Elementary Mathematics

CLASS ONE

$5 + 2 = ?$

Elementary Mathematics

Class One

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Preface

A child is a great wonder. There is no end to the thinking about his/her world of wonder. A child is a subject of contemplation for educationists, scientists, philosophers, child specialists and psychologists. The fundamental principles of children education outlined in the National Education Policy 2010 have been defined in the light of these contemplations. The curriculum for primary education has been revised to develop a child on the potentials of his/her innate amazement, unbounded curiosity, endless joy and enthusiasm keeping in view the all-round development of children's potentials. The aims and objectives of primary education were modified in the revised curriculum of 2011.

The subject **Mathematics** is abstract one . For easy presentation of the complex terms, there are so many explanations, pictures and examples have been introduced. To create interest and for easy learning of the students "Do yourself with examples" are incorporated here. To evaluate acquired learning outcomes, sufficient exercises have been incorporated in the textbook . On the other hand, the contents of the textbook have been rearranged by following manner 'Easy to Hard' to keep students enthusiastic in the learning strategy.

To make the young learners interested, enthusiastic and dedicated, Bangladesh Awami League Government under the dynamic leadership of the Honorable Prime Minister Sheikh Hasina has taken initiatives to change the textbooks into four colors, and make them interesting, sustainable and distributed free of cost since 2009. The textbooks of Pre-primary, Primary, Secondary, Ibtedaie, Dakhil, Dakhil Vocational and SSC Vocational level are being distributed free of cost across the country which is a historical initiative of the present government.

My sincere acknowledgement and thanks to all who had helped in different stages of composition, edition, rational evaluation, printing and publication of the textbook. Though all cares have been taken by those concerned, the book may contain some errors/lapses. Therefore, any constructive and rational suggestions will be highly appreciated for further improvement and enrichment of the book. We will deem all our efforts successful if the young learners for whom it is intended find it useful to them.

Professor Narayan Chandra Saha
Chairman
National Curriculum and Textbook Board, Bangladesh

Explanation of Characters and Symbols:

1) Character: A dialogue between two students names Reza and Meena are shown in the textbook. The mathematical idea of the students would be clear through their discussion and opinion.

Reza

Meena

2) The steps have been indicated by using some symbols in the lesson.

Key Question: Key concept of the chapter has been expressed through this question.

Activity: To solve a problem students will discuss and think logically with the help of teacher.

Exercise: Students will solve problems. It will be possible for evaluation of the learning development.

CONTENT

1. Let us compare

What difference can you find in the side by side pictures?

What difference can you find in the following pairs?

What can you find in the picture?

The hare and tortoise are going to the tree!

Which is farther from the tree, hare or tortoise?

Difference can be described in various ways.

More

Less
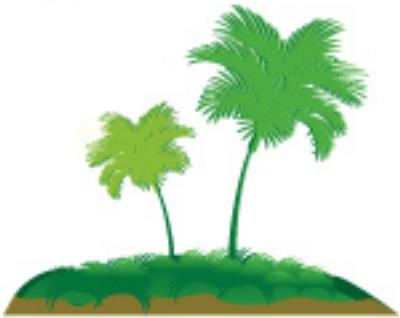
Remember the words to compare objects.
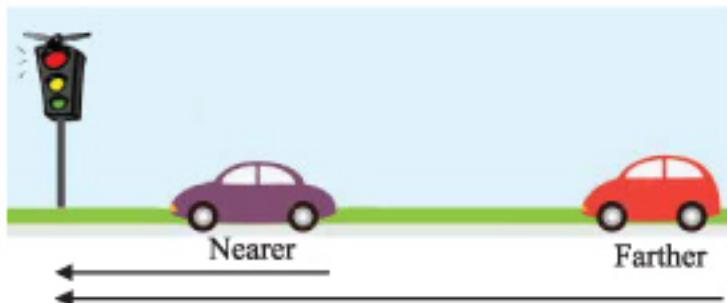
Larger

Smaller
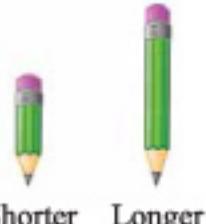
Shorter   Taller

Nearer

Farther

Shorter   Longer

Let us compare things around us by using the words given above.

