

MODULE 1

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none">Analyze to find two objects that are exactly the same or not exactly the same	<ul style="list-style-type: none">Left hand mat (Fluency Template)Bag of beans or small counters	<ul style="list-style-type: none">Right-hand glove with the numbers written on the fingertips from 1 on the pinky finger to 5 on the thumb (looks like left hand from students' perspective)Blue sockPairs of socks (or any other pairs of items available) in a variety of patterns, colors, sizes, and lengths in a laundry bag

A	2	<ul style="list-style-type: none"> Analyze to find two similar objects—these are the same but ... 	<ul style="list-style-type: none"> Left hand mat (Lesson 1 Fluency Template) Bag of beans or small counters Two of the same flowers (or leaves, twigs, etc.) 	<ul style="list-style-type: none"> 20-bead Rekenrek Pairs of similar items that are different in one aspect (e.g., two tennis balls, one white and one yellow; two identical cups, one with a straw and one empty; two squares, one turned to be a kite and one parallel to the floor; two identical pencil boxes, each labeled with a different student's name; two identical pencils, one new and one used)
A	3	<ul style="list-style-type: none"> Classify to find two objects that share a visual pattern, color, and use. 	<ul style="list-style-type: none"> Left hand mat (Fluency Template) Bag of beans or small counters Sets of plates, cups, bowls, etc., in a variety of patterns; bin or basket; stuffed animals Bags of objects or pictures of objects that are used together 	<ul style="list-style-type: none"> Right-hand glove with the numbers written on the fingertips from 1 on the pinky finger to 5 on the thumb (looks like left hand from students' perspective)

B	4	<ul style="list-style-type: none">• Classify items into two pre-determined categories		<ul style="list-style-type: none">• 20-bead Rekenrek• Assortment of classroom toys with a wide range of attributes and obvious differences to facilitate sorting• two plastic trays
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B	5	<ul style="list-style-type: none">• Classify items into three categories, determine the count in each, and reason about how the last number named determines the total .	<ul style="list-style-type: none">• 1 die• birthday cake (Lesson 5 Fluency Template)• Crayons	<ul style="list-style-type: none">• Green & Red marker/Dry Erase• Large pictures for the board depicting the sun, raindrops, and snowflakes; smaller pictures in an opaque bag or envelope depicting items corresponding to each of the weather types
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B	6	<ul style="list-style-type: none"> Sort categories by count. Identify categories with 2, 3, and 4 within a given scenario. 	<ul style="list-style-type: none"> Crayons 	<ul style="list-style-type: none"> 3 sheets of chart paper positioned in a row on the bottom of the wall decorated to look like treasure chests—one labeled with a large 2, one with a large 3, and one with large 4; Several bundled sets of classroom objects in groups of 2, 3, and 4 stored in a large opaque bag
C	7	<ul style="list-style-type: none"> Sort by count in vertical columns and horizontal rows (linear configurations to 5). Match to numerals on cards . 	<ul style="list-style-type: none"> Blank 5-frame (Fluency Template), Bag of 5 cubes Die (cover 6-dot side or replace 6 with a number less than 5) Bag of 15 linking cubes with 5 different colors such that each color configuration includes quantities to 5 (e.g., 1 blue, 2 red, 3 yellow, 4 green, and 5 brown) Large numeral cards 1–5 (Template 1) Small 5-group cards 1–5 (Template 2) Crayons 	<ul style="list-style-type: none"> 20-bead Rekenrek Bag of 15 linking cubes with 5 different colors such that each color configuration includes quantities to 5 (e.g., 1 blue, 2 red, 3 yellow, 4 green, and 5 brown) Large numeral cards 1–5 (Template 1) Small 5-group cards 1–5 (Template 2)

C	8	<ul style="list-style-type: none"> • Answer how many questions to 5 in linear configurations (5-group), with 4 in an array configuration. Compare ways to count five fingers. 	<ul style="list-style-type: none"> • Counters in a bag • Bag with 5 cotton balls • Personal white board 	<ul style="list-style-type: none"> • Large 5-group cards 1–5 (Fluency Template) • 5 markers
C	9	<ul style="list-style-type: none"> • Within linear and array dot configurations of numbers 3, 4, and 5, find hidden partners 	<ul style="list-style-type: none"> • Left hand mat (Fluency Template) • Bag of beans or small counters • 1 die with the 6-dot side replaced with 0 (cover with a piece of mailing label), • 5-group cards (Lesson 7 Template 2) • 2 linking cube sticks of 5 per pair • Hidden partners (Template) per pair 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 8 Fluency Template)

C	10	<ul style="list-style-type: none"> • Within circular and scattered dot configurations of numbers 3, 4, and 5, find hidden partners . 	<ul style="list-style-type: none"> • Bag of beans • Piece of construction paper or foam as a work mat • Small plastic cup • 5 counting bears (1 large red, 2 large yellow, 2 small yellow) • 1 paper clip 	<ul style="list-style-type: none"> • Large 5-frame cards (Fluency Template) • 5 counting bears (1 large red, 2 large yellow, 2 small yellow) • 1 paper clip
C	11	<ul style="list-style-type: none"> • Model decompositions of 3 with materials, drawings, and expressions. Represent the decomposition as $1 + 2$ and $2 + 1$. 	<ul style="list-style-type: none"> • 3 beans • Paper or foam triangle • 5 counting bears or linking cubes per pair • 1 sheet of blue paper • 1 sheet of green paper • $\frac{1}{2}$ sheet of paper • 5-group cards to 5 (Lesson 7 Template 2) 	<ul style="list-style-type: none"> • 5 counting bears or linking cubes per pair • 1 sheet of blue paper • 1 sheet of green paper • $\frac{1}{2}$ sheet of paper • 5-group cards to 5 (Lesson 7 Template 2)

D	12	<ul style="list-style-type: none"> Understand the meaning of zero. Write the numeral 0. 	<ul style="list-style-type: none"> 1 die birthday cake (Lesson 5 Fluency Template) Crayons Bag of 5 loose linking cubes (varied colors) Personal white board Numeral formation practice sheet 0 (Lesson 12 Practice Sheet) 	
D	13	<ul style="list-style-type: none"> Order and write numerals 0–3 to answer how many questions . 	<ul style="list-style-type: none"> 3 linking cubes Personal white board Numeral formation practice sheet 1-3 (Lesson 13 Practice Sheet) 	<ul style="list-style-type: none"> 20-bead Rekenrek Cardboard picture frame
D	14	<ul style="list-style-type: none"> Write numerals 1–3. Represent decompositions with materials, drawings, and equations, $3 = 2 + 1$ and $3 = 1 + 2$. 	<ul style="list-style-type: none"> 3 beans Paper or foam triangle Personal white board Bag of 3 loose linking cubes 	

D	15	<ul style="list-style-type: none"> Order and write numerals 4 and 5 to answer how many questions in categories; sort by count. 	<ul style="list-style-type: none"> Number path (Lesson 15 Fluency Template 1) (cut out 1 number path per student) Birthday cake number order cards (Lesson 15 Fluency Template 2) Personal white board Numeral formation practice sheet 4–5 (Lesson 15 Practice Sheet) 	<ul style="list-style-type: none"> Personal white board Personal white board or chart paper and sticky notes; Cardboard picture frame for writing
D	16	<ul style="list-style-type: none"> Write numerals 1–5 in order. Answer and make drawings of decompositions with totals of 4 and 5 without equations. 	<ul style="list-style-type: none"> 4 beans, paper or foam squares Birthday cake number order cards per pair (Lesson 15 Fluency Template) 5-group cards 1-5 shuffled (Lesson 7 Template 2) Bag of loose linking cubes 	<ul style="list-style-type: none"> 5-frame cards (Lesson 10 Fluency Template) Personal white board 5 magnetic shapes or pictures (divided by a line down the middle)
Mid-Module Assessment				

E	17	<ul style="list-style-type: none"> Count 4–6 objects in vertical and horizontal linear configurations and array configurations. Match 6 objects to the numeral 6 . 	<ul style="list-style-type: none"> Bag of 6 loose linking cubes, beans, or other counters; Work mat 5-group cards 1–6 (Lesson 7 Template 2) 2, 5-group mats (Template) 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 8 Template) 5-group cards (Lesson 7 Template 2)
E	18	<ul style="list-style-type: none"> Count 4–6 objects in circular and scattered configurations. Count 6 items out of a larger set. Write numerals 1–6 in order . 	<ul style="list-style-type: none"> Birthday Cake (Lesson 15 Fluency Template 2) Number path (Lesson 15 Fluency Template 1) (optional) 1 small clear plastic bag of 10 lima beans or small counters 1 work mat inscribed with a large circle 1 plastic cup Personal white board with numeral formation practice sheet 6 (Lesson 18 Practice Sheet) 	<ul style="list-style-type: none"> Personal white board Cardboard writing frame on board

