Mathematics
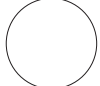
Grade 3

Scoring Protocol

2017-2018

Item 1	Option:	A	B	C	Correct	Scoring (0/1)

H - Here are three shapes. (Point to student materials.) Which of these shapes is a circle: A, B, or C?

A	B	C	c	

Scoring: 0 = incorrect; 1 = correct

Item 2	Option:	A	B	C	Correct	Scoring (0/1)

L - Here are some balls. (Point to student materials.) How many balls are there: 1, 2, or 3?

1	2	3	b	

Scoring: 0 = incorrect; 1 = correct

Item 3	Option:	A	B	C	Correct	Scoring (0/1)

L - The girl has 3 coins. The boy has 3 coins. (Point to student materials.) How many coins do they have all together: 4, 5, or 6?

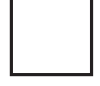coins are not shown

4	5	6	c	

Scoring: 0 = incorrect; 1 = correct

Item 4	Option:	A	B	C	Correct	Scoring (0/1)

L - Here are some trees with pears. (Point to student materials.) How many pears are there all together: 2, 3, or 4?

trees are not shown, circles represent pears

2	3	4	a	

Scoring: 0 = incorrect; 1 = correct

Item 5	Option:	A	B	C	Correct	Scoring (0/1)

L - Here is a rectangle and a unit square. (Point to student materials.) How many unit squares fit in the rectangle: 2, 3, or 4?

2	3	4	c	

Scoring: 0 = incorrect; 1 = correct

Item 6	Option:	A	B	C	Correct	Scoring (0/1)

L - Here are three shapes. (Point to student materials.) Which of these shapes is a triangle: A, B, or C?

A	B	C	a	

Scoring: 0 = incorrect; 1 = correct

Item 7	Option:	A	B	C	Correct	Scoring (0/1)
H - Here are some unit squares. (Point to student materials.) How many unit squares are there: 9, 10, or 18?		9	10	18	c	

Scoring: 0 = incorrect; 1 = correct

Item 8	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a clock. (Point to student materials.) What time is it: 7:00, 8:00, or 10:00?		7:00	8:00	10:00	b	

Scoring: 0 = incorrect; 1 = correct

Item 9	Option:	A	B	C	Correct	Scoring (0/1)
M - Here are some unit squares. (Point to student materials.) How many unit squares are there: 11, 12, or 14?		11	12	14	c	

Scoring: 0 = incorrect; 1 = correct

Item 10	Option:	A	B	C	Correct	Scoring (0/1)
			circles represent hats			
H - Here are 15 hats in three groups. (Point to student materials.) How many hats are in each group if you divide them into three groups: 4, 3, or 5?		4	3	5	c	

Scoring: 0 = incorrect; 1 = correct

Item 11	Option:	A	B	C	Correct	Scoring (0/1)
		stars are in boxes rather than circles				
H - Here are some stars. (Point to student materials). If Mike has four groups of three stars, how many stars does he have all together: 3, 12, or 6?		3	12	6	b	

Scoring: 0 = incorrect; 1 = correct

Item 12	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a pattern of skip counting by 5's. (Point to student materials.) What number comes next: 20, 10, or 5?		20	10	5	a	

Scoring: 0 = incorrect; 1 = correct

Item 13	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a square, with smaller squares inside of it. (Point to student materials.) How much of this figure is shaded: half, whole, or none?		half (1/2)	whole (1)	none (0)	a	

Scoring: 0 = incorrect; 1 = correct

Item 14	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a pattern of skip counting by two's. (Point to student materials.) What number is missing: 10, 12, or 14?		10	12	14	a	

Scoring: 0 = incorrect; 1 = correct

Item 15	Option:	A	B	C	Correct	Scoring (0/1)
L - This tree has some apples. (Point to student materials.) How many apples are there: 7, 8, or 9?		tree is not shown, circles represent apples				
		7	8	9	b	

Scoring: 0 = incorrect; 1 = correct

Item 16	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is Dylan skip counting by fives. (Point to student materials.) Finish Dylan's counting for him, 5, 10, then what: 5, 15, or 20?		5	15	20	b	

Scoring: 0 = incorrect; 1 = correct

Item 17	Option:	A	B	C	Correct	Scoring (0/1)
M - This shirt has 12 buttons. (Point to student materials.) Six buttons are black. What portion of the buttons is black: 0, 1/2, or 1?		the shirt is not shown				
		0	1/2	1	b	

Scoring: 0 = incorrect; 1 = correct

Item 18	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a picture graph that shows the average number of cats that teachers and students have. (Point to student materials.) Do teachers and students have the same number of cats, do teachers have more, or do students have more?		each set of six dots (a full cell) represents one cat on the grid				
		Same	Teachers have more	Students have more	c	