Heavier
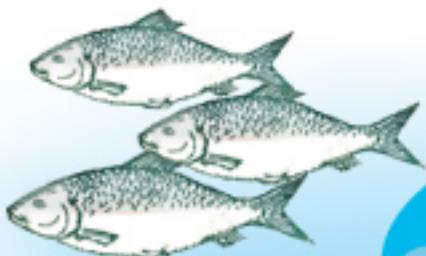
Lighter

2. Let us count

What are the pictures? How many are there?
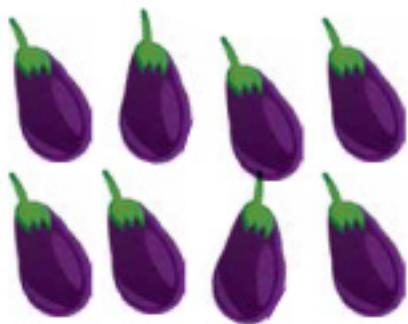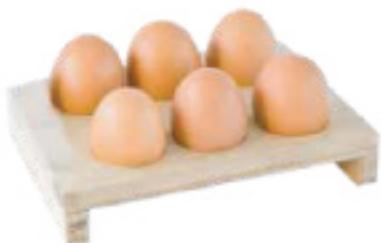
This is our national flag.
There is 1.

What are the pictures? How many are there?

Match equal number of pictures .
One is shown.

Elementary Mathematics

Match equal number of pictures .

9

3. Numbers (1 to 10)

3.1. Numbers: 1 to 5

1

2

3
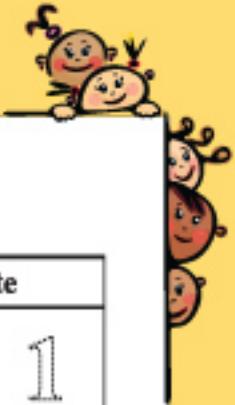
4

5

Count, colour, read and write.

Count	Colour the equal numbers	Read	Write	
🥭	● ○ ○ ○ ○ / ○ ○ ○ ○ ○	1	1	1
🥭🥭	● ● ○ ○ ○ / ○ ○ ○ ○ ○	2	2	2
🥭🥭🥭	○ ○ ○ ○ ○ / ○ ○ ○ ○ ○	3	3	3
🥭🥭🥭🥭	○ ○ ○ ○ ○ / ○ ○ ○ ○ ○	4	4	4
🥭🥭🥭🥭🥭	○ ○ ○ ○ ○ / ○ ○ ○ ○ ○	5	5	5

Count and write the number in the blank boxes.