E	19	<ul style="list-style-type: none"> Count 5–7 linking cubes in linear configurations. Match with numeral 7. Count on fingers from 1 to 7, and connect to 5-group images . 	<ul style="list-style-type: none"> Two hands mat (Fluency Template) Bag with 5 red beans and 5 white beans 1 bag of 10 loose linking cubes (5 each of red and blue) 5-group mat (Lesson 17 Template) 5-group cards (Lesson 7 Template 2) 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 8 Template) 20-bead Rekenrek Writing frame on board Classroom size 5-group mat (Lesson 17 Template) Large numeral cards (Lesson 7 Template 1)
E	20	<ul style="list-style-type: none"> Reason about sets of 7 varied objects in circular and scattered configurations. Find a path through the scattered configuration. Write numeral 7. Ask, “How is your seven different from mine?” 	<ul style="list-style-type: none"> 3 beans Paper or foam triangle Personal white board Two hands mat (Lesson 19 Fluency Template) Bag of beans painted red on one side Bag of 10 counters (objects should vary from student to student) Work mat inscribed with a large circle Plastic cup Personal white board with numeral formation practice sheet 7 (Lesson 20 Practice Sheet) 	<ul style="list-style-type: none"> Cardboard writing frame on the board

E	21	<ul style="list-style-type: none"> • Compare counts of 8 in linear and array configurations. Match with numeral 8. 	<ul style="list-style-type: none"> • Bag of 10 loose linking cubes (5 blue and 5 red) • Work mat • Two, 5-group mats (Lesson 17 Template) • 5-group cards (Lesson 7 Template 2) 	<ul style="list-style-type: none"> • Pair of gloves with the numbers written on the fingertips from 1 on the pinky finger to 5 on the thumb on the right hand and then from 6 on the thumb to 10 on the pinky on the left-hand glove. • Linking cubes • Cardboard writing frame on the board • Classroom-size 5-group mats (Lesson 17 Template)
E	22	<ul style="list-style-type: none"> • Arrange and strategize to count 8 beans in circular (around a cup) and scattered configurations. Write numeral 8. Find a path through the scattered set, and compare paths with a partner . 	<ul style="list-style-type: none"> • 4 beans • Paper or foam squares • Personal white board • Bag of 10 beans or other small counters (objects should vary from student to student) • Work mat • Plastic cup • Personal white board with numeral formation practice sheet 8 (Lesson 22 Practice Sheet) 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 8 Template) • Cardboard writing frame on board

F	23	<ul style="list-style-type: none"> Organize and count 9 varied geometric objects in linear and array (3 threes) configurations. Place objects on 5-group mat. Match with numeral 9. 		<ul style="list-style-type: none"> Cardboard writing frame on board (S) 1 bucket of assorted pattern blocks, 5-group mat (Lesson 17 Template), 5-group cards (1–9) (Lesson 7 Template 2)
F	24	<ul style="list-style-type: none"> Strategize to count 9 objects in circular (around a paper plate) and scattered configurations printed on paper. Write numeral 9. Represent a path through the scatter count with a pencil. Number each object. 	<ul style="list-style-type: none"> 5 linking cubes, personal white board Bag of 10 small counters (objects should vary from student to student), plastic cup, small paper plate, personal white board with numeral formation practice sheet 9 (Lesson 24 Practice Sheet) 	<ul style="list-style-type: none"> Cardboard writing frame on board
F	25	<ul style="list-style-type: none"> Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10. 	<ul style="list-style-type: none"> Personal white board, blank ten-frame (Fluency Template) Bag of 10 beans, bag of 10 linking cubes (5 red, 5 blue), construction paper work mat, 5-group mat (Lesson 17 Template), 5-group cards (Lesson 7 Template 2) 	<ul style="list-style-type: none"> Cardboard writing frame on board

F	26	<ul style="list-style-type: none"> Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10. 	<ul style="list-style-type: none"> Personal white board Bag of pony beads (5 red and 5 white), pipe cleaner or lanyard for bracelet, 5-group mat (Lesson 17 Template), personal white board with numeral formation practice sheet 10 (Lesson 26 Practice Sheet) 	<ul style="list-style-type: none"> Cardboard writing frame on board
F	27	<ul style="list-style-type: none"> Count 10 objects, and move between all configurations. 	<ul style="list-style-type: none"> Bag of 10 small counters (objects should vary from student to student), 5-group mat (Lesson 17 Template), work mat inscribed with a large circle, plastic cup 	
F	28	<ul style="list-style-type: none"> Act out result unknown story problems without equations. 	<ul style="list-style-type: none"> Bags of red and white beans, construction paper work mat, die Bag of 20 loose linking cubes (10 red, 10 white) 	<ul style="list-style-type: none"> 10 sheets of construction paper, each labeled with a large number (1–10) placed in a row on the floor in the front of the room to make a number path, set of number cards (1–10)

G	29	<ul style="list-style-type: none"> • Order and match numeral and dot cards from 1 to 10. • State 1 more than a given number. 	<ul style="list-style-type: none"> • Pennies, number path (Lesson 15 Fluency Template) • Baggie of pennies, piggy bank mat (Fluency Template) • Number path (Lesson 15 Fluency Template) • 1 set of 5-group cards (Lesson 7 Template 2) 	<ul style="list-style-type: none"> • Magnets or brown circles of paper to represent pennies • Personal white board
G	30	<ul style="list-style-type: none"> • Make math stairs from 1 to 10 in cooperative groups. 	<ul style="list-style-type: none"> • 5-group cards (Lesson 7 Template 2) • Bag of red and white beans, left hand mat (Lesson 1 Fluency Template) • Bears (Template) • Bag of 30 loose red linking cubes, bag of 25 loose blue linking cubes per pair 	<ul style="list-style-type: none"> • Bears (Template)
G	31	<ul style="list-style-type: none"> • Arrange, analyze, and draw 1 more up to 10 in configurations other than towers. 	<ul style="list-style-type: none"> • Die, paper and pencil or personal white board • Large construction paper work mat (21" × 24") per 2 students inscribed as shown below (circles should have a diameter of at least 4"), set of linking cube stairs from the previous lesson, red and blue crayon 	

G	32	<ul style="list-style-type: none"> • Arrange, analyze, and draw sequences of quantities of 1 more, beginning with numbers other than 1. 	<ul style="list-style-type: none"> • Draw 1 More (Fluency Template) • 10 index cards, crayons 	<ul style="list-style-type: none"> • Set of linking cube number stairs 1–10
H	33	<ul style="list-style-type: none"> • Order quantities from 10 to 1, and match numerals. 	<ul style="list-style-type: none"> • Bag of beans, laminated paper or foam work mat, die • Bag of loose linking cubes (5 blue, 5 red), 5-group dot mat (Lesson 17 Template), 5-group cards (Lesson 7 Template 2) 	<ul style="list-style-type: none"> • Large numeral cards 1–10 (Lesson 8 Template) or a number path written on the board
H	34	<ul style="list-style-type: none"> • Count down from 10 to 1, and state 1 less than a given number 	<ul style="list-style-type: none"> • Large sheet of construction paper, 10 robot cards (Problem Set), 10 number cards (Problem Set) 	<ul style="list-style-type: none"> • Large tree drawn on the board, 10 cardboard apples affixed with tape to the tree in a circular formation, simple puppet made from a paper bag to represent a farmer
H	35	<ul style="list-style-type: none"> • Arrange number towers in order from 10 to 1, and describe the pattern. 	<ul style="list-style-type: none"> • Bag of red and white beans, left hand mat (Lesson 1 Fluency Template) • 1 set of linking cube stairs prepared per the instructions in Lesson 30, 5-group cards (Lesson 7 Template 2) 	

