero (0) as the number for "none".	LIT: <i>Five Little Monkeys Jumping on the Bed.</i>	none, zero		Raisins, popcorn, fish crackers, cheerios, counters	
1♦5	NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems. <i>NS 1.2</i>	Represent the numbers 1-9 in a variety of ways.	LIT: <i>Emily's First 100 Days of School</i>	number, count	<i>Simon Says</i>	Craft objects, stickers dots for gluing, glue, chart paper or poster board	
1♦6	AF 1.0 Students sort and classify objects. AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red). <i>NS 1.0 NS 1.2</i>	Find ways to sort objects in a variety of ways.	LIT: <i>The Button Box; Frog and Toad Are Friends: The Lost Button</i>	sort, attribute		Buttons, coins, pasta, sorting containers, egg cartons, trays	

1♦7	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties,</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 MR 1.1</i></p>	Compare capacities using appropriate vocabulary.	Activity Card #1 -- Cup of Beans	volume, more, less, holds more than, holds less than, taller than, heavier than, lighter than, shorter than		Fill different sized containers with dried rice, beans and peas	
1♦8	<p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2</i></p>	Make comparisons from data on a bar graph.	Although representing and analyzing bar graphs is a first grade standard, comparative language supports good mathematical thinking. LIT: <i>Flower Garden</i>	graph, data, total, some, none, all, more, most		Student self-portrait or school photo, index cards	
1♦9	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2</i></p>	Use sound and motion to create and extend patterns.		pattern, repeat, AB etc.,		B-I-N-G-O song	
1♦10	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 MR 2.0</i></p>	Use color to create and extend patterns.	Activity Card #2 -- Patterns With Natural Objects	repeat, pattern		Colored beads, Linking Cubes	
1♦11	<p>AF 1.0 Students sort and classify objects.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2</i></p>	Sort coins according to their attributes.	Activity Card #3 -- Feely Box of Coins	sort, heads, tails, coins		Coins, egg cartons, sorting trays, muffin tins	
1♦12	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 1.0</i></p>	Develop number sense with oral counting.			<i>Give the Next Number</i>	My First Math Book	
1♦13	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties,</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 SDAP 1.0</i></p>	Use body heights to compare lengths.	Activity Card #4 -- Bean Count LIT: <i>Where's My Teddy</i>	longer, shorter, same length, taller, about the same		Classroom objects, Draw stick figures, strips of paper, Egg cartons	Compare lengths of two objects.

1♦14	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p>	<p>Use fingers to represent and recognize number 1-10.</p>	<p>Extend lesson to allow ample time for students to use 5 as a benchmark number to support. In Part A students will use one hand to represent 5. In Part B, have students shade in the top row of a horizontal Ten-Frame to represent 5. Read NOTE in margin (TGA p 73).</p> <p>Activity Card #5 -- Covering Ten Frames</p>			<p>Ten frames Counting objects, Egg cartons</p>	<p>Read numbers 0-10 & Count using one-to-one correspondence up to 10.</p>
Project 1	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: right;"><i>SDAP 1.0</i></p>	<p><i>Numbers in Our World</i></p> <hr/> <p>Recognize numbers in a variety of contexts.</p>	<p>LIT: <i>Arlene Alda's; 1 2 3</i></p>	<p>numbers, codes, address, phone number, pattern</p>		<p>Chart Paper</p>	

Section 2							
Overview: To explore 2-dimensional shapes; to reinforce spatial relations vocabulary and concepts; to introduce the concept of symmetry; to develop understanding of teen numbers; to develop counting and numeral recognition skills; to lay groundwork for number writing through tactile and kinesthetic activities; to introduce estimation; to introduce number stories; to continue patterning, graphing, and measurement comparison activities.							
California Standards		Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
2♦1	<p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p>MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).</p> <p><i>NS 1.2 AF 1.0 MG 2.0</i></p>	Identify circles, squares and triangles.	LIT: <i>Circus Shapes</i>	circle, square, triangle, shape, rectangle, straight, side, curved, corner	<i>Give the Next Number</i>	Large poster board cut into shapes; Magazines; catalogs	
2♦2	<p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p>MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).</p> <p><i>MG 2.0</i></p>	Recognize attributes of shapes through touch.		shape, corner, side, round, curve, triangle, square, rectangle		Attribute blocks, feely box, collages from Act #2.1	Identify and name a triangle and circle.
2♦3	<p>MG 2.0 Students identify common objects in their environment and describe the geometric features.</p> <p><i>MG 2.1</i></p>	Follow directions according to spatial vocabulary.	LIT: <i>Rosie's Walk; Three Bears; Three Billy Goats Gruff</i>	top, bottom, next to, between, behind, in front of, around, over, inside, outside, above, besides, up, down	<i>Hokey Pokey</i> (modified)	Blocks or objects Songs: <i>Hokey Pokey, Going on a Bear Hunt</i>	
2♦4	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>SDAP 1.0 SDAP 1.2</i></p>	Use a spinner to count and read numbers 1-10.	Send home <i>Spin A Number</i> for Home Connection.		<i>Spin a Number</i> (MM p136)	Paper clips , spinners, life size game mat	Count 1-10 objects and recognize numerals 1-10.
2♦5	<p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p><i>MG 2.0</i></p>	Describe and extend patterns.		pattern		Pattern Blocks, magazines Large poster board	
2♦6	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>MG 2.0 SDAP 1.2</i></p>	Develop oral counting skills through games.	LIT: <i>The April Rabbits</i>		<i>Count and Sit Follow the Leader</i>	Counting songs: Ten Little Penguins, Five Little Monkeys	

2♦7	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 1.0</i></p>	Develop stroke formation for writing numbers.	<p>During “Getting to Know Numbers, 7-9” emphasize comparative language such as equal to, more than, and less than.</p> <p>Activity Card #6 -- Modeling Dough Numbers</p>	stroke, line, curve, circle, more than, less than, equal to		Trays with sand, beans, shaving cream, finger paint. Sandpaper pieces
2♦8	<p>AF 1.0 Students sort and classify objects.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p style="text-align: center;"><i>NS 1.0 NS 1.1 NS 1.2 SDAP 1.0</i></p>	Practice coin recognition.	<p>Touch & Go. Although this is a 2nd grade standard, students need to become familiar with coins starting in Kindergarten. During “Getting to Know Numbers, 1-9” continue to emphasize comparative language.</p> <p>Activity Card #7 -- Sorting Coins</p>	more than, less than, equal to, match, penny, nickel, dime, coins	<i>Matching Coin Game</i> (MM pg 104)	Bags of coins, coin stickers, Labeled cubes, Egg cartons, muffin trays
2♦9	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>SDAP 1.2</i></p>	Represent numbers with concrete materials (Number Board).	<p>If possible, read <i>Bat Jamboree</i> to your students (TGA p107).</p> <p>LIT: <i>Bat Jamboree</i></p>	pattern, digit	<i>Give the Next Number</i>	Poster board to create number board, small counting objects, stickers, coins Get the book <i>Bat Jamboree</i>
2♦10	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>AF 1.0 AF 1.1</i></p>	Recognize teen numbers and their sequence.		tricky teens	<i>Count and Sit</i> <i>Follow the Leader</i> <i>Give the Next Number</i> <i>Teen Tangle</i> (MM pgs 98-102 & 139) <i>Tricky Teens</i> (MM pgs 97-102)	Card Stock labeled #1-19,
2♦11	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>MG 2.0 MG 2.1</i></p>	Recognize teen numbers.	Activity Card #8 -- Teen Number	teen	<i>I Spy</i> (MM p6)	Teen # cards, I Spy
2♦12	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>MG 1.0 MG 1.1</i></p>	Recognize that teen numbers are 10 and some more.	Activity Card #9 -- Tens/Ones With Craft Sticks	teen		Paper strips for chains Large Teen # cards

