

Mathematics for Elementary School

Grade 2 , One-Year Instructional Plan

1 st Trimester			
Month	Unit	# of periods	Instructional contents
April (15)	[Volume 1] 1. A Field Trip p. 2-7	5	<ul style="list-style-type: none"> <input type="radio"/> How to read and write simple tables (one dimensional) and graphs [table, graph] <input type="radio"/> Concept and difference of time and elapsed time [time, elapsed time] <input type="radio"/> Meaning of a.m. and p.m. <input type="radio"/> Relationship of units: 1 hour = 60 minutes, 1 day = 24 hours
	☆ Review 1 p. 8	(1)	<ul style="list-style-type: none"> <input type="radio"/> Reviewing previously learned contents
	2. Addition: 2-Digit Numbers p. 9-16	9	<ul style="list-style-type: none"> <input checked="" type="radio"/> Addition calculation of 2-digit numbers and 1- or 2-digit numbers [algorithm] <input checked="" type="radio"/> Addition calculation using an algorithm <input type="radio"/> Addition calculations and a method for checking the answers
May (15)	3. Subtraction: 2-Digit Numbers p. 17-24	9	<ul style="list-style-type: none"> <input checked="" type="radio"/> Subtraction calculation of 2-digit numbers and 1- or 2-digit numbers <input checked="" type="radio"/> Subtraction calculation using an algorithm <input type="radio"/> Relationship between addition and subtraction <input type="radio"/> Subtraction calculations and how to check those answers
	4. Length (1) p. 25-33	8	<ul style="list-style-type: none"> <input checked="" type="radio"/> Necessity and usefulness of a unit for measuring length <input checked="" type="radio"/> How to read tick marks on a ruler and its use <input checked="" type="radio"/> Units of length: centimeter and millimeter [unit, <i>cm</i>, <i>mm</i>] <input checked="" type="radio"/> Relationship of units, 1 <i>cm</i> = 10 <i>mm</i> <input type="radio"/> Concept of straight lines [straight line] <input type="radio"/> Addition and subtraction calculation involving lengths
	5. Numbers Up to 1000 p. 34-46	12	<ul style="list-style-type: none"> <input checked="" type="radio"/> How to read and write numbers up to 1000 [hundreds place] <input type="radio"/> Principles and structures of place value for 3-digit numbers <input type="radio"/> Order and relative size of numbers up to 1000 [thousand] <input type="radio"/> Addition and subtraction calculations based on the structure of numbers using 10 or 100 as a unit <input type="radio"/> How to use symbols for greater, less, and equal to [<i>></i>, <i><</i>]
June (20)	6. Capacity p.47-52	8	<ul style="list-style-type: none"> <input checked="" type="radio"/> Necessity and usefulness of a unit for measuring capacity <input checked="" type="radio"/> Units of capacity: deciliter, liter, and milliliter [<i>dl</i>, <i>l</i>, <i>ml</i>] <input checked="" type="radio"/> Relationship of units: 1 <i>l</i> = 10 <i>dl</i>, 1 <i>l</i> = 1000 <i>ml</i>, 1 <i>dl</i> = 100 <i>ml</i> <input type="radio"/> Addition and subtraction calculation involving capacity
	☆ Review 2 p.53-54	(2)	<ul style="list-style-type: none"> <input type="radio"/> Retaining and reinforcing the content that students learned in the first trimester
Standard # of periods in 1st trimester: 60 periods		51 periods (Adjustable periods (☆): 3 periods) (Optional periods: 6 periods)	Total of 9 periods (3 + 6)