H	36	<ul style="list-style-type: none"> • Arrange, analyze, and draw sequences of quantities that are 1 less in configurations other than towers. 	<ul style="list-style-type: none"> • Draw 1 More Template (Fluency Template) • 1 die • Large construction paper work mat (24" × 21") per pair inscribed as pictured to the right (circles should have a diameter of at least 4"), set of linking cube stairs from the previous lesson, red and blue crayons 	
H	37	<ul style="list-style-type: none"> • Culminating Task 	<ul style="list-style-type: none"> • 10 linking cubes • Paper “mystery” bags, each containing a set of loose linking cubes such that the first bag has 1, the second, 2, and so on up to 10 (each student or pair of students will receive one bag prior to choosing a station) materials for each station: 1 set of 5-group cards (Lesson 7 Template 2), pipe cleaner, bag with 5 red and 5 white beads, 1 bag of 10 lima beans, 1 bag of 10 popsicle sticks, 2 bags of other various counters (10 each), personal white board and markers, Rekenrek, 2 work mats inscribed with a large circle, 2 5-group mats, paper plate, 	

			plastic cup, crayons, paper, other materials as desired	
		<ul style="list-style-type: none">• End-of-Module Assessment: Topics E–H (Interview style assessment: 3 days) 3		
End of Module Assessment				

MODULE 2

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none"> Find and describe flat triangles, squares, rectangles, hexagons, and circles using informal language without naming them. 	<ul style="list-style-type: none"> 5-group mats (Fluency Template 1) 5 linking cubes Draw more (Fluency Template 2) Clear bag containing smaller cutouts of various shapes (all of one hue to limit distractions from variation in color) blank side of Problem Set affixed to clipboard pencil real or toy magnifying glass (if available) 	<ul style="list-style-type: none"> Large 5-group cards (5–7) (Fluency Template 3) Large cutouts of each shape (to be affixed to the board with tape) (Template)
A	2	<ul style="list-style-type: none"> Explain decisions about classifications of triangles into categories using variants and non-examples and record on a picture graph. Identify shapes as triangles. 	<ul style="list-style-type: none"> 3 beans 1 paper or foam triangle personal white board Craft sticks or straws of two different lengths foam or construction paper work mat Geoboard rubber band 	<ul style="list-style-type: none"> Sticky notes, outline of shapes to be affixed during lesson (Template)

A	3	<ul style="list-style-type: none"> • Explain decisions about classifications of rectangles into categories using variants and non-examples and record on a picture graph. • Identify shapes as rectangles. 	<ul style="list-style-type: none"> • 4 beans • paper or foam squares • personal white board • Copy of dot paper (Template 2) on cardstock • Wikki Stix (crayons or markers → may also be used) 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 1 Fluency Template 3) • Paper shapes of the same color in varying sizes, a wide range of exemplars, non-examples, and variants (Fluency Template), teacher created two-column grid, labeled Triangle and Not Triangle with cells large enough to accommodate shapes. • Sticky notes
A	4	<ul style="list-style-type: none"> • Explain decisions about classifications of hexagons and circles identify them by name, and record on a picture graph. Make observations using variants and non-examples. 	<ul style="list-style-type: none"> • Clipboard with paper and pencil • real or toy magnifying glass (if available) 	<ul style="list-style-type: none"> • Paper shapes of the same color in varying sizes, a wide range of exemplars, non-examples, and variants (Fluency Template), teacher created two-column grid, labeled Rectangle and Not Rectangle with cells large enough to accommodate shapes. • Paper shapes (Template) • Sticky notes

A	5	<ul style="list-style-type: none"> Describe and communicate positions of all flat shapes using the words above, below, beside, in front of, next to , and behind . 	<ul style="list-style-type: none"> Paper cutouts of triangles, rectangles, squares, hexagons, and circles (variety of sizes, include exemplars, non-examples, and variants) (Fluency Template 2) Scissors glue paper bag containing cutouts of various shapes (two non-identical shapes of each type, including triangles, rectangles, circles, hexagons, and squares) (Template) 	<ul style="list-style-type: none"> Signs with pictures of shapes to indicate where to form each group (Fluency Template 1) Paper cutouts of triangles, rectangles, squares, hexagons, and circles (variety of sizes, include exemplars, non-examples, and variants), pictures of real-world objects that are flat shapes (Fluency Template 3) 2-column grid on board or chart 1 sticky note
B	6	<ul style="list-style-type: none"> Find and describe solid shapes using informal language without naming them. 	<ul style="list-style-type: none"> Number path (Fluency Template) (optional) 5 linking cubes, personal white board Personal white board 1 bag containing a set of geometric solids per student pair (solids should include a cone, a cylinder, a cube, and a sphere), clipboard, paper, pencil, real or toy magnifying glass (if available) 	<ul style="list-style-type: none"> Personal white board (optional)

B	7	<ul style="list-style-type: none"> Explain decisions about classification of solid shapes into categories and record on a picture graph. Name the solid shapes. 	<ul style="list-style-type: none"> Assortment of solid shapes, possibly a mixture of everyday objects and wooden or plastic solid shapes 5-group mats (Lesson 1 Fluency Template 1), 5 linking cubes Small piece of modeling clay 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 3) Create on the board 2 two-row graphs with the labels Face and No Face. Sticky notes Set of geometric solids including a cube, sphere, cone, and cylinder per student pair paper and colored pencils small smiley face stickers
B	8	<ul style="list-style-type: none"> Describe and communicate positions of all solid shapes using the words above, below, beside, in front of, next to , and behind . 	<ul style="list-style-type: none"> Small ball of clay Set of geometric solids per pair 	<ul style="list-style-type: none"> 20 Rekenrek Set of geometric solids in a paper bag set of flash cards in a paper bag showing the words above, beside, below, in front of, next to , and behind
C	9	<ul style="list-style-type: none"> Identify and sort shapes as two-dimensional or three-dimensional, and recognize two-dimensional and three-dimensional shapes in different orientations and sizes. 	<ul style="list-style-type: none"> Assortment of real-world objects and wooden or plastic solid shapes 5 linking cubes personal white board Small piece of paper pencil ball of clay Cutouts from earlier in the week, including triangles, circles, rectangles, squares, and hexagons; bag of solids 	<ul style="list-style-type: none"> Signs with pictures of shapes to indicate where to form each group

			including a sphere, a cylinder, a cone, and a cube (Lesson 5 Template)	
C	10	<ul style="list-style-type: none"> • Culminating Task 	<ul style="list-style-type: none"> • Work mat (Activity Template) • sets of cutouts from the module lessons • small pieces of modeling clay • geoboards and rubber bands • dot paper and markers • pattern blocks • paper and glue stick • crayons, pencils • Wikki Stix (if available) • set of geometric solids; collection of pictures from catalogs, magazines, or newspapers representing the shapes and solids in real-life situations 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 1 Fluency Template 3) • Bag of flat shapes containing a triangle, a rectangle, a square, a circle, and a hexagon (as many as necessary in order to assign each group or pair of students one shape) (Lesson 5 Template)
End of Module Assessment: Topics A-C (Interview style assessment: 2 Days)				

MODULE 3

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none"> Compare lengths using taller than and shorter than with aligned and non-aligned endpoints. 	<ul style="list-style-type: none"> Pennies, number path (Fluency Template) 2 strips of paper (a longer blue one and a shorter red one) 	<ul style="list-style-type: none"> Indicated photos, heavy book, piece of ribbon 1 meter long 2 chairs, 2 different lengths of string, 2 pencils of different lengths
A	2	<ul style="list-style-type: none"> Compare length measurements with string. 	<ul style="list-style-type: none"> Bags of beans, laminated paper or foam work mat, dice String, scissors, clipboard, pencil, longer or shorter recording sheet (Template) 	<ul style="list-style-type: none"> Marker, crayon String, scissors, masking strip
A	3	<ul style="list-style-type: none"> Make a series of longer than and shorter than comparisons. 	<ul style="list-style-type: none"> Hidden numbers mat (Fluency Template) inserted into personal white board Longer than and shorter than work mat (Template), popsicle stick and prepared paper bag filled with various items to measure (e.g., pencil, eraser, glue stick, toy car, small block, 12-inch piece of string, marker, child's scissors, crayon, tower of 5 linking cubes) per pair 	
B	4	<ul style="list-style-type: none"> Compare the length of linking cube sticks to a 5-stick. 	<ul style="list-style-type: none"> 1 sticky note per student Bag of loose linking cubes per pair: 40 red and 15 of another color or 30 of one color and 25 of another, depending on how you build the stairs (the latter is 	<ul style="list-style-type: none"> three-column grid labeled as below displayed on chart paper or digitally

			pictured below), longer or shorter mat (Template)	
B	5	<ul style="list-style-type: none"> Determine which linking cube stick is longer than or shorter than the other. 	<ul style="list-style-type: none"> Dot path (Fluency Template 2) placed inside of a personal white board 1 bag of linking cube stairs from Lesson 4 per pair 	<ul style="list-style-type: none"> Large 5-group cards in vertical orientation (Fluency Template 1)
B	6	<ul style="list-style-type: none"> Compare the length of linking cube sticks to various objects. 	<ul style="list-style-type: none"> Hidden numbers mat (Lesson 3 Fluency Template) inserted into personal white board Crayon, paper, bag of linking cube stairs Bag of linking cube number stairs and paper bag filled with various items to measure (e.g., pencil, eraser, glue stick, toy car, small block, 8-inch piece of string, marker, child's scissors, crayon) per pair 	<ul style="list-style-type: none"> 20-bead Rekenrek
B	7	<ul style="list-style-type: none"> Compare objects using the same as . 	<ul style="list-style-type: none"> Die (with the 6-dot side covered), personal white board Small ball of clay Bag of linking cube number stairs, riddle work mat (Template) copied on two sides of the paper or inserted into personal white board 	<ul style="list-style-type: none"> Green and red dry-erase markers Bag of linking cube number stairs, riddle work mat (Template) copied on two sides of the paper or inserted into personal white board