2♦13	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 3.0 Students use estimation strategies in computation and problem solving that involve numbers that use the ones and tens places.</p> <p>NS 3.1 Recognize when an estimate is reasonable.</p> <p style="text-align: center;"><i>MG 1.0 MG 1.1</i></p>	Use a frame of reference to estimate the number of objects in a collection.	Estimation is most appropriate when students have a strong sense of quantities which is why it does not appear in the standards until grade 2. At this point introductions to estimation should be done using a frame of reference. Show student a known quantity of objects (i.e. 10) and then have them estimate another quantity by comparing it to the first.	estimate, about		Clear containers	
2♦14	<p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p>MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 MR 1.0 MR 1.1 MR 2.2</i></p>	Represent joining and take-away stories.	<p>Read <i>Mouse Count</i> and or check Resources for the Kindergarten Classroom for additional books to model number stories.</p> <p>Activity Card #10 -- Number stories</p> <p>LIT: <i>Mouse Count; Splash</i></p>	number story, all together, join, add, take away, subtract, remove, equal, more, less, the same	<i>Count and Sit</i>	Counters Get books to model number stories	
2♦15 & 2♦16	<p>MG 2.0 Students identify common objects in their environment and describe the geometric features.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 MG 1.3 SDAP 1.0</i></p>	Use folded paper paintings to recognize symmetry.	Combine into 1 Day: Although symmetry is a 5 th grade standard, these activities are appropriate as an Art lesson. Do these activities: "Follow the Leader with Teens" and "Creating a Bar Graph".	symmetry, symmetrical	<i>Follow the Leader</i>	Folded paper, cotton swabs, eye droppers, squeeze bottles	
2♦A	NS 2.0 Students understand and describe simple additions and subtractions.	Use hands to compose and decompose numbers to 5.	Supplemental Activity to support students in composing and decomposing numbers to 5, add the following routine. Have students use fingers on one hand (or a paper hand cut-out) to compose and decompose numbers to 5. For example, have students show you how many different combinations they can find that represent 5. For 2 and 3, students need to fold down 2 fingers with 3 left up, or fold 3 fingers down and 2 left up. Discuss how many ways you can show 5.				
Project 2	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p style="text-align: center;"><i>MG 1.0 MG 2.0</i></p>	<p style="text-align: center;"><i>Mathematics and Our Bodies</i></p> <p>Use the body as a tool for referencing and applying mathematical skills.</p>	LIT: <i>Count on your Fingers African Style; Africa Counts; Me and My Amazing Body; If You Hopped Like a Frog</i>	digit, yard, hand, hand span, measure, body measures, height, weight, length, symmetry, symmetrical		Collect symmetrical objects in nature, magazines, poster board string, adding machine tape, mirrors, cut out paper dolls	Identify symmetrical objects.

Section 3							
Overview: To introduce the concepts of addition and subtraction through concrete activities; to introduce number writing; to reinforce and extend counting, numeral recognition, and number comparison skills; to introduce skip counting by 10s; to introduce the pan balance; to introduce non-standard measurement tools and units for measuring length; to introduce the basic language of probability; to continue shape recognition, patterning, and graphing activities; to continue estimation and number story activities.							
	California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
3♦1	NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). <i>SDAP 1.2</i>	Develop stroke formation while writing numbers.		number			Represent numerals 1-10 using the correct number of objects.
3♦2	SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors. <i>NS 1.0 NS 1.2 NS 3.0 NS 3.1</i>	Create and describe patterns on macaroni necklaces.	Touch & Go on "Estimating Pennies" . Students are just beginning to explore estimation in Kindergarten. Use a frame of reference. Be cautious of teaching too low or too high as being wrong. Students need to be encouraged to take risks in making "guesses" when they first learn to estimate. Activity Card # 11 -- Pattern Strips	pattern, repeat, similarities, differences		Tube shaped pasta, string, food coloring, rubbing alcohol.	Create and describe a pattern.
3♦3	NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs. <i>NS 1.0 SDAP 1.0</i>	Review counting and number recognition.		count, numbers, graph, row, column, predict	<i>Dice Race</i> (MM p26 & 34)	Dice	
3♦4	MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more). <i>NS 1.2 MR 2.0 MR 2.1</i>	Use a pan balance to compare weights.		weight, compare, heavier than, lighter than, pan balance, level, balance, balanced, equal to, is the same as.	<i>Give the Next Number</i>	Clear containers that fit inside pan balance, paper clips, counters, objects to weigh	
3♦5	NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).	Match numbers of domino dots to written numerals.	Activity Card # 12 -- Matching Dominoes and Number Cards	half, match	<i>Domino Concentration</i> (MM pgs 105-106 & 121-123)	Number cards 0-12, Dominoes	Count 1-12 objects and match numbers with numerals
3♦6	NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other. <i>NS 2.0 MR 1.0 MR 1.2</i>	Compare numbers using words.	During "Telling and Drawing Number Stories" use manipulatives, white boards, or number lines.	number line, big, bigger, small, smaller, more, less, high, low, compare	<i>Monster Squeeze</i> (MM p126-128)	Number line, meter sticks, MM 126-127	

3♦7	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties, MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p><i>NS 1.2 MR 1.0 MR 1.2</i></p>	Use non-standard units to approximate lengths of various objects.	<p>Activity Card #13 -- Measuring Units</p> <p>LIT: <i>The Best Bug Parade</i></p>	measure, about, approximate, longest, shortest, compare		Linking cubes, links, paper clips, items of different lengths	
3♦8	<p>NS 2.0 Students understand and describe simple additions and subtractions. NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p><i>SDAP 1.1 MR 2.2</i></p>	Use concrete model to solve + and – problems.	During “Solving Pocket Problems” reinforce problem solving strategies (i.e. counting objects, fingers, counting on, etc.). Provide paper pockets for the students to represent their problems. Using transparent pockets or plastic jars could help students who are having difficulty not “seeing” the objects.	how many, more, less, take away, subtract, add		10 counters, bag	
3♦9	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 1.3</i></p>	Reinforce counting number recognition & sequencing 0-20.	Activity Card #14 -- Number Card Timer	number cards, order, smaller, bigger	<i>Domino Concentration</i> (MM pgs 105-106 & 121-123)	Number cards, small plastic bags	
3♦10	<p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p><i>MG 2.1</i></p>	Categorize events using basic language of probability.	Combine into 1 Day: Although this is a 3 rd /4 th grade standard, students can become familiar with probability vocabulary in Kindergarten.	possible, impossible, certain, might happen, maybe, happen, might happen, chance, likely, unlikely		Books that features unlikely or impossible events.	
3♦11	<p>SDAP 1.0 Students collect information about objects and events in their environment. SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>MG 2.1 MR 2.1</i></p>	Predict events using basic language of probability.	Touch & Go “Thinking about Probability: Can Pigs Fly?” Do “Using a Probability Tray”. Optional: “Creating Shape Art”. LIT: <i>And to Think I Saw It On Mulberry Street; Wacky Wednesday</i>	certain, likely, more likely, chance, more, all, less, unlikely, possible, impossible, none, probably	<i>Stick Pick Up</i>	Tray, red and blue counters	
3♦12	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties, MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p><i>NS 1.2</i></p>	Use clay to equalize weights in a pan balance.	Activity Card # 15 -- Pan Balance Weights LIT: <i>Mighty Maddie</i>	level, compare, heavier, lighter, balance, equal, weight, is the same as, weighs the same as	<i>Count and Sit</i>	One or more pan balances, objects to weigh	
3♦13	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). NS 2.0 Students understand and describe simple additions and subtractions.</p> <p><i>NS 1.0 SDAP 1.0 SDAP 1.2</i></p>	Use concrete model to practice joining and taking-away objects	LIT: <i>Chugga-Chugga Choo-Choo</i>	count on, forward, add, count back, backward, subtract, remove, take away	<i>Growing & Disappearing Train Games</i> <i>I Spy</i>	Linking cubes, labeled cubes	