1	2	

Match numbers with the pictures. One is shown.
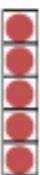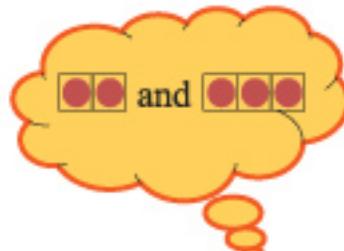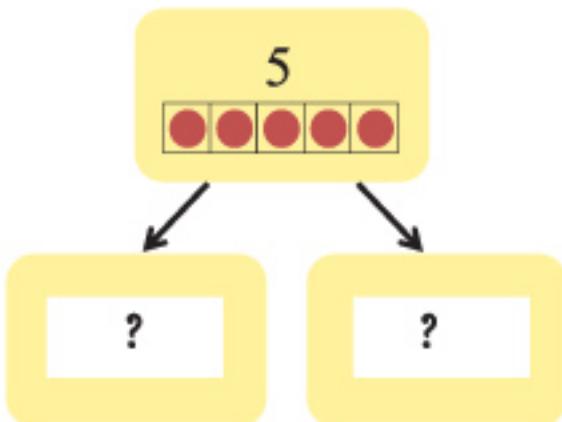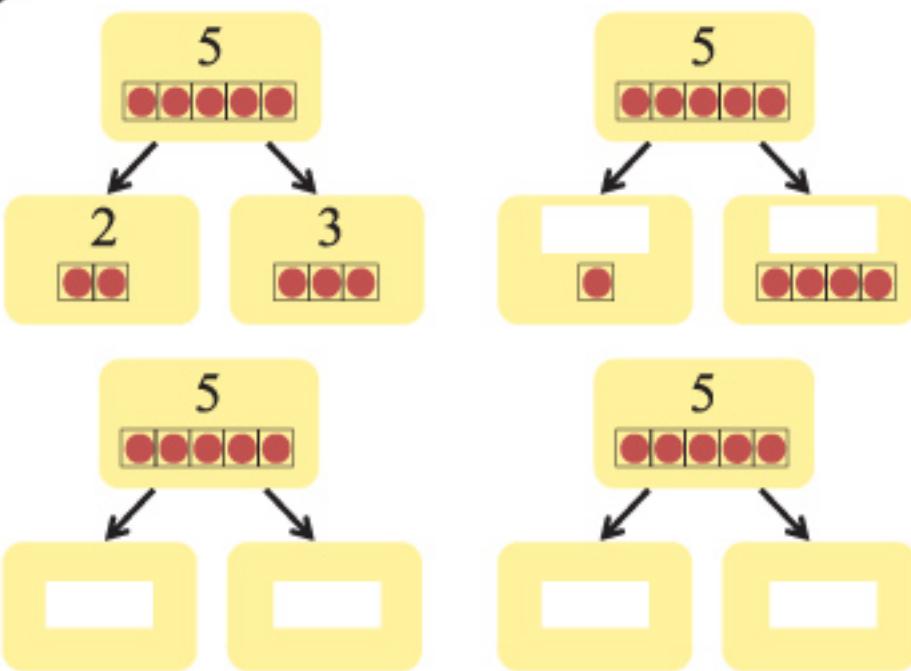
How many ways 5 things can be arranged?

5

? | ?

and

5 things can be arranged in various ways.

5 → 2, 3

5 → ?, 4

5 → ?, ?

5 → ?, ?
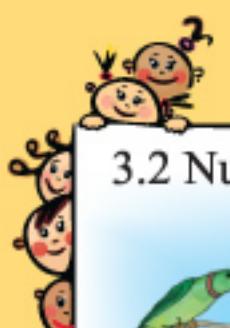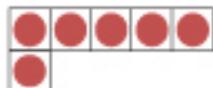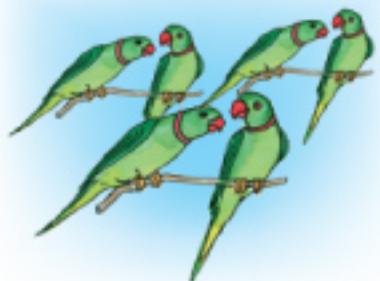
Arrange 4 things in various ways.

2020
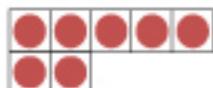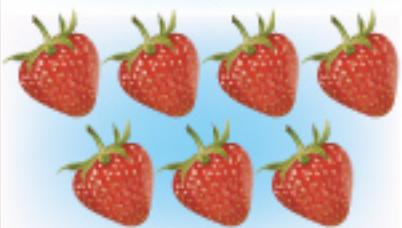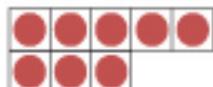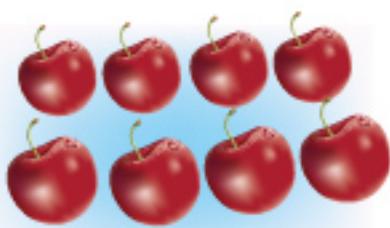
3.2 Number: 6 to 10
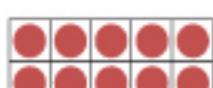
		6
		7
		8
		9
		10
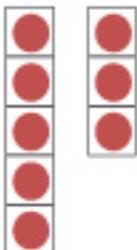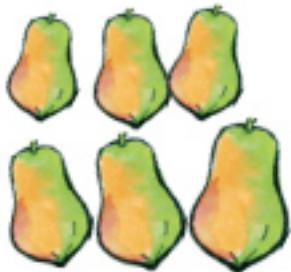
Count, colour, read and write.