Scoring: 0 = incorrect; 1 = correct

Item 19	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a rectangle with six smaller squares. (Point to student materials.) Three of the squares are shaded. What portion of the rectangle is shaded: 1, 1/2, or 2?		1	1/2	2	b	

Scoring: 0 = incorrect; 1 = correct

Item 20	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a clock. (Point to student materials.) It is Noon and time for lunch. (Point to student materials.) Which answer shows what time it is: 12:00 PM, 11:00 AM, or 12:00 AM?		12:00 PM	11:00 AM	12:00 AM	a	

Scoring: 0 = incorrect; 1 = correct

Item 21	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is an addition problem represented by squares. (Point to student materials.) 5 + 4 is the same as: 4 + 5, 3 + 1, or 4 + 4?		4 + 5	3 + 1	4 + 4	a	

Scoring: 0 = incorrect; 1 = correct

Item 22	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a picture graph that shows the number of ice creams sold in two days, Monday and Tuesday. (Point to student materials.) Did they sell the same number of ice creams on Monday and Tuesday, more on Monday, or more on Tuesday?		Same	more on Monday	more on Tuesday	c	

each set of six dots (a full cell) represents one ice cream cone on the grid

Scoring: 0 = incorrect; 1 = correct

Item 23	Option:	A	B	C	Correct	Scoring (0/1)
L - Here are two ribbons and a ruler with inches. (Point to student materials.) Which ribbon is shorter: A, B, or are they the same?		A	B	Same	c	

Scoring: 0 = incorrect; 1 = correct

Item 24	Option:	A	B	C	Correct	Scoring (0/1)
M - Here are some bears. (Point to student materials.) How many bears are there: 13, 14, or 15?		13	14	15	b	

circles represent bears

Scoring: 0 = incorrect; 1 = correct

Item 25	Option:	A	B	C	Correct	Scoring (0/1)
L - Here is a tile that is 2 inches by 2 inches. (Point to student materials.) To get area, we multiply the sides, 2 inches times 2 inches. What is the area of the tile: 3 square inches, 4 square inches, or 7 square inches? *Scoring:* 0 = incorrect; 1 = correct		3	4	7	b	

Item 26	Option:	A	B	C	Correct	Scoring (0/1)
H - This is the fraction 1/2. (Point to student materials.) Which of the following fractions is the same as 1/2: 10/20, 11/14, or 7/20? *Scoring:* 0 = incorrect; 1 = correct		10/20	11/14	7/20	a	

Item 27	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is an addition problem represented by dots. (Point to student materials.) 8 + 11 is the same as: 11 + 8, 7 + 8, or 7 + 11? *Scoring:* 0 = incorrect; 1 = correct		11 + 8	7 + 8	7 + 11	a	

Item 28	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a multiplication problem. (Point to student materials.) 3 X 5= which number: 10, 15, or 20? *Scoring:* 0 = incorrect; 1 = correct		10	15	20	b	

Item 29	Option:	A	B	C	Correct	Scoring (0/1)
L - Here are two fish tanks with water. (Point to student materials.) Do the fish tanks have the same amount of water, does A have more, or does B have more? *Scoring:* 0 = incorrect; 1 = correct		Same	A has more water	B has more water	a	

Item 30	Option:	A	B	C	Correct	Scoring (0/1)
M - This is the fraction 1/2. (Point to student materials.) Which of the following fractions is the same as 1/2: 1/12, 7/12, or 6/12? *Scoring:* 0 = incorrect; 1 = correct		1/12	7/12	6/12	c	

Item 31	Option:	A	B	C	Correct	Scoring (0/1)
M - Here are some dots. (Point to student materials.) If you have three groups of five dots, how many do you have: 10, 15, or 20?		10	15	20	b	

Scoring: 0 = incorrect; 1 = correct

Item 32	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a triangle with equal sides. (Point to student materials.) The perimeter is the distance around a figure. What is the perimeter of this triangle: 15 inches, 18 inches, or 13 inches?		15 inches	18 inches	13 inches	b	

Scoring: 0 = incorrect; 1 = correct

Item 33	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is an addition problem represented by squares. (Point to student materials.) 6 + 14 is the same as: 14 + 6, 13 + 11, or 14 + 4?		14 + 6	13 + 11	14 + 4	a	

Scoring: 0 = incorrect; 1 = correct

Item 34	Option:	A	B	C	Correct	Scoring (0/1)
H - Here are two ribbons and a ruler with inches. (Point to student materials.) Which ribbon is shorter, A, B, or are they the same?		A	B	Same	b	

Scoring: 0 = incorrect; 1 = correct

Item 35	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a multiplication problem. (Point to student materials.) 5 X 4 = which number: 18, 12, or 20?		18	12	20	c	

Scoring: 0 = incorrect; 1 = correct

Item 36	Option:	A	B	C	Correct	Scoring (0/1)
H - Here are 18 muffins. (Point to student materials.) Nine of them have nuts. What portion of the muffins has nuts: 1, 1/2, or 2?		1	1/2	2	b	

Scoring: 0 = incorrect; 1 = correct

Item 37	Option:	A	B	C	Correct	Scoring (0/1)

H - Here is a tree with 10 pears. Tommy picks 4 pears. (Point to student materials.) How many pears are left on the tree: 8, 6, or 4?

the tree is not shown, circles represent pears

A	B	C	Correct
8	6	4	b

Scoring: 0 = incorrect; 1 = correct

Item 38	Option:	A	B	C	Correct	Scoring (0/1)

H - Here is a square. (Point to student materials.) The perimeter is the distance around a figure. What is the perimeter of this square: 15 inches, 16 inches, or 17 inches?