3♦14	<p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>MG 1.1 MG 1.3 MR 1.0 MR 1.1</i></p>	Answer comparison questions from a bar graph.	LIT: <i>Caps For Sale</i>	bar-graph, some, none, all, most, least, more, less, fewest		Poster board, squares of white paper	
3♦15	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 2.0 NS 2.1</i></p>	Recognize skip counting as a faster way to count.	LIT: <i>100 Is a Family</i>	1s, 10s, skip counting, counting by 10s		Growing number line, Concrete Number Count containers	
3♦16	<p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 1.0 NS 1.3 SDAP 1.0</i></p>	Represent teen numbers on a teen frame board.	LIT: <i>Teen Numbers</i>	count, teen, ten	<i>Teen Frame</i> (MM p137-139)	Large paper clips, counters, tray	Count and compare teen numbers.
Project 3	<p>MR 1.0 Students make decisions about how to set up a problem.</p> <p>MR 1.1 Determine the approach, materials, and strategies to be used.</p>	<p><i>Fun with Games</i></p> <p>Practice problem solving strategies through games.</p>	<p>Project 3 is an important project that supports Core Process. Allow ample time to complete.</p> <p>LIT: A variety of world math games books see TGA p176</p>	rules, strategy		<p>2 Day Lesson</p> <p><i>Mancala</i> Game, counters, index cards, playing cards, dice, spinners, stickers, cardboard pieces</p>	

Section 4						
Overview: To introduce addition and subtraction symbols and terminology through number stories and concrete experiences; to introduce calculators; to introduce attribute blocks; to introduce "What's My Rule?" Fishing game activities; to continue patterning activities using pattern blocks and the Pattern-Block Templates; to continue to explore 2-dimensional shapes and symmetry; to reinforce and extend counting, numeral recognition, and number-writing skills; to reinforce number sequencing and number comparison skills; to continue graphing, measuring, estimation, and probability activities						
California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
<p>4+1</p> <p>NS 2.0 Students understand and describe simple additions and subtractions. NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10). <i>MG 2.1 MR 2.0 MR 2.1</i></p>	<p>Develop strategies for addition and subtraction on a number line.</p>	<p>During "Counting Steps on the Number Line" have students use 5 as a benchmark number (i.e.6 is one more than 5, 2 is 3 less than 5).</p>	<p>number line, count on count back</p>	<p><i>Go Forward, Back Up</i> (MM p124) <i>Outdoor Hopscotch</i></p>	<p>Outdoor Hopscotch board</p>	
<p>4+2</p> <p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other. NS 1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have. <i>NS 1.0</i></p>	<p>Recognize and compare numbers.</p>	<p>Activity Card #16 -- Addition Top-It</p>	<p>more, less, higher, lower</p>	<p><i>Give the Next Number</i> <i>Top It Games</i> (MM p105-107 & 108)</p>	<p>Card decks and number cards</p>	<p>Compare pairs of numbers 0-20 to determine the smaller and larger number</p>
<p>4+3</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone). SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors. <i>NS 2.0 NS 2.1 MR 2.2</i></p>	<p>Use Pattern Block template to create a pattern strip.</p>	<p>Activity Card #17 -- Pattern Block Creatures</p>	<p>template, circle, triangle, square, parallelogram, trapezoid, hexagon, pattern</p>		<p>Pattern block templates, pattern blocks, strips of paper</p>	
<p>4+4</p> <p>NS 2.0 Students understand and describe simple additions and subtractions. NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10). <i>SDAP 1.2 MR 1.0 MR 1.2</i></p>	<p>Use addition symbol stick to model joining objects.</p>	<p>LIT: <i>Gingerbread Boy</i> and <i>Rooster's Off to See the World</i></p>	<p>add, join, addition, all together, symbol, plus sign</p>	<p><i>Growing & Disappearing Train Games</i></p>	<p>Slates, craft sticks, counters</p>	
<p>4+5</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone). SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors. <i>NS 1.2 NS 3.0 NS 3.1</i></p>	<p>Create, extend and describe patterns using pattern blocks.</p>	<p>"Creating and Extending Pattern-Block Patterns" is a good opportunity to help students recognize when additional information is needed to support. Give the students a triangle and rhombus and ask what comes next? Help the students understand that they need to see repetition to identify the pattern. Touch & Go "Estimating Objects in a Collection". Choose quantities that are appropriate for your students. Activity Card #18 -- Pattern Cover Up</p>	<p>extend, copy, repeat, continue</p>	<p><i>Pattern Cover Up</i></p>	<p>Pattern blocks</p>	<p>Create, extend, and describe 2- and 3-part patterns</p>
<p>4+6</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). <i>SDAP 1.0 SDAP 1.1</i></p>	<p>Count forwards from any number.</p>			<p><i>Count and Sit Dice Race</i> (MM p26 & 34) <i>Follow the Leader</i> <i>Give the Next Number</i></p>	<p>Stop sign or red circle, dice</p>	<p>Counting by 1s to at least 30.</p>

4♦7	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p><i>NS 1.1 NS 1.2 NS 1.3</i></p>	Read two digit numbers.	<p>Modification: Substitute the Readiness Activity “Practicing 2-Digit Number Recognition” in Part B for “Exploring Calculators”. Play <i>Teen Frame</i>.</p>	calculator, display, clear, all clear	<i>Teen Frame</i> (MM p137-139)	Calculators, large signs: [ON/C] or [AC] – depending on calculators being used Growing Number Line (GNL), spinners, counters, Ten Frames	
4♦8	<p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>NS 2.0 MG 2.1 SDAP 1.0</i></p>	Create a graph dice roll sums.	<p>Skip: Drawing a 10-Part Bug in Part B, not enough instructional value for the time students spend waiting for their number.</p>	add, sum, probability, likely, chance, graph, graphing		Dice, attribute and feely box	
4♦9	<p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p>MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).</p> <p><i>MR 1.0</i></p>	Use bodies and rope to create shapes.	During “Making Shapes” ask students “what makes this a triangle? A square?” to support. Optional: “Making Symmetrical Snowflakes”.	circle, square, rectangle, triangle, side, corner, shape, attribute		Rope or string, shape collages from 2.1	
4♦10	<p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p>MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).</p> <p><i>AF 1.0 AF 1.1</i></p>	Recognize that shape name remain the same even if position and size changes.	<p>During “Comparing Shapes” ask students “what makes this a triangle? A square?” to support.</p> <p>Activity Card #19 -- Shapes and Geo-boards</p> <p>LIT: <i>Grandfather Tang's Story</i></p>	shape, side, corner, angle, edge, turn, rotate, same, different		Construction paper shapes, different sizes, rope or string cut into two pieces, Geo-boards, tangrams, index cards w/student names	
4♦11	<p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p><i>NS 1.0 MR 1.0 MR 1.2</i></p>	Use subtraction symbol stick to model separating objects.	During “Practice Number Writing” focus on numbers 0-31.	take away, subtract, subtraction, symbol, minus sign.	<i>Growing & Disappearing Train Games</i>	Craft sticks and counters	
4♦12	<p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>MG 1.1</i></p>	Practice number writing and number recognition.	Activity Card #20 -- Number Writing on Slates			Large number cards, slates, spinners and dice	
4♦13	<p>AF 1.0 Students sort and classify objects.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p><i>NS 1.2 MG 2.1 MG 2.2</i></p>	Sort blocks according to different attributes.	LIT: <i>Three Little Firefighters</i>	thick, thin, attribute, shape, size, number of sides, circles, triangles, rectangles, squares (as special rectangles), rhombi, hexagons, and trapezoids	<i>Simon Says</i>	Attribute blocks	Recognizing and naming shapes; using rules to sort a collection of objects
4♦14	<p>AF 1.0 Students sort and classify objects.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p><i>MG 2.0</i></p>	Use sorting rules to sort children.		sorting, attribute, circles, triangles, rectangles, squares (as special rectangles), rhombi, hexagons, and trapezoids.	<i>I Spy</i> (MM p6) <i>What's My Rule?</i> <i>Fishing for Attributes</i> <i>Who Am I Thinking Of?</i>		