Count	Colour equal numbers	Read	Write	
		6	6	6
		7	7	7
		8	8	8
		9	9	9
		10	10	10

2020
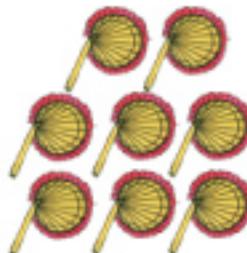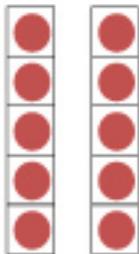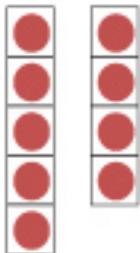
Count and write the number in the blank boxes.
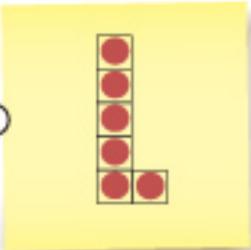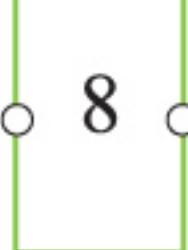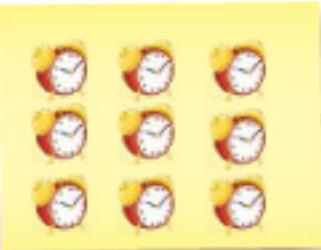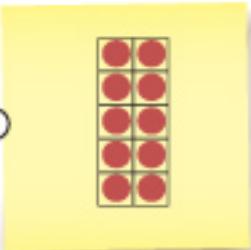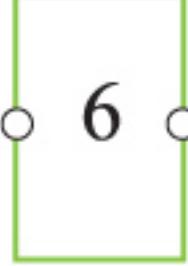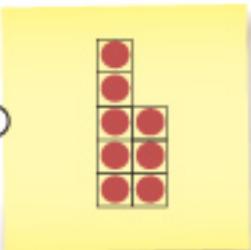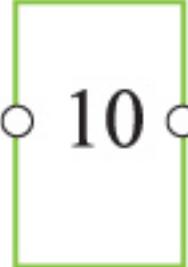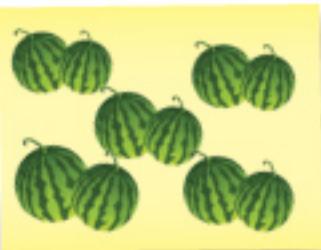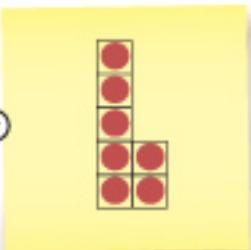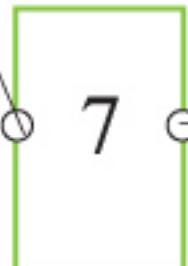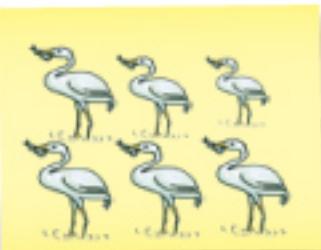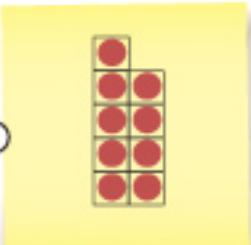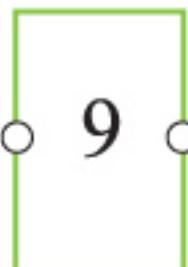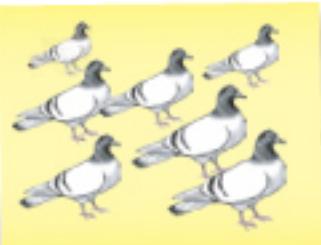
| 6 | 8 | |

| | | |

| | | |
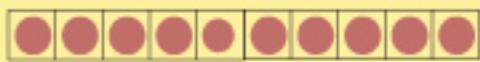
Let's match. One is shown.

9

7

10

6

8

How many ways 10 things can be arranged?

10
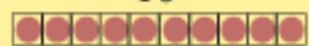
? ? and

10 things can be arranged in various ways.

10 → 8 , 2
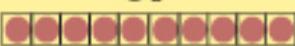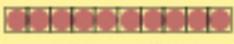
10 → ☐ , ☐

10 → ☐ ☐

10 → ☐ ☐

10 → ☐ ☐

What are the other ways that 10 things can also be arranged?