C	8	<ul style="list-style-type: none"> Compare using heavier than and lighter than with classroom objects. 		<ul style="list-style-type: none"> Personal white board (S) Number path (Lesson 1 Fluency Template)
C	9	<ul style="list-style-type: none"> Compare objects using heavier than, lighter than, and the same as with balance scales. 	<ul style="list-style-type: none"> Hidden numbers mat (Lesson 3 Fluency Template) inserted into personal white board Die (with the 6-dot side covered), personal white board Lighter or heavier recording sheet (Template) affixed to the white board Simple balance scale and assortment of objects such that each small group of students has at least three things to compare (include some objects that are the same weight); lighter or heavier recording sheet (Template) 	<ul style="list-style-type: none"> Large 5-group cards (5–7) (Lesson 5 Fluency Template 1) Lighter or heavier recording sheet (Template) affixed to the white board
C	10	<ul style="list-style-type: none"> Compare the weight of an object to a set of unit weights on a balance scale. 	<ul style="list-style-type: none"> Bag of beans, foam or laminated paper work mat, 2 dice Balance scale, bag of 30 pennies, bag of objects to weigh (including a pencil, an eraser, a marker, a small child’s pair of scissors, a linking cube, and a small block or toy) per pair or small group; as heavy as recording sheet (Template) 	<ul style="list-style-type: none"> Green and red dry-erase markers Large 5-group cards (Lesson 5 Fluency Template 1) Balance scale, pencil, marker, bag of 30 pennies, as heavy as recording sheet (Template) affixed to the white board

C	11	<ul style="list-style-type: none"> Observe conservation of weight on the balance scale. 	<ul style="list-style-type: none"> 1 sticky note per student Hidden numbers mat (Lesson 3 Fluency Template) inserted into personal white board Small bag of about 10 Lego-type building blocks, balance scale for small group, 20 pennies Balance scale, ball of clay (per small group or pair) 	<ul style="list-style-type: none"> three-column grid labeled as below displayed on chart paper or digitally Large 5-group cards (Lesson 5 Fluency Template 1) Balance scale, ball of clay
C	12	<ul style="list-style-type: none"> Compare the weight of an object with sets of different objects on a balance scale. 	<ul style="list-style-type: none"> Die (with the 6-dot side covered), personal white board Dot path (Lesson 5 Fluency Template 2) inserted into personal white board 1 simple balance scale per pair or small group of students, 4 small bags of various items to use as weights (pennies, linking cubes, small counters, and large dried beans), collection of classroom objects for the balance exercise, and as heavy as a set recording sheet (Template) 	<ul style="list-style-type: none"> 5-group cards in vertical orientation (Lesson 5 Fluency Template 1) Simple balance scale, marker, 2 pennies, small bag of linking cubes, small counters, beans, and as heavy as a set recording sheet (Template)
D	13	<ul style="list-style-type: none"> Compare volume using more than, less than, and the same as by pouring. 	<ul style="list-style-type: none"> Dot cards of 6 (Fluency Template 1) Pair of dice with the 6-dot side covered with a sticker Small ball of clay 	<ul style="list-style-type: none"> Dot cards of 6 (Fluency Template 1) Fluency Template 2 2 cups of uncooked rice, several small containers (two with equal capacity: coffee or

			<ul style="list-style-type: none"> • 2 cups of uncooked rice, several small containers (two with equal capacity: coffee or beverage scoop, $\frac{1}{4}$ cup measure, teacup, bowl, small drinking cup, small box, tablespoon), and tray per pair or small group; capacity recording sheet (Template) 	<p>beverage scoop, $\frac{1}{4}$ cup measure, teacup, bowl, small drinking cup, small box, tablespoon), and tray per pair or small group; capacity recording sheet (Template)</p>
D	14	<ul style="list-style-type: none"> • Explore conservation of volume by pouring. 	<ul style="list-style-type: none"> • Hidden numbers mat (Lesson 3 Fluency Template) • Small ball of clay • 2 cups of rice, clear containers (if possible) with varying diameters (e.g., a glass, small bowl, small vase with an interesting shape, bottle, mug), tray, funnel, spoon, volume recording sheet (Template) 	<ul style="list-style-type: none"> • Set of student materials for demonstration
D	15	<ul style="list-style-type: none"> • Compare using the same as with units. 	<ul style="list-style-type: none"> • Dot cards of 7 (Fluency Template) • Bag of beans, foam or laminated paper work mat, 2 dice with 6-dot side covered • 10 linking cubes • Small ball of clay and 10 beans • 2 cups of rice, assortment of containers (teacup, small bottle, bowl, glass, small box, measuring cup), small scoop such as a coffee scoop, funnel, and tray per pair or small group; 	<ul style="list-style-type: none"> • Dot cards of 7 (Fluency Template) • Set of student materials for demonstration, we've got the scoop recording sheet (Template) affixed to white board

			we've got the scoop recording sheet (Template)	
Mid-Module Assessment				
E	16	<ul style="list-style-type: none"> Compare to find if there are enough. 	<ul style="list-style-type: none"> Dot cards of 8 (Fluency Template) 1 sticky note per student Paper plate, cup, spoon, and napkin; popcorn (or some other snack); bottle of water 	<ul style="list-style-type: none"> Dot cards of 8 (Fluency Template) three-column grid labeled as below displayed on chart paper or digitally Music player; chairs, carpet squares, or pieces of construction paper per student; plus several more chairs than students
E	17	<ul style="list-style-type: none"> Compare using more than and the same as . 	<ul style="list-style-type: none"> Dice Dice, personal white board Bag of 5 loose red linking cubes, bag of 10 loose blue linking cubes, pair of dice with the 6-dot side covered, 5 additional red linking cubes 	<ul style="list-style-type: none"> Basket of 3 blocks or small toys, additional blocks
E	18	<ul style="list-style-type: none"> Compare using fewer than and the same as . 	<ul style="list-style-type: none"> Varied dot cards of 9 (Fluency Template) Lined writing paper 1 small ball of clay Bag of 5 pennies, bag of 10 loose linking cubes 	<ul style="list-style-type: none"> Varied dot cards of 9 (Fluency Template) Box of markers

F	19	<ul style="list-style-type: none"> Relate more and less to length. 	<ul style="list-style-type: none"> Square path letter trains (Template) Bag of 20 linking cubes, 10-sided die 	<ul style="list-style-type: none"> Count and Circle How Many Sprint (project for students to view), framed portrait of the teacher at 5–6 years old Bag of 20 linking cubes, 10-sided die
F	20	<ul style="list-style-type: none"> Compare sets informally using more, less, and fewer. 	<ul style="list-style-type: none"> 1 copy of the Count and Circle How Many Sprint (Lesson 19) Linking cubes, dry erase marker More than, fewer than recording sheet (Template 2) 	<ul style="list-style-type: none"> Shapes (Template 1) cut out and arranged in rows on the board
F	21	<ul style="list-style-type: none"> Identify and create a set that has the same number of objects. 	<ul style="list-style-type: none"> Dice with 6-dot side covered, personal white board 7 linking cubes, small piece of clay 10-sided die (or spinner), bag of 20 linking cubes, and bag of 20 pennies 	<ul style="list-style-type: none"> Fluency Template
F	22	<ul style="list-style-type: none"> Reason to identify and make a set that has 1 more. 	<ul style="list-style-type: none"> 10-sided die, bag of 20 linking cubes, bag of 20 pennies per pair 	
F	23	<ul style="list-style-type: none"> Reason to identify and make a set that has 1 less. 	<ul style="list-style-type: none"> 10-sided die, bag of 20 linking cubes, bag of 20 pennies per pair 	
G	24	<ul style="list-style-type: none"> Match and count to compare a number of 	<ul style="list-style-type: none"> 2 copies of Count and Circle How Many (Lesson 19 Sprint) 	<ul style="list-style-type: none"> White board and markers, shapes (Lesson 20 Template)