4♦15	<p>NS 2.0 Students understand and describe simple additions and subtractions. MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.</p> <p><i>NS 1.2 MR 1.0 MR 1.1 MR 2.2</i></p>	<p>Create number stories involving joining and take away situations.</p>		<p>joining, take away, number story, add, subtract, addition, subtraction, plus, minus, equal, symbol, number sentence, strategy</p>	<p><i>Count and Sit</i></p> <p><i>Growing & Disappearing Train Games</i></p>	<p>Counters, chart paper, symbol posters with "+" and "-", die with operation symbols</p>	
4♦16	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>SDAP 1.0</i></p>	<p>Practice reading two-digit numbers up to 99.</p>	<p>During "Reading 2-Digit Numbers" focus on numbers 0-31.</p>	<p>digits, tens, ones</p>		<p>Large number cards, straws or sticks, calculators</p>	
Project 4	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MR 1.1 Determine the approach, materials, and strategies to be used.</p> <p><i>MG 2.0 SDAP 1.2</i></p>	<p><i>Class Celebrations</i></p> <p>Apply various math skills when planning a celebration.</p>	<p>LIT: <i>Spaghetti and Meatballs for All</i> (additional titles in TGA p 225)</p>	<p>measure, recipe, pattern, shape words</p>		<p>food items, sponges, measuring cups and spoons, large bowls</p>	

Section 5							
Overview: To introduce the need for standard measurement tools and units through continued measuring activities; to reinforce the use of multiple attributes to identify, describe, and sort objects; to reinforce the meanings of addition and subtraction and the use of symbols to write number models for addition and subtraction number stories; to develop awareness of equivalent names for numbers; to introduce the concept of making exchanges; to introduce the Class Number Grid; to introduce skip counting by 5s and tally marks; to reinforce and extend counting, estimation, and other numeration skills; to continue patterning and graphing activities							
	California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
5♦1	MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar). <i>NS 2.0 NS 2.1 MG 1.4</i>	Use ordinal numbers to sequence events.	Look at the project at the end of this Section to see where these activities for the 100th Day of School can be done.	morning, afternoon, evening, before, after, first, second, third, next, last, order, time	<i>Growing & Disappearing Train Games</i>		Sequence events and describe time periods of the day
5♦2	SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors. <i>NS 1.2</i>	Create, describe and extend visual patterns.	This is the first time students will use "My First Math Books". Activity Card #21 -- Toothpick Patterns	AB pattern		Craft sticks	
5♦3	AF 1.0 Students sort and classify objects. AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red). MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone). <i>NS 1.2 MR 1.2</i>	Use multiple attributes to find and describe blocks.	During "Using Slates to Practice Writing 2-digit Numbers" emphasize the numbers 0-31.	attributes, shapes, large, medium, small, thick, thin, shape names, color names	<i>Find the Block</i> <i>I Spy</i> (MM p6)	Attribute blocks	Read and write numbers to 30
5♦4	NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 2.0 Students understand and describe simple additions and subtractions. <i>MG 1.1 MR 1.2</i>	Recognize and find equivalent names for numbers.	Although the benchmark number changes in this lesson, spend ample time emphasizing 5 as a benchmark number (i.e.6 is one more than 5, 2 is 3 less than 5). Extension: use 10 as a benchmark. During "Using Pan Balances" reinforce vocabulary of equal, more than, and less than. Activity Card #22 -- Missing Number Game	digit, less than, between, more than, equal, less than, more than	<i>Guess My Number</i>	Pan Balance	
5♦5	NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). <i>NS 1.1</i>	Compare numbers using words. (Monster Squeeze).		clear, all clear, plus, minus, take away, subtract, equals.	<i>Monster Squeeze</i> (MM p126-128)	Calculators, symbol posters from 4.7	
5♦6	MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more). <i>NS 1.0 NS 1.1 NS 1.3</i>	Measure using non-standard feet.		measure, foot, heel to toe, longer than, shorter than.	<i>Top It Games</i> (MM p105-108)		

5♦7	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p style="text-align: center;"><i>NS 1.2</i></p>	Compare measures between standard and non-standard feet.	LIT: <i>How Big is a Foot?</i>	standard, foot, unit	<i>Count and Sit</i>	Foot cut outs from 5.6	
5♦8	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	Skip count by 5's.	Activity Card #23 -- Counting Nickels	skip counting, pattern		Growing Number Line	
5♦9	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 1.0</i></p>	Represent skip counting by 5's with tally marks.	<p>If possible read <i>Tally O'Malley</i> by Stuart J. Murphy to support tally marks.</p> <p>LIT: <i>Tally O'Malley</i></p>	tally marks, data			
5♦10	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 3.0 NS 3.1</i></p>	Use craft stick to represent exchanges for 5.	Use markers to make 5 dots on craft sticks, rather than using beans if you do not have time. Have students skip count by 5's to determine the total number of beans at the end of the game. During "Estimating Objects in a Collection" choose quantities that are appropriate for your students.	exchange, trade, equal	<p><i>Penny - Nickel Exchange</i></p> <p><i>The Raft Game</i></p>	Note: Kids pre-make planks and rafts a few days before. Materials: craft sticks, beans, glue, dice, small plastic animals	Make reasonable estimates.
5♦11	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p style="text-align: center;"><i>NS 1.2</i></p>	Compare measures between standard and non-standard feet.	<p>Caution: Standard measurement is a 2nd grade standard. During "Measuring and Comparing" select components that are most appropriate for your students (i.e. my feet, my partner's feet, and/or standard feet).</p> <p>LIT: <i>Inch by Inch</i></p>	standard, non standard, measurement, length, foot, feet, longer than, shorter than, 12-inch ruler		Feet cut outs, growing number line	
5♦12	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2</i></p>	Reading numbers on a standard measuring tool.	<p>Activity Card #24 -- Measuring Long Lines</p> <p>LIT: <i>Building a House</i></p>	measuring tools, scale, zero, rulers, yardsticks, tape measures, carpenter measures and meter sticks.	<i>Domino Concentration</i> (MM p105-106 & 121-123)	Rulers, meter sticks, tape measures	