2 nd Trimester			
Month	Unit	# of periods	Instructional contents
Sept. (20)	7. Addition and Subtraction p. 55-57	3	<input type="radio"/> Associative property (law) of addition, how to use () <input type="radio"/> Mental calculation of addition and subtraction of 2-digit and 1-digit numbers
	☆ Review 3 p.58	(1)	<input type="radio"/> Reviewing previously learned content
	8. Calculation with 3-digit Numbers p. 59-69	11	<input checked="" type="radio"/> Addition calculation of 3-digit and 1 to 3-digit numbers <input checked="" type="radio"/> Subtraction calculation of 3-digit and 1 to 3-digit numbers
	☆ How Can You Calculate? p.70	(1)	<input type="radio"/> Story problems involve 3-digit addition and subtraction that require students to make decision about what calculation operation they need to use.
Oct. (20)	[Volume 2] 9. Triangles and Quadrilaterals p. 2-12	8	<input checked="" type="radio"/> Concept of triangles and quadrilaterals [triangle, quadrilateral] <input type="radio"/> Structural elements of triangles and quadrilaterals [sides, vertex] <input type="radio"/> Concept of a right angle [right angle] <input checked="" type="radio"/> Concepts and characteristics of rectangles and squares, how to draw them using graph paper [rectangle, square] <input type="radio"/> Concept and characteristics of right triangles [right triangle]
	☆ Review 4 p.13	(1)	<input type="radio"/> Reviewing previously learned content
	10. Multiplication (1) p. 14-31	18	<input checked="" type="radio"/> Meaning of multiplication <input type="radio"/> Terms and symbols such as multiply, x, and muplication [x, multiplication] <input type="radio"/> Basic concept of "times as much as" [times as much as] <input checked="" type="radio"/> Structures of multiplication facts for 5 and 2 [multiplication facts] <input checked="" type="radio"/> Structures of multiplication facts for 3 and 4 <input type="radio"/> Terms "multiplicand" and "multiplier" and their meaning [multiplicand, multiplier] <input type="radio"/> Size relationship between a multiplier and a factor
Nov. (20)	☆ Multiplication Game p.32	(2)	<input type="radio"/> Practicing multiplication facts through activity
	11. Multiplication (2) p. 33-44	16	<input checked="" type="radio"/> Structures of multiplication facts for 6 and 7 <input checked="" type="radio"/> Structures of multiplication facts for 8, 9, and 1. <input type="radio"/> Commutative property (law) of multiplication (using the multiplication table) <input type="radio"/> Problem solving using multiplication facts
Dec. (10)	☆ Review 5 p.45-46	(2)	<input type="radio"/> Retaining and reinforcing the content the students learned in the second trimester
	Standard # of periods in 2nd trimester: 70 periods		56 periods (Adjustable periods (☆): 7 periods) (Optional periods: 7 periods) Total of 14 periods (7 + 7)

3 rd Trimester			
Month	Unit	# of periods	Instructional contents
Jan. (15)	12. Length (2) p. 47-50	4	<input checked="" type="radio"/> Unit of length: meter [m] <input checked="" type="radio"/> Relationship of units: $1m = 100\text{ cm}$
	13. Do We Need to Add or Subtract? p. 51-54	5	<input type="radio"/> Problem solving: a problem situation is presented as a subtraction situation but addition is used in the actual calculation; a problem situation is presented as an addition situation but subtraction is used in the actual calculation <input type="radio"/> Relationship between addition and subtraction
	☆ Review 6 p. 45-46	(1)	<input type="radio"/> Reviewing previously learned content
Feb. (20)	14. Numbers up to 10000 p. p. 56-67	12	<input checked="" type="radio"/> How to read and write numbers up to 10000 [thousands place] <input type="radio"/> Order and relative size of numbers up to 10000 [one man] <input type="radio"/> Be able to express a number as the sum of two numbers, subtraction of two numbers, and a number as a product of other numbers <input type="radio"/> Addition calculations involving 2 to 3-digit numbers that produce 4-digit numbers as a result. <input type="radio"/> Subtraction calculations involving 4-digit numbers minus 1 to 3-digit numbers.
March (10)	15. Shapes of Boxes p. 68-73	7	<input type="radio"/> Structural elements of cubes and rectangular prisms [face] <input type="radio"/> Distinction and relationship of plane figures and solid figures <input type="radio"/> Deepening understanding through construction
	☆ The Amusement Park p. 74-75	(2)	<input type="radio"/> Mathematical thinking and how to manipulate <input type="radio"/> Mathematical examination of everyday life phenomena through creating math problems
	☆ 2nd Grade Review p. 76-78	(4)	<input type="radio"/> Review of all the content learned in the first grade
Standard # of periods in 3rd trimester: 45 periods		28 periods (Adjustable periods (☆): 7 period) (Optional periods: 10 period)	Total of 17 periods (7 + 10)

Standard # of periods in a year: 175 periods	135 periods* (Adjustable periods (☆): 17 periods) (Optional periods: 23 periods) Total of 39 periods (17 + 23)
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Note:

- One period is 45 minutes.
- The numbers indicated in the () in the month column show the number of available periods in the month.
- The ☆ symbol in the unit column indicates the periods teachers can adjust by considering students' state of learning.
- The ⊙ symbol in the instructional contents column indicates important content. The [] contains terms and symbols students learn in the unit.