Arrange the 7 items in diferent way.

Arrange the 9 items in diferent way.

4. Arrangement in Pair
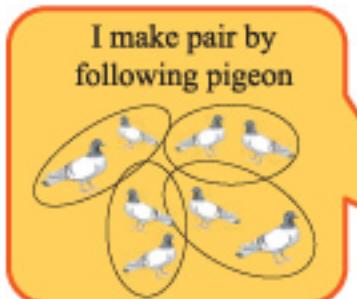
See the picture and make pair by following items.

Butterfly. ...., two, four, six, ...

I make pair by following pigeon

Make pair by following items arround you.
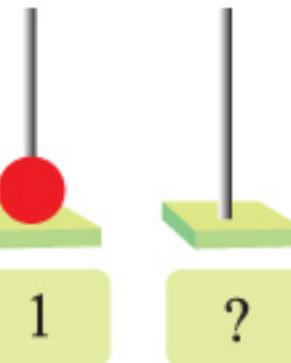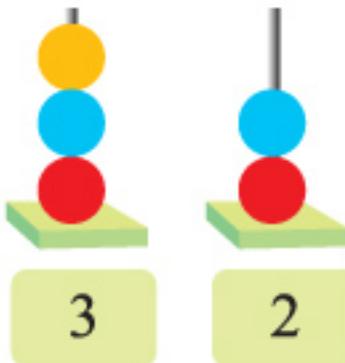
5. Zero (0)

Let us count. How many balls are there?

| 3 | 2 | 1 | ? |

What is the number in [?]
How can we call this?

We call this "zero" and write "0".

| **0** | 0 | 0 | | |

Zero

How many balls in each?

6. Concept of Order

Count numbers from smaller to larger and larger to smaller
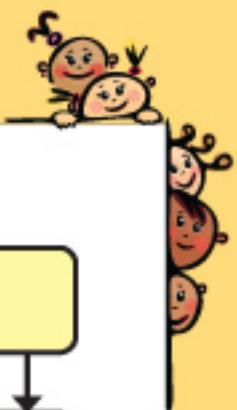
Objects from less to more	Smaller to greater	Objects from more to less	Greater to smaller
	0	●●●●● ●●●●●	10
●	1	●●●● ●●●●●	9
●●	2	●●● ●●●●●	8
●●●	3	●● ●●●●●	7
●●●●	4	● ●●●●●	6
●●●●●	5	●●●●●	5
● ●●●●●	6	●●●●	4
●● ●●●●●	7	●●●	3
●●● ●●●●●	8	●●	2
●●●● ●●●●●	9	●	1
●●●●● ●●●●●	10		0

Numbers from smaller to greater:
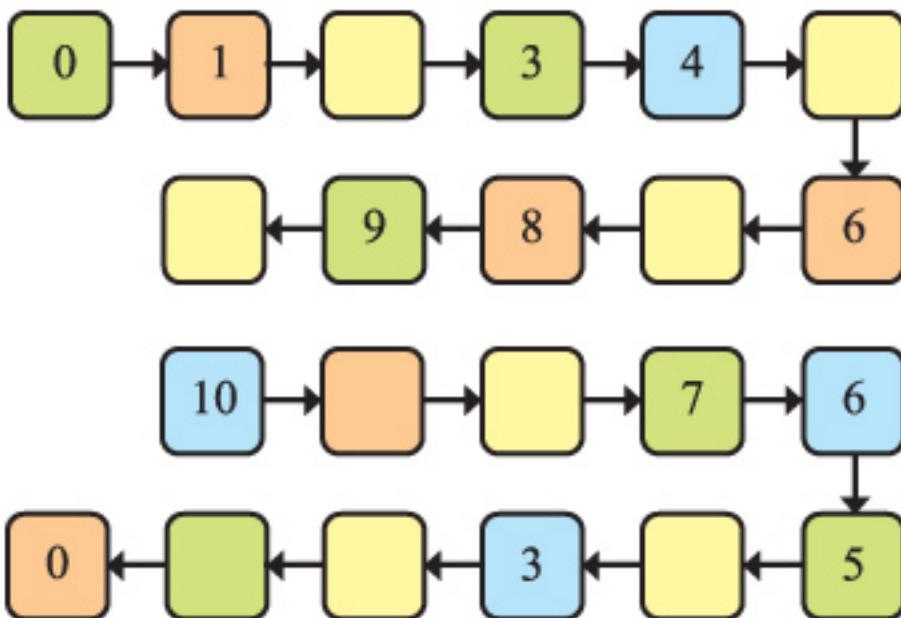
0　1　2　3　4　5　6　7　8　9　10