		objects. State which quantity is more.	<ul style="list-style-type: none"> • Bag of 10 pennies, bag of 8 linking cubes 	1), cut out and placed in scatter arrangements on the board
G	25	<ul style="list-style-type: none"> • Match and count to compare two sets of objects. State which quantity is less. 	<ul style="list-style-type: none"> • Dot cards of 6 (Lesson 13 Fluency Template) 	<ul style="list-style-type: none"> • Dot cards of 6 (Lesson 13 Fluency Template) • Fluency Template • White board and markers, shapes (Lesson 20 Template 1) cut out and placed in scatter arrangements on the board
G	26	<ul style="list-style-type: none"> • Strategize to compare two sets. 	<ul style="list-style-type: none"> • Hidden numbers mat (Lesson 3 Fluency Template) • Pattern blocks, small bucket per pair • 10-sided die, bag of 10 linking cubes, bag of 10 beans, bag of 10 pennies, bag of 10 counters per pair 	<ul style="list-style-type: none"> • Ruler, pencil • 2 sets of student materials
G	27	<ul style="list-style-type: none"> • Visualize quantities to compare two numerals. 	<ul style="list-style-type: none"> • 2 copies of the Counting to 5 Sprint • Paper, crayons, and a small ball of clay • 1 set of 5-group cards (Template) 	<ul style="list-style-type: none"> • Bell, chime, or other gentle noisemaker
End-of-Module Assessment: Topics E–G (Interview style assessment: 3 days)				

MODULE 4

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none"> Model composition and decomposition of numbers to 5 using actions, objects, and drawings. 	<ul style="list-style-type: none"> Matching game cards (Fluency Template 2) (use only dots, dice, and fingers) per pair Personal white board Number bond (Template 2), 5 cubes 	<ul style="list-style-type: none"> Large 5-frame cards (Fluency Template 1) 3 hula hoops, colorful masking tape, 1 nickel, 1 penny, graphic of birds (Template 1)
A	2	<ul style="list-style-type: none"> Model composition and decomposition of numbers to 5 using fingers and linking cube sticks. 	<ul style="list-style-type: none"> 3 beans, make a bond of 3 (Fluency Template 1) inserted into personal white board Hidden numbers mat (Fluency Template 2) inserted into personal white board 5 pennies or 5 nickels Number bond (Lesson 1 Template 2), personal white board, linking cube 5-stick 	<ul style="list-style-type: none"> 3 hula hoops, colorful masking tape
A	3	<ul style="list-style-type: none"> Represent composition story situations with drawings using numeric number bonds. 	<ul style="list-style-type: none"> Number Order to 5 Sprint (2 copies) Set of 5 linking cubes, number bond (Lesson 1 Template 2) inserted into personal white board Number bond (Lesson 1 Template 2) inserted into personal white board 	<ul style="list-style-type: none"> 1 penny, 1 nickel

A	4	<ul style="list-style-type: none"> • Represent decomposition story situations with drawings using numeric number bonds. 	<ul style="list-style-type: none"> • Dice and 12 linking cubes per pair • 4 beans, make a bond of 4 (Fluency Template) inserted into personal white board • Small piece of clay, paper, pencil • Number bond (Lesson 1 Template 2), two linking cube 5-sticks (all of the same color), personal white board 	<ul style="list-style-type: none"> • Familiar objects that exemplify the part–whole relationship such as a whole apple and an apple slice or a whole banana and a banana peel
A	5	<ul style="list-style-type: none"> • Represent composition and decomposition of numbers to 5 using pictorial and numeric number bonds. 	<ul style="list-style-type: none"> • 5 beans, make a bond of 5 (Fluency Template) inserted into personal white board • 4 nickels, paper or foam square • Personal white board 	<ul style="list-style-type: none"> • 20-bead Rekenrek • White board and various color markers (S) Personal white board, number bond (Lesson 1 Template 2)
A	6	<ul style="list-style-type: none"> • Represent number bonds with composition and decomposition story situations. 	<ul style="list-style-type: none"> • Make 5 Sprint (2 copies) • 5-stick of linking cubes, pencil, paper 	<ul style="list-style-type: none"> • White board and markers (S) 5-stick

B	7	<ul style="list-style-type: none"> Model decompositions of 6 using a story situation, objects, and number bonds. 	<ul style="list-style-type: none"> Dot path (Fluency Template 1) inserted into personal white board Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Fluency Template 2) per pair (use 1 picture of each quantity 0–6) Linking cube 5-stick, loose cubes, personal white board 	<ul style="list-style-type: none"> Magnetic shapes or dry-erase markers (S) Personal white board Bell or other gentle noisemaker or instrument
B	8	<ul style="list-style-type: none"> Model decompositions of 7 using a story situation, sets, and number bonds. 	<ul style="list-style-type: none"> 5-stick of linking cubes Die and 14 linking cubes (per pair) 7 pennies or 7 nickels Personal white board, 1 bucket of shapes with multiple variations of squares, triangles, hexagons, and circles per table (construction paper cutouts can be used, if desired) 	
B	9	<ul style="list-style-type: none"> Model decompositions of 8 using a story situation, arrays, and number bonds. 	<ul style="list-style-type: none"> 8 beans, 2 paper or foam squares Hidden numbers mat (Lesson 2 Fluency Template 2) inserted into personal white board Two linking cube 5-sticks, 1 each of 2 colors Personal white board 	

B	10	<ul style="list-style-type: none"> Model decompositions of 6–8 using linking cube sticks to see patterns. 	<ul style="list-style-type: none"> Make 6 Sprint (2 copies) 6-stick of linking cubes (per pair), personal white board Linking cube 5-stick, 5 additional loose linking cubes of another color 	
B	11	<ul style="list-style-type: none"> Represent decompositions for 6–8 using horizontal and vertical number bonds. 	<ul style="list-style-type: none"> Personal white board Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Lesson 7 Fluency Template 2) per pair (use 1 picture of each quantity 0–7) Personal white board Linking cube 5-stick, 5 additional loose linking cubes (all of one color or with color change at 5), number bond (Lesson 1 Template 2) inserted into personal white board 	

B	12	<ul style="list-style-type: none"> Use 5-groups to represent the $5 + n$ pattern to 8. 	<ul style="list-style-type: none"> Make 5 (Fluency Template 1) Dot path (Lesson 7 Fluency Template 1) inserted into personal white board Personal white board Two 5-group mats (Template), linking cube 5-stick, 5 loose linking cubes, personal white board 	<ul style="list-style-type: none"> Large 5-group cards (6–10) (Fluency Template 2)
C	13	<ul style="list-style-type: none"> Represent decomposition and composition addition stories to 6 with drawings and equations with no unknown. 	<ul style="list-style-type: none"> Dot cards of 6 (Fluency Template 1) Make 6 (Fluency Template 2) Personal white board, 6 linking cubes 	<ul style="list-style-type: none"> 20-bead Rekenrek Dot cards of 6 (Fluency Template 1) Magnetic shapes (optional) Personal white board
C	14	<ul style="list-style-type: none"> Represent decomposition and composition addition stories to 7 with drawings and equations with no unknown. 	<ul style="list-style-type: none"> Make 7 Sprint (2 copies) Personal white board Linking cube 7-stick, train (Template) inserted into personal white board 	

C	15	<ul style="list-style-type: none"> • Represent decomposition and composition addition stories to 8 with drawings and equations with no unknown. 	<ul style="list-style-type: none"> • Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Lesson 7 Fluency Template 2) per pair (use only dots, dice, and fingers for the quantities 0–8) • Personal white board 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 12 Fluency Template 2) • Number towers 1–10 showing color change at 5 • Cup containing 8 loose linking cubes or other small manipulatives, masking tape • Personal white board
C	16	<ul style="list-style-type: none"> • Solve add to with result unknown word problems to 8 with equations. Box the unknown. 	<ul style="list-style-type: none"> • Make 8 Sprint (2 copies) • 10 pennies and/or nickels • Personal white board 	
C	17	<ul style="list-style-type: none"> • Solve put together with total unknown word problems to 8 using objects and drawings. 	<ul style="list-style-type: none"> • Bags of red and white beans, number bond (Lesson 1 Template 2), blank paper or personal white board, dice (with the 6 side covered on both dice or the 5 and 6 covered on one die) • Personal white board • Container with 8 attribute blocks for each pair or small group of students (4 circles, 4 triangles), personal white board, tree and sun (Template) 	