5♦13	<p>SDAP 1.0 Students collect information about objects and events in their environment. SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>SDAP 1.2</i></p>	Answer quantity questions from a bar graph.		bar, total, some, none, all, more, fewer, bar graph, label, column, title, tally mark		Poster board, index cards, books about pets	Answer questions based on a bar graph
5♦14	<p>AF 1.0 Students sort and classify objects. AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red). MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	Select block based on multiple attributes.	Activity Card #25 -- Attribute Trains	words describing size, color and shape, thick thin, attributes, tally marks	<i>Attribute Spinner Game</i> (MM p118-119)	Attribute blocks, card stock, paper clips, spinners	
5♦15	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 2.0 MR 1.1 MR 2.1 MR 2.2</i></p>	Identify and locate numbers on a number grid.	LIT: <i>How the Stars Fell into the Sky</i>	number grid, row, column, before, after, start, end.		Class number grid, sticky notes	
5♦16	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>AF 1.0 AF 1.1</i></p>	Locate numbers on a number grid based on cues.		number grid, row, column, right, left, middle, higher, lower, top, bottom, above, below	<i>Matching Coin Game</i> (MM p104) <i>Number Grid Game</i> (MM p110 & 129) <i>Number Grid Search</i> (MM p110)	Class number grids, sticky notes, blind fold, coins	
Project 5	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). MR 1.1 Determine the approach, materials, and strategies to be used.</p> <p style="text-align: center;"><i>MG 1.2 MR 2.1</i></p>	<p style="text-align: center;"><i>The 100th Day of School</i></p> <p>Develop number sense for the quantity of 100.</p>	LIT: <i>Centipedes 100 Shoe; Emily's First 100 Days of School; Miss Bindergarten; Celebrates the 100th Day of Kindergarten; 100 Hungry Ants</i>	one hundred, groups of ten collection		2 Day Lesson poster boards for 100 collections, sticky notes, hundred charts, measuring tools, index cards	

Section 6						
Overview: To introduce pennies, nickels, dimes, and coin exchanges; to introduce 3-dimensional shapes and review 2-dimensional shapes and symmetry; to explore various ways to measure and compare time; to extend graphing skills to include making individual survey graphs; to extend patterning skills to include representing patterns with symbols; to introduce skip counting by 2s and to continue other counting, estimation, and numeration activities; to introduce the concept of half; to develop strategies for solving simple addition and subtraction problems, including joining, take-away, and comparison situations; to continue measurement activities using standard and nonstandard tools and units						
California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
<p>6♦1</p> <p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p><i>NS 1.2 NS 2.0 NS 2.1 MR 1.2</i></p>	Recognize and count pennies.	<p>If available, utilize document camera zoom to magnify the penny. During "Counting Steps on a Number Line" have students count both forward and back. Continue to emphasize 5 as a benchmark number (i.e.6 is one more than 5, 2 is 3 less then 5). Although naming and determining values of coins is a 2nd grade standard, this is an appropriate lesson.</p> <p>Activity Card #26 -- Coin Rubbings</p> <p>LIT: <i>Benny's Pennies</i></p>	penny, coin, cent, worth, value, symbol		Pennies, small plastic bags, magnifying lens, Photo of Lincoln and Memorial	
<p>6♦2</p> <p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p><i>NS 2.0 NS 2.1</i></p>	Recognize nickels and trade 1 for 5 pennies.	<p>If available, utilize document camera zoom to magnify the nickel. Although naming and determining values of coins is a 2nd grade standard, this is an appropriate lesson.</p>	nickel, coin, cent, penny, exchange, value, trade and symbol	<i>Growing & Disappearing Train Games</i> <i>Penny - Nickel Exchange</i>	Gather items to sell, nickels, pennies, magnifying lens	
<p>6♦3</p> <p>MG 2.0 Students identify common objects in their environment and describe the geometric features.</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p>MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners).</p> <p><i>AF 1.0 AF 1.1</i></p>	Compare 2-D and 3-D shapes	<p>Although symmetry is a 5th grade standard, these activities are appropriate as an Art lesson. Focus the lesson on "Making a Shape Museum" and play <i>Penny-Nickel Exchange</i> from 6♦2 if you did not have time to play in the previous lesson.</p> <p>LIT: <i>Captain Invincible and the Space Shapes</i></p>	two-dimensional, three-dimensional, sphere, cube, square, circle, triangle, rectangle, cone, sphere, cylinder, same, different	<i>Stand Up If</i>	Common 3 dimensional geometrical shapes, two dimensional shapes	
<p>6♦4</p> <p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p><i>NS 1.0 NS 1.2</i></p>	Use steady counting to measure and compare time.	<p>Model tip-toeing (slow and steady) to students prior to "Beating Out Time".</p> <p>LIT: <i>Tortoise and the Hare</i></p>	steady pace, faster, slower, length, counts, longest, shortest	<i>The Raft Game</i>	Drum or metronome	
<p>6♦5</p> <p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>NS 1.1 NS 1.2</i></p>	Use a bar graph to display results of a survey.	<p>Although representing and analyzing bar graphs is a 1st grade standard, comparative language. Allow ample time for students to complete their surveys.</p> <p>LIT: <i>The Best Vacation Ever.</i></p>	survey, graph, data, title, label		Poster board, clip boards, construction paper	
<p>6♦6</p> <p>MG 2.0 Students identify common objects in their environment and describe the geometric features.</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p><i>SDAP 1.0 SDAP 1.1</i></p>	Identify and describe 2-D and 3-D shapes.	Activity Card #27 -- Feeling for shapes	two-dimensional shape names, three-dimensional shape names.	<i>I Spy</i> (MM p6)	Two and three dimensional shapes	

6↔7	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>AF 1.0 AF 1.1 MG 2.1</i></p>	Recognize dimes and trade 1 for 10 pennies.	If available, utilize document camera zoom to magnify the dime. Although naming and determining values of coins is a 2 nd grade standard, this is an appropriate lesson.	dime, nickel, penny, exchange, cents, estimate, value, coin	<i>Attribute Spinner Game</i> MM p118-119 <i>Penny - Dime Exchange</i>	Dimes, pennies, magnifying lens, spinners, dice	Count by 10s
6↔8	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p> <p style="text-align: center;"><i>NS 2.0</i></p>	Practice exchanging coins.	Naming and determining values of coins is a 2 nd grade standard.	exchange, penny, value, trade, nickel, dime, coin, worth, count	<i>Guess My Number; Penny - Dime Exchange</i> ; <i>Penny - Nickel Exchange</i>	Large collections of coins	Identify pennies, nickels, and dimes
6↔9	<p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p style="text-align: center;"><i>MG 1.1 MR 2.0 MR 2.1</i></p>	Use 1:1 correspondence to solve comparison number stories.		comparison, number story, difference, more, less, equal to, greater than, less than		Counters	Use nonstandard measuring tools and units to measure length
6↔10	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>NS 3.0 NS 3.1</i></p>	Use paired objects to skip count by 2's.	<p>"Estimating Nickels or Dimes" Touch & Go. Counting the total value is beyond 2nd grade standard. Choose quantities appropriate for your students and use strong teacher guidance to support students in finding the total value of the coins. Use pennies instead of nickels or dimes if students are not ready.</p> <p>Activity Card #28 -- Counting by 2's on a number grid</p> <p>LIT: <i>How Many Feet in the Bed</i></p>	count by twos, pair, skip count, number pattern		Growing number line, class number grid, nickels and dimes	
6↔11	<p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 NS 1.3</i></p>	Divide a group of objects in half.	LIT: <i>The Doorbell Rang</i>	half, halves, divide, equal, even odd, uneven, whole, part	<i>Cover Half</i> MM p120 <i>Teen Frame</i> MM p137-139 ; <i>Top It Games</i> MM p105-107 & 108	Counters or pennies	
6↔12	<p>AF 1.0 Students sort and classify objects.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p style="text-align: center;"><i>NS 1.1</i></p>	Select a block from a collection bases on attribute clues.	Activity Card #29 -- Making Attribute Collages	attributes, clues	<i>Find the Block</i> ; <i>Guess Who?</i> , <i>Monster Squeeze</i> MM p126-128 ; <i>Read my Mind</i>	Collect collage materials (magazines), attribute blocks	Use attribute rules to find an object