A	B	C	Correct
15 inches	16 inches	17 inches	b

Scoring: 0 = incorrect; 1 = correct

Item 39	Option:	A	B	C	Correct	Scoring (0/1)

L - Here are 4 dots in two groups. (Point to student materials.) How many dots are in each group: 2, 3, or 4?

A	B	C	Correct
2	3	4	a

Scoring: 0 = incorrect; 1 = correct

Item 40	Option:	A	B	C	Correct	Scoring (0/1)

H - Here is a subtraction problem. (Point to student materials.) 12 - 10 = which number: 9, 5, or 2?

A	B	C	Correct
9	5	2	c

Scoring: 0 = incorrect; 1 = correct
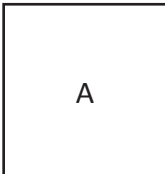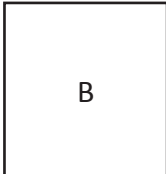
Item 41	Option:	A	B	C	Correct	Scoring (0/1)

L - Here are two cubes. (Point to student materials.) Are the cubes the same size, is A larger, or is B larger?

cubes are represented with simple squares

A	B	C	Correct
Same	A is larger	B is larger	a

Scoring: 0 = incorrect; 1 = correct

Item 42	Option:	A	B	C	Correct	Scoring (0/1)

M - Here is a 6 inch rope that is being cut in half. (Point to student materials.) How long will half of the rope be: 2 inches, 3 inches, or 4 inches?

scissors are not shown, heavy line shows cut line

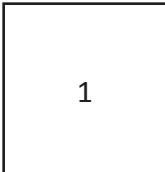| A	B	C	Correct
2 inches	3 inches	4 inches	b

Scoring: 0 = incorrect; 1 = correct

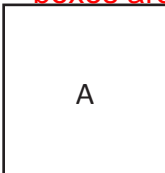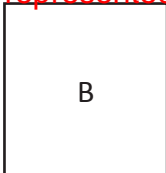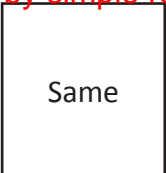| Item 43	Option:	A	B	C	Correct	Scoring (0/1)
H - Here are two ropes and a ruler with inches. (Point to student materials.) Which rope is shorter, A, B, or are they the same?		A	B	Same	a	

Scoring: 0 = incorrect; 1 = correct

Item 44	Option:	A	B	C	Correct	Scoring (0/1)
M - This is the fraction 1/2. (Point to student materials.) Which of the following fractions is the same as 1/2: 12/14, 7/14, or 3/14?		12/14	7/14	3/14	b	

Scoring: 0 = incorrect; 1 = correct

Item 45	Option:	A	B	C	Correct	Scoring (0/1)
H - Here is a square, with smaller squares inside of it. (Point to student materials.) How much of this figure is shaded: whole, half, or none?		1	1/2	0	a	

Scoring: 0 = incorrect; 1 = correct

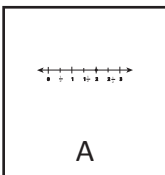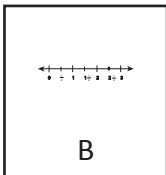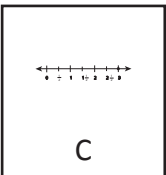| Item 46	Option:	A	B	C	Correct	Scoring (0/1)
H - Here are two boxes and a ruler with inches. (Point to student materials.) Which box is wider, A, B, or are they the same?		A	B	Same	a	

boxes are represented by simple rectangles

Scoring: 0 = incorrect; 1 = correct

Item 47	Option:	A	B	C	Correct	Scoring (0/1)
M - Here is a triangle with equal sides. (Point to student materials.) The perimeter is the distance around a figure. What is the perimeter of this triangle: 12 inches, 18 inches, or 9 inches?		12 inches	18 inches	9 inches	a	

Scoring: 0 = incorrect; 1 = correct

Item 48	Option:	A	B	C	Correct	Scoring (0/1)
L - Here are three number lines. (Point to student materials.) Which answer, A, B, or C, (point to answer choices) has a point that is half way between 2 and 3?		A	B	C	b	

Scoring: 0 = incorrect; 1 = correct