C	18	<ul style="list-style-type: none"> Solve both addends unknown word problems to 8 to find addition patterns in number pairs. 	<ul style="list-style-type: none"> Make 5 Sprint (2 copies) Personal white board 	<ul style="list-style-type: none"> Large foam die or substitute (S) Personal white board, dry erase markers in black, red, and green (if not available, use paper and crayons), train (Lesson 14 Template) (with train image cut)
D	19	<ul style="list-style-type: none"> Use objects and drawings to find how many are left. 	<ul style="list-style-type: none"> 10 linking cubes Bags of cubes, laminated paper or foam work mat, dice (per pair) Small ball of clay Personal white board 	
D	20	<ul style="list-style-type: none"> Solve take from with result unknown expressions and equations using the minus sign with no unknown. 	<ul style="list-style-type: none"> Cross 1 Out and Write How Many Sprint (2 copies) sticky notes 5 linking cubes, personal white board 	<ul style="list-style-type: none"> Three-column, labeled graph, as shown
D	21	<ul style="list-style-type: none"> Represent subtraction story problems using objects, drawings, expressions, and equations. 	<ul style="list-style-type: none"> Dice (with the 6-dot side covered as a scaffold or uncovered as an extension) 5 linking cubes Personal white board or pencil and paper 5 linking cubes or other counters, personal white board 	

D	22	<ul style="list-style-type: none"> Decompose the number 6 using 5-group drawings by breaking off or removing a part, and record each decomposition with a drawing and subtraction equation. 	<ul style="list-style-type: none"> Complete the Number Bond Sprint (2 copies) Linking cube 6-stick per pair, personal white board 	<ul style="list-style-type: none"> Large foam die (S) Linking cube 6-sticks, personal white board, 1 die (per pair)
D	23	<ul style="list-style-type: none"> Decompose the number 7 using 5-group drawings by hiding a part, and record each decomposition with a drawing and subtraction equation. 	<ul style="list-style-type: none"> Personal white board Linking cube 7-sticks, personal white board, 1 die (per pair) 	<ul style="list-style-type: none"> Large 5-group cards (1–10) (Lesson 12 Fluency Template 2) Large foam die
D	24	<ul style="list-style-type: none"> Decompose the number 8 using 5-group drawings and crossing off a part, and record each decomposition with a drawing and subtraction equation. 	<ul style="list-style-type: none"> Pair of dice (with the 6 sides covered), personal white board Personal white board Linking cube 8-stick, personal white board, 1 die (per pair) 	<ul style="list-style-type: none"> Large foam die
Mid-Module Assessment: Topics A–D				
E	25	<ul style="list-style-type: none"> Model decompositions of 9 using a story situation, objects, and number bonds. 	<ul style="list-style-type: none"> Personal white board Array of 9 (Fluency Template), personal white board 9 pennies and 1 paper bowl (per pair), personal white board 	<ul style="list-style-type: none"> 20-bead Rekenrek Large 5-group cards (1–4) (Lesson 12 Fluency Template 2)

E	26	<ul style="list-style-type: none"> Model decompositions of 9 using fingers, linking cubes, and number bonds. 	<ul style="list-style-type: none"> Die with the 6-dot side covered Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–9 (Lesson 7 Fluency Template 2) per pair Paper, crayons 9 linking cubes (5 blue and 4 red), personal white board 	<ul style="list-style-type: none"> 20-bead Rekenrek
E	27	<ul style="list-style-type: none"> Model decompositions of 10 using a story situation, objects, and number bonds. 	<ul style="list-style-type: none"> Personal white board Array of 10 (Fluency Template) inserted into personal white board Paper, crayons 1 chenille wire stem, 10 pony beads of a single color, personal white board 	<ul style="list-style-type: none"> 20-bead Rekenrek
E	28	<ul style="list-style-type: none"> Model decompositions of 10 using fingers, sets, linking cubes, and number bonds. 	<ul style="list-style-type: none"> Die with the 6-dot side covered Number bonds of 10 bracelet (Lesson 27), personal white board Matching game cards 0–5 (Lesson 1 Fluency Template 2), matching game cards 6–10 (Lesson 7 Fluency Template 2) per pair, 1 extra 5-card (so 1 of the partners can be 5 and 5) 2 linking cube 5-sticks, a half sheet of red construction paper 	<ul style="list-style-type: none"> bag with pennies and nickels; enough total coins for each student to choose one

			to represent a picnic blanket, personal white board	
F	29	<ul style="list-style-type: none"> • Represent pictorial decomposition and composition addition stories to 9 with 5-group drawings and equations with no unknown. 	<ul style="list-style-type: none"> • Fluency Practice Sets • 9 pennies, pencil, paper • Personal white board 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 12 Fluency Template 2)
F	30	<ul style="list-style-type: none"> • Represent pictorial decomposition and composition addition stories to 10 with 5-group drawings and equations with no unknown. 	<ul style="list-style-type: none"> • Fluency Practice Sets (Lesson 29 Fluency Practice Sets) • 5 pennies, cup, personal white board • 10 linking cubes, paper and pencil or personal white board • Personal white board 	

F	31	<ul style="list-style-type: none"> Solve add to with total unknown and put together with total unknown problems with totals of 9 and 10. 	<ul style="list-style-type: none"> Fluency Sprint (2 copies) 10 teddy bears or other counters, equation (Template), personal white board 	<ul style="list-style-type: none"> bag of red, blue and green linking cubes; more than enough for each student to draw a cube from the bag
F	32	<ul style="list-style-type: none"> Solve both addends unknown word problems with totals of 9 and 10 using 5-group drawings. 	<ul style="list-style-type: none"> Break apart numbers (Fluency Template 1), personal white board 5-group puzzles (Fluency Template 2) cut apart to show the decompositions of 10, personal white board Paper, crayons Two large 5-group cards (Lesson 12 Fluency Template 2), personal white board 	<ul style="list-style-type: none"> 100-bead Rekenrek
G	33	<ul style="list-style-type: none"> Solve take from equations with no unknown using numbers to 10. 	<ul style="list-style-type: none"> Fluency Practice Sets (Lesson 29 Fluency Practice Sets) 9 linking cubes and 1 construction paper “picnic blanket” (per pair), paper 9 teddy bears or other counters, 10 linking cubes, subtraction equation (Template), personal white board 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 12 Fluency Template 2)

G	34	<ul style="list-style-type: none"> • Represent subtraction story problems by breaking off, crossing out, and hiding a part. 	<ul style="list-style-type: none"> • 5-stick of linking cubes • Personal white board • Linking cube 10-stick with a color change at the five, 10 teddy bears or other counters, paper bowl per pair, personal white board 	<ul style="list-style-type: none"> • Large 5-group cards (Lesson 12 Fluency Template 2)
G	35	<ul style="list-style-type: none"> • Decompose the number 9 using 5-group drawings, and record each decomposition with a subtraction equation. 	<ul style="list-style-type: none"> • Fluency Practice Sets (Lesson 29 Fluency Practice Sets) • 5 nickels, cup, personal white board 9 pennies, personal white board • Subtraction equation (Lesson 33 Template), personal white board 	
G	36	<ul style="list-style-type: none"> • Decompose the number 10 using 5-group drawings, and record each decomposition with a subtraction equation. 	<ul style="list-style-type: none"> • Fluency Sprint (2 copies of the Lesson 31 Sprints) • 10 linking cubes, personal white board • Subtraction equation (Lesson 33 Template), personal white board 	<ul style="list-style-type: none"> • 100-bead Rekenrek
H	37	<ul style="list-style-type: none"> • Add or subtract 0 to get the same number and relate to word problems wherein the same quantity that joins a set, separates. 	<ul style="list-style-type: none"> • Imagine more to add to 5 (Fluency Template 1) • Cross out 2 (Fluency Template 2) • Small ball of clay • Number path (Template), personal white board 	<ul style="list-style-type: none"> • Large 5-group cards 0–5 (Lesson 12 Fluency Template 2) • Construction paper number path (1–10) on the floor, additional number path for 1–10 drawn on the board