6♦13	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p style="text-align: center;"><i>NS 1.2</i></p>	Compare time measurements.		seconds, comparing, time, measure, tools	<i>Number Grid Search</i> MM p110	Clocks, stop watches, hour glass, number grid	
6♦14	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p>	Use coins to create and extend patterns.	LIT: <i>King's Commissioners</i>	skip counting, plus equals, pattern, repeat, on, all clear		Calculators, large signs: [ON/C] or [AC]	
6♦15	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	Use symbols to create and extend patterns.		represent, translate, symbol, copy, repeat		Chalk board and chalk, coins, musical instruments	Use basic probability terms
6♦16	<p>MR 2.0 Students solve problems in reasonable ways and justify their reasoning.</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p> <p style="text-align: center;"><i>NS 2.0 MR 1.1</i></p>	Determine whether 2 parts of a whole are equal (halves).	<p>Activity Card #30 -- Making Half and Half Pizzas</p> <p>LIT: <i>Little Mouse; The Red Ripe Strawberry and the Hungry Bear; Give Me Half</i></p>	whole, part, half, divide, equal, one half		Graham crackers	
Project 6	<p>MR 1.1 Determine the approach, materials, and strategies to be used.</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	<p style="text-align: center;"><i>Maps and Mapping</i></p> <p>Use mapping activities to describe the relative position of objects.</p>	<p>Spend 1 Day on this project.</p> <p>LIT: <i>Pirates</i></p>	map, orientation		pirate books, chart paper	

Section 7							
Overview: To introduce the concept of 10s and 1s and place value using concrete materials; to introduce name collections through continued exploration of equivalent names for numbers; to introduce quarters and reinforce the names and values of other coins; to reinforce addition and subtraction skills and the use of number sentences to model addition and subtraction number stories; to extend data collection and graphing skills; to continue activities with 2- and 3-dimensional shapes; to continue to explore "What's My Rule?" activities with sorting and patterning; to reinforce and extend counting, estimation, and other numeration skills							
California Standards		Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
7♦1	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 1.0</i></p>	Identify names and values of a penny, nickel & dime.	The marked coins on the cube must be very recognizable. Glue a picture or use a rubber stamp to mark your cubes.	dime, penny, nickel, cents, exchanging, bank	<i>Go Forward, Back Up (with money)</i> MM p124 ; <i>Money Cube (Coin Exchange)</i> ; <i>Money Grid</i> MM p125 <i>Spin a Number (with money)</i> MM p136	Coin marked cube, pennies, nickels, dimes and calculators, spinner, dice	Know the names and values of coins
7♦2	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>NS 2.0 AF 1.0 AF 1.1 MG 1.0</i></p>	Group and count objects by 10's.	Add this activity to your routines to provide more practice grouping and counting objects by 10s.	tally, data, record, chart, collection, track, growth		Large storage containers, plastic bags, items for a class collection	
7♦3	<p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p><i>MG 2.1 MR 1.0 MR 1.1 MR 1.2 MR 2.2</i></p>	Use pictures and symbols to represent and solve number stories.	LIT: <i>12 Ways to get to 11</i>	number sentence, addition, subtraction, add, subtract, plus, minus, equal, equation, symbol, number sentence	<i>I Spy</i> MM p6; <i>Stand Up If</i>	Chart paper, 3-d shapes	Identify number story situation as addition or subtraction.
7♦4	<p>MG 2.0 Students identify common objects in their environment and describe the geometric features.</p> <p>MG 2.1 Identify and describe common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone).</p> <p><i>MR 1.2 MR 2.0 MR 2.1</i></p>	Use toothpicks to construct 2-D shapes.	Activity Card #31 – Straw Shapes LIT: <i>Picture Pies</i>	dimensional, two-dimensional & three-dimensional shape names.		Mini marshmallows, round tooth picks, card stock. Straws, twist ties	Model half of a collection
7♦5	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 1.0 SDAP 1.0 SDAP 1.1</i></p>	Recognize quarters and trade 1 for 25 pennies.	Touch & Go: Although naming and determining values of coins is a 2 nd grade standard, this is an appropriate lesson.	quarter, cent, exchange, value, nickel, dime, penny, ¼, dollar	<i>Money Cube (Coin Exchange)</i>	Quarters, nickels, pennies and dimes, magnifying lens, feely box, dice, number grid	
7♦6	<p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p><i>NS 1.0 NS 1.1 NS 1.3</i></p>	Compare dice sum totals.	LIT: <i>Animals on Board</i>	sum, add, count-on, strategy	<i>Dice Addition Games</i> <i>Dice Race</i> MM p26 & 34	Dice, counters	Add small numbers

7♦7	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	Count forwards and backwards to 100 starting from any number.			<i>Count and Sit (by 10s)</i> <i>Give the Next Number</i>	Class collection of things to count	
7♦8	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 3.0 NS 3.1</i></p>	Use bundles to represent numbers as 10s and 1s.	Activity Card #32 -- Craft Stick	exchange, bundle, tens, ones, represent, place value	<i>Number Grid Search</i> MM p110	Craft sticks, rubber bands, cups, labeled containers, small plastic bags, number grid	Use manipula-tives to model numbers and make ex-changes
7♦9	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p style="text-align: center;"><i>NS 2.0 AF 1.1 MR 1.2 MR 2.2</i></p>	Use craft sticks to represent number equivalencies.	During "Exploring Equivalent Names for Numbers", give the students five craft sticks instead of six. If your students are fluent with combinations to make 5, extend with other numbers such as 6, 7, and so on. Activity Card #33 -- Connecting cube numbers	combinations, name collections, equivalent names, number models	<i>Attribute Spinner Game</i> MM p118-119 <i>Guess My Number</i>	Craft sticks, chart paper, spinners	
7♦10	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 1.3 NS 3.0 NS 3.1</i></p>	Write consecutive numbers on a number scroll.		scroll, number grid	<i>Number Grid Search</i> MM p110	Class number grid, calculator, quarters	
7♦11	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>SDAP 1.0</i></p>	Recognize a pattern in counting to record tens place.		ones, tens, place value, count forward	<i>Guess My Number</i>	Chalk board, chalk, erasers, number grid, bundles of sticks, number line	
7♦12	<p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 SDAP 1.0</i></p>	Connect + and - symbols to the actions of adding and taking away.	Activity Card #34 -- Clear the Board	add, subtract, symbol, plus, minus	<i>Clear the Board or Cover the Board; Plus or Minus Steps</i>	Labeled cube, counters, dice	

