



Exercise	Topic	Strand	trand Learning objectives	
1	Numbers 1 to 20		■ Learn numbers 1 to 20	4
2	Counting on and counting back, odd numbers and even numbers	Number	 Perform counting on and counting back Learn the odd numbers and even numbers within 20 	6
3	Comparing numbers of objects		 Understand the numbers of objects 	8
4	Ordering		Understand ordering	10
5	Compositions of 2 to 10		 Understand the decomposition and composition of 2 to 10 	
6	Compositions of 11 to 13	Number	Number Understand the decomposition and composition of 11 to 13	
7	Compositions of 14 to 18		 Understand the decomposition and composition of 14 to 18 	16
8	3-D shapes (1)	Shape	·	
9	3-D shapes (2)	and Space	Space Recognise the properties of prisms, cylinders, pyramids, cones and spheres	
	Assessment 1		■ Cover the content of exercises 1 - 9	22
10	Basic addition (1)		 Understand the basic concept of addition 	26
11	Basic addition (2)		 Add numbers within 18 orally Recognise the addition of exchanging the positions of two numbers will lead to the same result 	28
12	Basic subtraction (1)	Number	 Understand the basic concept of subtraction 	30
13	Basic subtraction (2)		 Subtract numbers within 18 orally Recognise the relationship between addition and subtraction 	32
14	Knowing 0		■ Understand the concept of 0	34

Exercise	Topic	Strand	Learning objectives	Page
15	Relative positions of objects	Shape and Space	 Describe the relative positions of objects from observer's view using 'over', 'under', 'left', 'right', in front of', 'behind' and 'between' 	36
16	Lengths and distances	Measures	 Understand the concepts of length and distance Compare the lengths of objects and the distances between objects intuitively and directly 	38
17	Measuring activities		 Use self-made units to compare the lengths of objects and the distances between objects 	40
18	Sudoku (Enrichment)		Perform the game of SudokuDesign the game of Sudoku	42
Assessment 2			Cover the content of exercises	44
	Final Assessment		Cover the content of exercises 1 - 17	48

Additional Resources:

Cross-topic Exercise	56
Challenging Problems ('Inquiry and Investigation' in the latest curriculum)	58
Revision Notes	60

■ Answer Booklet (Including Solution Guide, Common Mistakes Explanation, MCQ Explanation)

Basic subtraction (2)





1-minute Revision

Common Error

What is the difference between the number of the two kinds of fruit?



When doing subtraction, subtract the smaller number from the larger number.

Basic Practice

Fill in the boxes.

1A Compositions of numbers When doing subtraction, we can use the decompositions of 2 to 18.

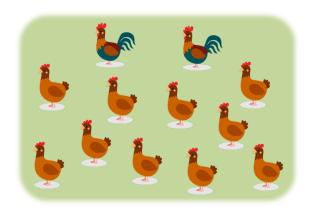
with the correct numbers. Fill in the

Then fill in the () with - or = .

7. 10 and 2 are on the grass.

more **b** than There are

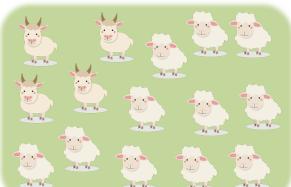




8. 4 and 11 are on the grass.

The difference between the number of goats and sheep is





Date

Time used

minutes

Marks

= 7

Write the correct number in each box.

9.
$$5 + 4 = 9$$

3 Advanced Practice

Fill in the boxes with the correct numbers.

15.
$$-6 = 1$$

$$-8 = 8$$

Use the 3 number cards below to form 4 correct expressions. Then fill in the boxes with the correct numbers.

4

9

13

Blacken the O next to the correct answer.

- 21. Which of the following expressions gives a result of 7?
 - A. 17 9

OB. 8 + 9

○ C. 14 – 7

OD. 8 + 1

22. Which of the expressions below represents the difference between the number of the two kinds of sweets?



Useful Tips

○ A. 8 – 9

 \bigcirc B. 9 – 8

between the number of obje

○ D. 17 – 8

Assessment 1



Time allowed: 30 min

Class: ____ (Date: Name:

	Assessment points	Questions	Marks
Numbers within 20	Learn numbers 1 to 20, counting on and counting back, odd numbers and even numbers, comparing numbers of objects, ordering	1 – 6	/ 48
Compositions of numbers	Compositions of numbers 2 to 18	7 – 11	/ 28
3-D shapes	Identify and recognise prisms, cylinders, pyramids, cones and spheres	12 – 15	/ 24
		Total marks:	/ 100

- Instructions •
- **Multiple choice questions:** Blacken the \(\cap \) next to the correct answer.
 - Questions in which you are asked to 'show your working': Write your mathematical expressions, answers, and statements / conclusions.
 - Other types of questions: Answer as required in the spaces provided.
- 1. Fill in the blanks and circle the answer.



In the figure above, there are _____ a.





Marks

and _____ 🤾.



This number is an (odd/even) number.

Study the pattern. Fill in the boxes and circle the answers. 2.

11, | |, 9, | |, | |, 6 a.

This is (counting on / counting back).

4M

, l , 18, 19, l 14, 15, b.