H	38	<ul style="list-style-type: none"> Add 1 to numbers 1-9 to see the pattern of the next number using 5-group drawings and equations. 	<ul style="list-style-type: none"> Fluency Practice Sets (Lesson 29 Fluency Practice Sets) 10 linking cubes, small square of blue paper to represent a watering hole (optional) Number path (Lesson 37 Template), personal white board 	<ul style="list-style-type: none"> Large 5-group cards (0–5) (Lesson 12 Fluency Template 2) Number path on the floor, large foam die
H	39	<ul style="list-style-type: none"> Find the number that makes 10 for numbers 1-9, and record each with a 5-group drawing. 	<ul style="list-style-type: none"> Fluency Practice Sets (Lesson 29 Fluency Practice Sets) Apple tree (Fluency Template), 10 red beans, die 1 set of 5-group cards (Template), personal white board 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 12 Fluency Template 2)
H	40	<ul style="list-style-type: none"> Find the number that makes 10 for numbers 1-9, and record each with an addition equation. 	<ul style="list-style-type: none"> Draw more to make 10 (Fluency Template) Personal white board Linking cube 10-stick, personal white board, add to make 10 recording sheet (Practice Sheet), 1 set of 5-group cards (per pair) (Lesson 39 Template) 	
H	41	<ul style="list-style-type: none"> Culminating task—choose tools strategically to model and represent a stick of 10 cubes broken into two parts. 	<ul style="list-style-type: none"> Fluency Sprint (2 copies of the Lesson 31 Sprints) Personal white board, linking cube 10-stick, colorful markers, 11-inch × 17-inch sheet of sturdy paper (construction or white) 	<ul style="list-style-type: none"> A few sets of large plastic eyeglasses, pointers, or other props for students to use as they become the teachers

End-of-Module Assessment: Topics E–H

MODULE 5

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none"> Count straws into piles of ten; count the piles as 10 ones. 	<ul style="list-style-type: none"> 5-group cards (Fluency Template 2) 1 egg carton cut to have 10 compartments for each pair of students, 10 bags with different items in each (suggestions to the right), 40 straws 	<ul style="list-style-type: none"> Large 5-group cards (Fluency Template 1)
A	2	<ul style="list-style-type: none"> Count 10 objects within counts of 10 to 20 objects, and describe as 10 ones and ___ ones. 	<ul style="list-style-type: none"> 5-group cards (Lesson 1 Fluency Template 2) About 40 straws for each pair of students 1 egg carton cut to have 10 compartments for each pair of students 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 1) 20-bead Rekenrek 10 bags with different items in each (suggestions to the right)
A	3	<ul style="list-style-type: none"> Count and circle 10 objects within images of 10 to 20 objects, and describe as 10 ones and ___ ones. 	<ul style="list-style-type: none"> 5-group cards (Lesson 1 Fluency Template 2) Bag with about 20 small objects for each student Find 10 (Template) cut into strips 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 1)

A	4	<ul style="list-style-type: none"> Count straws the Say Ten way to 19; make a pile for each ten. 	<ul style="list-style-type: none"> Dot cards of 6 (Fluency Template 1) Personal white board Circle 10 (Fluency Template 2) bag of 19 small counting objects such as pennies or beans; 19 straws (per pair) 	<ul style="list-style-type: none"> Dot cards of 6 (Fluency Template 1) Linking cube sticks or dot cards of 6 (Fluency Template 1) 19 linking cubes
A	5	<ul style="list-style-type: none"> Count straws the Say Ten way to 20; make a pile for each ten. 	<ul style="list-style-type: none"> Dot cards of 7 (Fluency Template 1) Dot cards of 7 (Fluency Template 1), personal white board Circle 10 ones (Fluency Template 2) (pictured to the right) 20 straws (per pair) 	<ul style="list-style-type: none"> Dot cards of 7 (Fluency Template 1)
B	6	<ul style="list-style-type: none"> Model with objects and represent numbers 10 to 20 with place value or Hide Zero cards. 	<ul style="list-style-type: none"> 5-group cards (Lesson 1 Fluency Template 2) Dot cards of 8 (Fluency Template) 5-group cards (Lesson 1 Fluency Template 2), 20 straws (per pair) Hide Zero cards: 1 Hide Zero 10 card (Template 2) with 5-group cards 1–9 (Lesson 1 Fluency Template 2), two sets of 10 linking cubes (10 in one color and 10 in another color), personal white board (per pair) 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 1) Dot cards of 8 (Fluency Template) Large 5-group cards (Lesson 1 Fluency Template 1) Large Hide Zero cards (Template 1)

B	7	<ul style="list-style-type: none"> Model and write numbers 10 to 20 as number bonds. 	<ul style="list-style-type: none"> Dot cards of 8 (Lesson 6 Fluency Template) Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2) 20 two-sided counters in a clear plastic bag (white beans spray painted red on one side, commercial two-sided counters, etc.), number bond (Template) within a personal white board, 1 set of Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2) (per pair) 	<ul style="list-style-type: none"> Large Hide Zero cards (Lesson 6 Template 1) (emphasize the breaking apart of numbers by separating the cards as students say numbers the Say Ten way and the regular way.) Large Hide Zero Cards (Lesson 6 Template 1)
B	8	<ul style="list-style-type: none"> Model teen numbers with materials from abstract to concrete. 	<ul style="list-style-type: none"> Personal white board Bag with about 20 small objects personal white board; bag of Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2), bag of 10 linking cubes in one color and 10 linking cubes in another color (per pair) 	<ul style="list-style-type: none"> Dot cards of 8 (Lesson 6 Fluency Template) Number bond cards (Fluency Template)

B	9	<ul style="list-style-type: none"> • Draw teen numbers from abstract to pictorial. 	<ul style="list-style-type: none"> • Dot cards of 9 (Fluency Template) • Bag with about 20 small objects and work mat • Double 10-frame (Template) within a personal white board 	<ul style="list-style-type: none"> • Dot cards of 9 (Fluency Template) • Large 5-group cards (Lesson 1 Fluency Template 1)
C	10	<ul style="list-style-type: none"> • Build a Rekenrek to 20. 	<ul style="list-style-type: none"> • Problem Set, 10 red pony beads, 10 white pony beads, a red crayon, a black crayon • 10 red and 10 white pony beads from the Concept Development, two 12-inch lengths of elastic, one 2.75-inch by 5.5-inch piece of chipboard (or cardboard strip) with an indentation (note that each 8 ½-inch by 11-inch chipboard makes 4 Rekenreks.) 	<ul style="list-style-type: none"> • Linking cubes (S) Personal white board • 20-bead Rekenrek
C	11	<ul style="list-style-type: none"> • Show, count, and write numbers 11 to 20 in tower configurations increasing by 1—a pattern of 1 larger. 	<ul style="list-style-type: none"> • Personal Rekenrek (Built in Lesson 10) • Two sets of 10 linking cubes (10 in one color and 10 in another color) 	<ul style="list-style-type: none"> • 20-bead Rekenrek • Sentence frame (Template)

C	12	<ul style="list-style-type: none"> • Represent numbers 20 to 11 in tower configurations decreasing by 1—a pattern of 1 smaller. 	<ul style="list-style-type: none"> • One stick of 10 linking cubes that are the same color, 10 loose cubes of a different color, personal white board • One stick of 10 linking cubes that are the same color, 10 loose cubes of a different color • 2 sets of 10 linking cubes (10 in one color and 10 in another color) 	<ul style="list-style-type: none"> • Sentence frame (Template)
C	13	<ul style="list-style-type: none"> • Show, count, and write to answer how many questions in linear and array configurations. 	<ul style="list-style-type: none"> • 2 sticks of 10 linking cubes that are different colors • 2 sticks of 10 linking cubes with a color change at five, personal white board, personal Rekenrek (from Lesson 10); set of Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2) (per pair) 	
C	14	<ul style="list-style-type: none"> • Show, count, and write to answer how many questions with up to 20 objects in circular configurations. 	<ul style="list-style-type: none"> • Teen counting array (Fluency Template) • double 10-frame mat (Lesson 9 Template) within a personal white board; Teen numeral and dot cards (only numeral cards from 10–20) (Template), paper plate or round mat, bag of 20 counting objects (per pair) 	<ul style="list-style-type: none"> • Pre-drawn arrays • Personal white board • Large Hide Zero cards (Lesson 6 Template 1)

Mid-Module Assessment: Topics A–C (Interview-style assessment)