7♦13	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>NS 1.3 MR 1.2</i></p>	Represent and compare 2-digit numbers using 10's and 1's.			<p><i>Money Cube (Coin Exchange)</i> ; <i>Number Grid Grab</i></p>	Two labeled cubes, craft sticks, number line, number grid, calculators	
7♦14	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>SDAP 1.0 SDAP 1.1</i></p>	Order nonconsecutive numbers from least to greatest and vice versa.		smaller, larger, order, largest, smallest	<i>High Low</i>	Number line, number grid, index cards, grocery store flyer, number cards	Compare and order numbers
7♦15	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>NS 1.0 NS 2.0 NS 2.1</i></p>	Translate pattern rules to different media.	<p>See NOTE in TGA p362. Use "Comparing Patterns" as an RSA to assess students' ability to translate patterns.</p> <p>LIT: <i>I Went Walking</i></p>	pattern, rule, repeat, create, extend, compare, identity	<i>What's My Rule?</i> MM p58	Coins, craft sticks, connecting cubes, Song "Did You Ever see a Laddie Lassie?"	
7♦16	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p style="text-align: center;"><i>MR 1.2</i></p>	Use bead strings to represent equivalent names for numbers	<p>Modification: Make at least one bead loop of 5. Use FMB p21 as an RSA (i.e. show me 5 in 3 different ways).</p> <p>LIT: <i>Math Fables</i></p>	equivalent names, name collections, combinations	<i>Monster Squeeze</i> MM p126-128	String or pipe cleaners, beads, blocks, straws	
Project 7	<p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p style="text-align: center;"><i>MG 1.1 MR 1.0 MR 1.1</i></p>	<p style="text-align: center;"><i>Weaving</i></p> <p>Use weaving activities to practice patterning and directionality.</p>	<p>Optional: Can be used along with Science Fabric Unit LIT: <i>The Goat in the Rug: The Chief's Blanket</i></p>	weaving, warp, woof, over, under, back, forth, left, right		Stiff card board, yarn	

Section 8						
<p>Overview: To introduce the use of the hour hand to estimate time on an analog clock; to introduce the concept of hours and minutes; to introduce Function Machines and function rules; to continue to explore place-value concepts and equivalent names for numbers; to introduce the \$1 and \$10 bills and reinforce coin names, values, and exchanges; to introduce “missing number” problems and reinforce the use of number models for addition and subtraction stories and situations; to continue activities with 2- and 3-dimensional shapes; to continue graphing and measurement activities; to reinforce and extend counting, estimation, and other numeration activities</p>						
California Standards	Learning Target	Comments	Vocabulary	Games	Advanced Prep	RSAs
<p>8↕1</p> <p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p><i>NS 1.3 MG 1.1 MR 1.2</i></p>	<p>Use craft stick to make exchanges of 1s, 10s & 100s.</p>		<p>ones, tens, hundreds, equals, trade, exchange, count, group, collect, collection</p>	<p><i>Ones, Tens, Hundreds Game</i> (MM p130)</p> <p><i>Paper Money Exchange Game</i> (MM p113-114 & 131-134)</p>	<p>Labeled cubes, bundles of ten craft sticks, paper money</p>	<p>Exchange ones for tens and tens for hundred</p>
<p>8↕2</p> <p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p><i>SDAP 1.0</i></p>	<p>Develop sense of length of an hour.</p>	<p>Although telling time is a 2nd grade standard, this is an appropriate lesson.</p> <p>LIT: <i>My Grandmother's Clock; Me: Counting Time</i></p>	<p>hour, o'clock, graph, timer, watch, analog</p>		<p>Wall clock, beeping timer (beeping on the hour)</p>	
<p>8↕3</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p>MG 1.4 Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock; bedtime is 8 o'clock at night).</p> <p><i>MG 1.0 MG 2.0 MG 2.1</i></p>	<p>Use analog clock's hour hand to show approximate time.</p>	<p>Although telling time is a 2nd grade standard, this is an appropriate lesson.</p> <p>Touch & Go.</p> <p>LIT: <i>The Grouch Lady Bug</i></p>	<p>hour-hand, o'clock, just before, just after, halfway between, shapes, one-dimensional, two-dimensional</p>	<p><i>Walk Around the Clock</i> (MM p56)</p>	<p>Fasteners, card stock or paper plates</p>	
<p>8↕4</p> <p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10).</p> <p><i>NS 1.1 NS 1.2 NS 1.3 AF 1.1</i></p>	<p>Develop counting on as an addition strategy.</p>		<p>compare, count on, rule, attribute, circles, triangles, rectangles, squares (as special rectangles), rhombi, hexagons, and trapezoids.</p>	<p><i>High Roller Games</i></p> <p><i>What's My Rule?</i></p> <p><i>Fishing</i></p>	<p>Dice and counters, calculators</p>	
<p>8↕5</p> <p>NS 2.0 Students understand and describe simple additions and subtractions.</p> <p>AF 1.1 Identify, sort, and classify objects by attribute and identify objects that do not belong to a particular group (e.g., all these balls are green, those are red).</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p> <p><i>AF 1.0 MR 1.2 MR 2.2</i></p>	<p>Use a rule to add numbers in a function machine.</p>	<p>When introducing the function machine, spend time modeling concrete examples before you ask students to determine a rule.</p> <p>Activity Card #35 -- Function Machines</p>	<p>function machine, rule, coins, penny, nickel, dime, quarter, clues, addition, subtraction, in, out</p>		<p>Small box, index cards, counters, coins</p>	

8♦6	<p>NS 2.0 Students understand and describe simple additions and subtractions. MR 2.2 Make precise calculations and check the validity of the results in the context of the problem.</p> <p style="text-align: center;"><i>NS 1.0 NS 1.2 SDAP 1.1 MR 2.0</i></p>	Develop number sense with mental math activities.		digit, reverse, add, subtract, weather, temperature, data, graphs, tallies, display, questions	<p style="text-align: center;"><i>Number Grid Grab</i></p> <p style="text-align: center;"><i>Number Gymnastics</i></p>	Number grid	
8♦7	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p style="text-align: center;"><i>NS 1.2 NS 1.3 NS 2.0</i></p>	Recognize characteristics of a dollar bill.	LIT: <i>The Big Buck Adventure</i>	one-dollar bill, dollar sign, exchange, equals, symbol, function machine, equals,		Dollar bills, magnifying lens, paper plates, coins, dollar store items	
8♦8	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p style="text-align: center;"><i>NS 1.2 NS 2.0 MR 2.1</i></p>	Use coins to make exchanges of 1s, 10s & 100s.	Use <i>One Dollar</i> game or Extra Practice Games in Part B. LIT: <i>A Bargain for Francis; A Chair for my Mother</i>	exchange, bundle, tens, ones, represent, place value	<p style="text-align: center;"><i>Money Grid</i></p> <p style="text-align: center;"><i>Money Cube (Coin Exchange)</i></p> <p style="text-align: center;"><i>One Dollar Game</i> (MM p115-116)</p> <p style="text-align: center;"><i>The Raft Game</i></p>	Labels cubes, coins	
8♦9	<p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). NS 2.0 Students understand and describe simple additions and subtractions.</p> <p style="text-align: center;"><i>NS 1.0 NS 2.1</i></p>	Represent number equivalencies in multiple ways.	Activity Card #36 -- Equivalent Dominoes LIT: <i>One is a Snail; Ten is a Crab</i>	equivalent names, name collection, number scrolls, grid		Chart paper, poster board, tape, dominoes	Represent equivalent names for numbers
8♦10	<p>NS 2.0 Students understand and describe simple additions and subtractions. MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p> <p style="text-align: center;"><i>MG 1.2 MG 1.4 MR 1.2</i></p>	Identify addition rules for function machines.	When introducing the function machine, spend time modeling concrete examples before you ask students to determine a rule. If students have difficulty identifying the rule, focus on applying the rule (i.e. +2 or +3).	function machine rule, hour-hand, minute-hand, hour, minute, slower, faster, o'clock	<p style="text-align: center;"><i>What's My Rule?</i> (MM p58)</p>	Chalk boards, analog clock, links	Apply simple addition & subtraction rules to complete a number pair
8♦11	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p style="text-align: center;"><i>MG 1.1</i></p>	Recognize the difference between the hour and minute hands.		hour-hand, minute-hand, our, minute, slower, faster, o'clock		Paper clocks, analog clock, pan balance	
8♦12	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p style="text-align: center;"><i>MG 2.1 MG 2.2</i></p>	Read clocks to the hour.		analog, digital, divide, whole, half, halves, equal, exact	<p style="text-align: center;"><i>Time Match</i> (MM p140-143 & 112)</p>	Paper clocks, digital and analog clock, watchers	