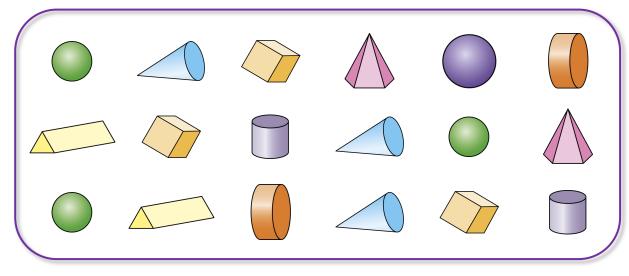
This is (counting on / counting back).

Cross-topic Exercise



Answer the questions.

1. Count the 3-D shapes in the picture below and fill in the blanks with the correct numbers.



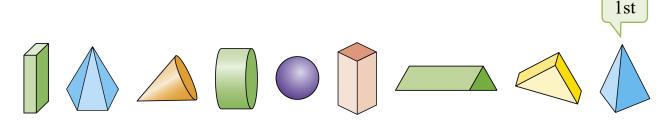
- **a.** _____ prism(s)
- b. ___ cylinder(s)
- **c.** _____ cone(s)

sphere(s)

2.

- a. This is (counting on / counting back). (Circle the answer)
- **b.** Among these numbers, there are _____ odd numbers.
- c. Among these numbers, _____ and ____ can make 14.

3.



- a. The 8th 3-D shape is a (prism / cylinder / pyramid / cone / sphere). It (can / cannot) roll. (Circle the answer)
- b. The _____ 3-D shape is a cylinder.
- c. In the picture above, there are _____ prisms.

Revision Notes



Unit 1: Numbers within 20 (Exercises 1-4)

1. Numbers 1 to 20

Counting on and counting back

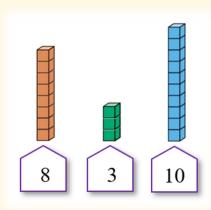
Counting on 1, 2, 3 ...

10 11 12 13 14 15

20, 19, 18 ... Counting back

- Odd numbers and even numbers
 - Odd numbers: 1, 3, 5, 7, 9, 11, 13, 15, 17, 19
 - Even numbers: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20

2. Comparing the numbers of objects



- There are more than. 8 is larger than 3.
- There are fewer than. 3 is smaller than 10.
- The number of is the largest and the number of is the smallest.
- Arrange the numbers on the left from the largest to the smallest: 10, 8, 3

largest

smallest

3. Ordering



There are 5 pupils in total.



is the 4th in the line.



19.
$$9, 14$$
 $5 + 9 = 14$

12 Basic subtraction (1)

2.
$$10-7=3$$

3.
$$13-5=8$$









$$[9-6=3, 14-8=6]$$











$$[15 - 8 = 7, 11 - 4 = 7]$$

$$12 - 5 = 7$$

$$17 - 9 = 8$$

$$13 - 6 = 7$$

13 Basic subtraction (2)

7.
$$8$$
 $10-2=8$

8.
$$7$$
 $11 - 4 = 7$

21. C

MCQ Explanation

MOQ Explanation		
Wrong choice	Reason	
A	17-9 is 8 but misunderstand to be 7.	
В	'8 + 9' is 17 but misunderstand to be 7.	
D	Mistakenly read the '+' in '8 + 1' as '-'. '8 - 1' is 7 but '8 + 1' is 9.	

22. B

There are 8 pink sweets and 9 blue sweets.

MCQ Explanation

. "	ace Explanation		
	Wrong choice	Reason	
	A	Ignore to use the larger number to subtract the smaller number while finding the difference between the number of 2 groups of items using expression.	
	C	Misunderstand to use addition.	
	D	Misuse the total number of the sweets to subtract the number of pink sweets.	

14 Knowing 0

1. 0

0 2.

3. 2 0

more

6. 8

7. 0

5 8.

- 9.
- **10**. D

[A: 5, B: 1, C: 9]

MCQ Explanation		
Wrong choice	Reason	
A	Mistakenly think the expression with '0' is the correct answer.	
В	Mistakenly think the expression with '0' is the correct answer.	
С	Mistakenly think the expression with '0' is the correct answer.	

11. C

[There are 6 bananas and 1 strawberry but no apples on the plate.]

MCQ Explanation

MCQ Explanation		
Wrong choice	Reason	
A	Misunderstand to find 'how many kinds of fruit'.	
В	Misuse the number of strawberries as the answer.	
D	Misuse the number of bananas as the answer.	

- **12.** 3
 - 3 + 0 = 3
- **13.** 8
 - 8 0 = 8
- **14**. 2
 - 0 + 2 = 2
- **15.** 0
 - 7 7 = 0

[There are 7 flowers each in the two pots of flowers.]

15 Relative positions of objects

- behind
- 2.



- 3.
- 4.

Common Mistake: 3 ×

Mistake



5.



- 7.
- 8.

 - C.
 - d.



16 Lengths and distances

- 1.
- 2.

- 7.
- dog
 - dog
 - rabbit C.
- Nick a.
 - b. Joey
 - shorter, taller C.
 - d. Joey