D	15	<ul style="list-style-type: none"> Count up and down by tens to 100 with Say Ten and regular counting. 	<ul style="list-style-type: none"> Teen circular-counting (Fluency Template) Donuts (Template 1), 14 cubes Set of 10 small 10-frame cards (Template 2) 	<ul style="list-style-type: none"> Pre-drawn circular configurations Personal white board Large Hide Zero cards (Lesson 6 Template 1) 100-bead Rekenrek
D	16	<ul style="list-style-type: none"> Count within tens by ones. 	<ul style="list-style-type: none"> Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2), interesting counters Small 10-frame cards (Lesson 15 Template 2) 2-hand cards (Template) Small 10-frame cards (Lesson 15 Template 2), 9 counters 	<ul style="list-style-type: none"> 100-bead Rekenrek 10 pieces of tagboard
D	17	<ul style="list-style-type: none"> Count across tens when counting by ones through 40. 	<ul style="list-style-type: none"> personal white board, 1 bag of about 20 objects (per pair) Personal Rekenrek (from Lesson 10) 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 1)

D	18	<ul style="list-style-type: none"> Count across tens by ones to 100 with and without objects. 	<ul style="list-style-type: none"> Number bond (Lesson 7 Template) Personal Rekenrek (from Lesson 10) 9 small 10-frame cards (Lesson 15 Template 2), 2 empty 10-frame cards (Template), 20 counters, blank paper to use as a hiding paper for the Problem Set 	<ul style="list-style-type: none"> Large 5-group cards (Lesson 1 Fluency Template 1) 100-bead Rekenrek
D	19	<ul style="list-style-type: none"> Explore numbers on the Rekenrek. (Optional) 	<ul style="list-style-type: none"> Personal Rekenrek (from Lesson 10) Rekenrek dot paper (Fluency Template 1) Personal Rekenrek (from Lesson 10) 	<ul style="list-style-type: none"> Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2), Hide Zero cards 20–100 (Fluency Template 2)
E	20	<ul style="list-style-type: none"> Represent teen number compositions and decompositions as addition sentences. 	<ul style="list-style-type: none"> Personal Rekenrek (Lesson 10) Bag of twenty 2-color beans, number bond (Lesson 7 Template) within a personal white board 	<ul style="list-style-type: none"> Dot cards of 7 (Lesson 5 Fluency Template 1) Prepared images of arrays and circular configurations, large 5-group cards (Lesson 1 Fluency Template 1)
E	21	<ul style="list-style-type: none"> Represent teen number decompositions as 10 ones and some ones, and find a hidden part. 	<ul style="list-style-type: none"> Personal Rekenrek (Lesson 10) 40 centimeter cubes and number bond (Lesson 7 Template) within a personal white board (per pair) 	<ul style="list-style-type: none"> Dot cards of 7 (Lesson 5 Fluency Template 1)

E	22	<ul style="list-style-type: none"> Decompose teen numbers as 10 ones and some ones; compare some ones to compare the teen numbers. 	<ul style="list-style-type: none"> Personal Rekenrek (Lesson 10) 20 linking cubes, personal white board 	<ul style="list-style-type: none"> Dot cards of 8 (Lesson 6 Fluency Template)
E	23	<ul style="list-style-type: none"> Reason about and represent situations, decomposing teen numbers into 10 ones and some ones and composing 10 ones and some ones into a teen number 	<ul style="list-style-type: none"> Teen numeral and dot cards (Lesson 14 Template) (per pair; pictured below) 	<ul style="list-style-type: none"> Dot cards of 8 (Lesson 6 Fluency Template) 12 pieces of red construction paper (S) Picture and word problem (Template), number bond (Lesson 7 Template) within a personal white board
E	24	<ul style="list-style-type: none"> Culminating Task— Represent teen number decompositions in various ways. 	<ul style="list-style-type: none"> Teen numeral and dot cards (Fluency Template 2), Rabbit and Froggy’s matching race (Fluency Template 3) 10 bags each with a different teen number of objects inside. Materials for each station: 2-hand cards (Lesson 16 Template), Hide Zero cards: 1 Hide Zero 10 card (Lesson 6 Template 2) and 5-group cards 1–9 (Lesson 1 Fluency Template 2), personal Rekenrek (Lesson 10), 20 centimeter cubes, 20 sticks, 20 beans, 1 small paper plate, 20 linking cubes, blank paper, number bond (Lesson 7 Template) 	<ul style="list-style-type: none"> Pictorial growth chart 10–20 (Fluency Template 1), frog puppet (popsicle stick with a frog picture)

End-of-Module Assessment: Topics D–E (Interview-style assessment)

F	25	<ul style="list-style-type: none"> Understand gifts, income, and ways to earn income. 		<ul style="list-style-type: none"> Coins table (Lesson 25 Fluency Template) or a re-creation of the graph with coins Collection of U.S. coins for display, “How We Get Money” chart; (S) 1 penny, nickel, dime, and quarter (real or plastic) per student, personal white board
F	26	<ul style="list-style-type: none"> Define jobs as sources of income. 		<ul style="list-style-type: none"> 1 penny, 1 nickel, 1 dime, 1 quarter (plastic or real) or pictures of both sides of these coins Coins graph (Lesson 26 Fluency Template) or a re-creation of the graph with real coins Prepared chart
F	27	<ul style="list-style-type: none"> Understand the difference between needs and wants. 		<ul style="list-style-type: none"> Coins graph (Lesson 27 Fluency Template) or a re-creation of the graph with real coins Lesson 27 Template 1, Lesson 27 Template 2 (cut into cards)

MODULE 6

Topic	Lesson #	Objective	Student Materials	Teacher Materials
A	1	<ul style="list-style-type: none"> Describe the systematic construction of flat shapes using ordinal numbers. 	<ul style="list-style-type: none"> Rekenrek dot paper (Fluency Template 1) Markers, paper 15 coffee stir sticks or similar material marked at the midpoint with permanent marker, scissors, small ball of clay, pencil, piece of construction paper, ruler 	<ul style="list-style-type: none"> Coins Graph (Fluency Template 2) Shape cutouts (Fluency Template 3)
A	2	<ul style="list-style-type: none"> Build flat shapes with varying side lengths and record with drawings. 	<ul style="list-style-type: none"> Fluency Sprint A, B, C, or D Approximately 15 coffee stir sticks, scissors, personal white board, small ball of clay, ruler 	<ul style="list-style-type: none"> Large Hide Zero cards (Fluency Template) (optional)
A	3	<ul style="list-style-type: none"> Compose solids using flat shapes as a foundation. 	<ul style="list-style-type: none"> Color by answer addition (Fluency Template 1), crayons Color by answer subtraction (Fluency Template 2), crayons Geoboard and rubber bands per pair (or dot paper, markers, and ruler if geoboards are not available) 12 coffee stir sticks, small ball of clay 	<ul style="list-style-type: none"> Set of geometric solids
A	4	<ul style="list-style-type: none"> Describe the relative position of shapes using ordinal numbers. 	<ul style="list-style-type: none"> 4-dot puzzle cards (Fluency Template 2), plus extra 1-dot and 2-dot pieces 5-dot puzzle cards (Fluency Template 3), plus extra 1-dot and 2-dot pieces 	<ul style="list-style-type: none"> Coins Graph (Fluency Template 1)

			<ul style="list-style-type: none"> • Personal white board • Shapes (Template), scissors 	
B	5	<ul style="list-style-type: none"> • Compose flat shapes using pattern blocks and drawings. 	<ul style="list-style-type: none"> • Fluency Sprint A, B, C, or D (Lesson 2 Fluency Sprints) • Personal white board • Pattern blocks (a variety including 4 squares and 1 triangle), personal white board, I can make new shapes recording sheet (Template) 	<ul style="list-style-type: none"> • Coins Graph (Fluency Template)
B	6	<ul style="list-style-type: none"> • Decompose flat shapes into two or more shapes. 	<ul style="list-style-type: none"> • 2 copies of the Make 10 Sprint • Personal white board • Scissors, shape sheet (Template), pattern blocks, I can make new shapes recording sheet (Lesson 5 Template) 	
B	7	<ul style="list-style-type: none"> • Compose simple shapes to form a larger shape described by an outline. 	<ul style="list-style-type: none"> • Folders, resealable plastic bags, personal white board, copies of Sprints, personal Rekenreks (made in Module 5), fluency kit (Fluency Template), and other consumable fluency materials • Personal white board, ruler • Ruler, shape puzzle (Template), scissors, pattern blocks, personal white board, envelope to contain student puzzle pieces (optional) 	

B	8	<ul style="list-style-type: none">• Culminating task—review selected topics to create a cumulative year-end project.	<ul style="list-style-type: none">• Summer packets (built in Lesson 7 with Fluency Template)	
End-of-Module Assessment: Topics A–B				