8♦13	<p>NS 2.0 Students understand and describe simple additions and subtractions. NS 2.1 Use concrete objects to determine the answers to addition and subtraction problems (for two numbers that are each less than 10). MR 2.2 Make precise calculations and check the validity of the results in the context of the problem.</p> <p style="text-align: center;"><i>MG 2.0 MG 2.1 MR 1.0</i></p>	Use objects to solve missing number problems.	Activity Card #37 -- Number Model Cards	total, umber sentence, missing number, add, subtract, spy, shape, pattern, rule, clue	<i>I Spy</i> (MM p6)	Box or bag pocket, number cards, craft sticks, counters, walk on number line	Identify shapes
8♦14	<p>NS 2.0 Students understand and describe simple additions and subtractions. MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems. MR 2.2 Make precise calculations and check the validity of the results in the context of the problem.</p> <p style="text-align: center;"><i>NS 1.2 MR 2.1</i></p>	Tell and solve number stories on a calculator.	LIT: <i>More, Fewer, or Less</i>	number story, addition sign, minus (take away) sign, equals, equals sign, clear, all clear	<i>Number Gymnastics</i>	Calculators	Identify addition and subtraction situations; model number stories with numbers and symbols
8♦15	<p>NS 3.1 Recognize when an estimate is reasonable. MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more).</p> <p style="text-align: center;"><i>NS 1.2 MG 2.2</i></p>	Use pan balance to compare weights using nonstandard unit.	Activity Card #38 -- Snack Foods	level, weigh, weights, unit, balance, number, pictures, symbols, tallies, ten-frame, words		Pan Balance, small objects, (pennies, washers, etc...)	Generate equivalent names for numbers, including representations with addition and subtraction
8♦16	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p style="text-align: center;"><i>NS 1.2 MG 1.1 MG 2.2</i></p>	Recognize characteristics and value of a ten dollar bill.		one dollar bill, ten dollar bill, trade exchange, equals, dollar sign, measure, rulers, tape measures, foot, feet, standard, record, tools	<i>Paper Money Exchange Game</i> (MM p132-134)	A real \$10.00 bill, magnifying lens, calculator, tape measure	
Project 8	<p>MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more). MG 2.2 Compare familiar plane and solid objects by common attributes (e.g., position, shape, size, roundness, number of corners). SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p> <p style="text-align: center;"><i>NS 3.0 MG 1.2 SDAP 1.0</i></p>	<i>Math Outdoors</i>	Optional: Although the Obstacle Course activity.				
		Practice a variety of math skills through outdoor activities.	LIT: <i>Anno's Magic Seeds: Planting a Rainbow; Tops and Bottom</i>	estimate, measure, compare, height, length, over, under, near, far, left, right		measuring tools (stop watch...), hopscotch board	

Section Routines			
Overview: To establish Ongoing Daily Routines			
	California Standards	Routines	Vocabulary
Number of the Day Routine	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p>	<p>Building the Growing Number Line Making a Concrete Number Count Collection Using the Growing Number Line Thinking about Place Value</p>	ones, tens, hundreds, number of the day
Attendance Routine	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other.</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>NS 1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have.</p> <p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs.</p>	<p>Recording and discussing data Using Attendance Data in Context</p>	more, less, same, some, none, all, altogether, present, absent, chart, record, data
Job Chart Routine	<p>AF 1.0 Students sort and classify objects.</p> <p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p>	<p>Using the Job Chart</p>	rotate, before, after, pattern, next
Monthly Calendar Routine	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement).</p> <p>NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30).</p> <p>AF 1.0 Students sort and classify objects.</p> <p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p>MG 1.3 Name the days of the week.</p> <p>SDAP 1.0 Students collect information about objects and events in their environment.</p> <p>SDAP 1.2 Identify, describe, and extend simple patterns (such as circles or triangles) by referring to their shapes, sizes, or colors.</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p>	<p>Reading and Building the Calendar Completing the Days Board Dismantling the Monthly Calendar Using the Calendar</p>	month, day, date, week, year, calendar, today, yesterday, tomorrow, days of the week, weekend
Daily Schedule Routine	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties.</p> <p>MG 1.2 Demonstrate an understanding of concepts of time (e.g., morning, afternoon, evening, today, yesterday, tomorrow, week, year) and tools that measure time (e.g., clock, calendar).</p> <p>MG 1.4 Identify the time (to the nearest hour) of everyday events (e.g., lunch time is 12 o'clock; bedtime is 8 o'clock at night).</p> <p>MR 2.0 Students solve problems in reasonable ways and justify their reasoning.</p> <p>MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p>	<p>Ordering Daily Activities Using Clocks with the Daily Schedule</p>	morning, afternoon, noon, before, after, following, next, early late

<p style="text-align: center;">Weather Observation Routine</p>	<p>SDAP 1.0 Students collect information about objects and events in their environment. SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs. MR 2.0 Students solve problems in reasonable ways and justify their reasoning. MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p>	<p>Observing and Recording Data Compiling and Describing Data Comparing Data and Finding Patterns Exploring Probability and Chance</p>	<p>some, none, all, more, fewer, same, most, least, likely, more likely, least likely, definite, certain, sure, maybe, impossible</p>
<p style="text-align: center;">Recording Daily Temperature Routine</p>	<p>MG 1.0 Students understand the concept of time and units to measure it; they understand that objects have properties, such as length, weight, and capacity, and that comparisons may be made by referring to those properties. MG 1.1 Compare the length, weight, and capacity of objects by making direct comparisons with reference objects (e.g., note which object is shorter, longer, taller, lighter, heavier, or holds more). SDAP 1.0 Students collect information about objects and events in their environment. SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs. MR 1.1 Determine the approach, materials, and strategies to be used. MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems.</p>	<p>Collecting and Recoding Temperature Data Compiling and Discussing Monthly Data Exploring Probability and Chance</p>	<p>thermometer, temperature, hot cold warm, cool, higher, lower, more, fewer, some, all, none, definite, sure, maybe, likely, unlikely, impossible, certain</p>
<p style="text-align: center;">Survey Routine</p>	<p>NS 1.0 Students understand the relationship between numbers and quantities (i.e., that a set of objects has the same number of objects in different situations regardless of its position or arrangement). NS 1.1 Compare two or more sets of objects (up to ten objects in each group) and identify which set is equal to, more than, or less than the other. NS 1.2 Count, recognize, represent, name, and order a number of objects (up to 30). NS 1.3 Know that the larger numbers describe sets with more objects in them than the smaller numbers have. SDAP 1.0 Students collect information about objects and events in their environment. SDAP 1.1 Pose information questions; collect data; and record the results using objects, pictures, and picture graphs. MR 1.0 Students make decisions about how to set up a problem. MR 1.1 Determine the approach, materials, and strategies to be used. MR 1.2 Use tools and strategies, such as manipulatives or sketches, to model problems. MR 2.0 Students solve problems in reasonable ways and justify their reasoning. MR 2.1 Explain the reasoning used with concrete objects and/or pictorial representations.</p>	<p>Conducting Surveys and Recording Data Conducting Surveys with Families Conducting Surveys Independently</p>	<p>tally, record, graph, count, compare, more, less, same as, some, all, none</p>