Numbers from greater to smaller:

10　9　8　7　6　5　4　3　2　1　0

1. Write numbers in the blank boxes.

0 → 1 → ☐ → 3 → 4 → ☐

☐ ← 9 ← 8 ← ☐ ← 6

10 → ☐ → ☐ → 7 → 6

0 ← ☐ ← ☐ ← 3 ← ☐ ← 5

2. What is the number in between ?

| 7 | | 9 |

| 0 | | 2 |

| 6 | | 8 |

3. What is the next number ?

| 4 | |

| 9 | |

| 2 | |

4. What is the previous number ?

| | 8 |

| | 4 |

| | 9 |

Say, how the numbers are arranged.

2, 4, 6, 7, 9	smaller to greater
8, 6, 5, 4, 1	
3, 5, 7, 8, 9	

5. Arrange numbers in order.

	Numbers	Smaller to greater	Greater to smaller
	1, 5, 2, 6, 8	1, 2, 5, 6, 8	8, 6, 5, 2, 1
(1)	4, 2, 6, 9, 8		
(2)	6, 3, 1, 7, 5		
(3)	5, 3, 6, 4, 9		
(4)	7, 1, 4, 2, 3		
(5)	2, 0, 7, 3, 10		
(6)	4, 10, 1, 0, 8		
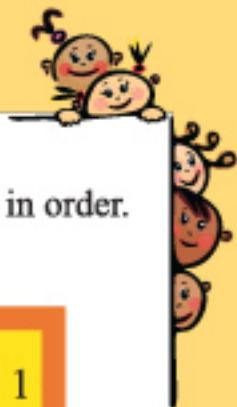
6. Write any 5 numbers out of order from 0 to 10. Ask your friend to arrange in order from smaller to greater or greater to smaller.
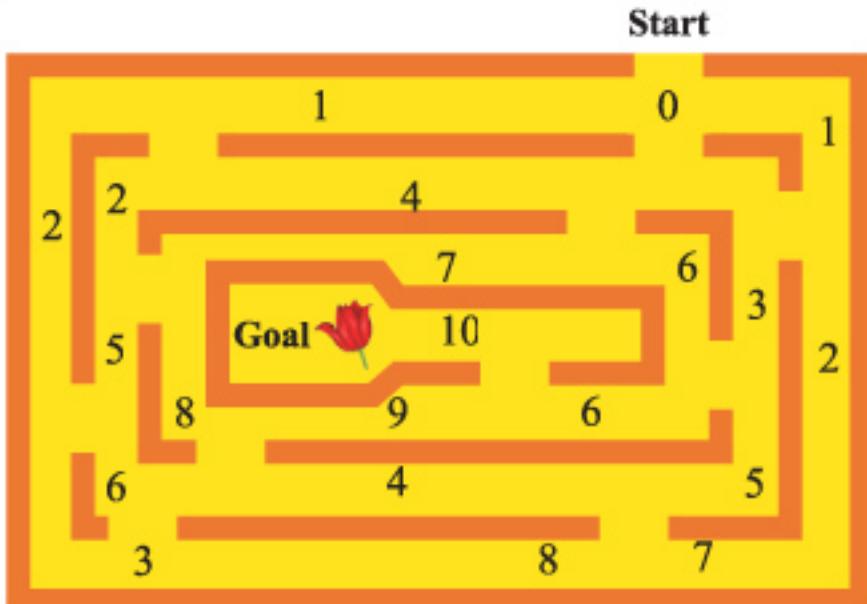
Arrange 2, 10, 3, 5, and 9 from smaller to greater.

Umm…. 2, 3, 5, 9, 10

2020
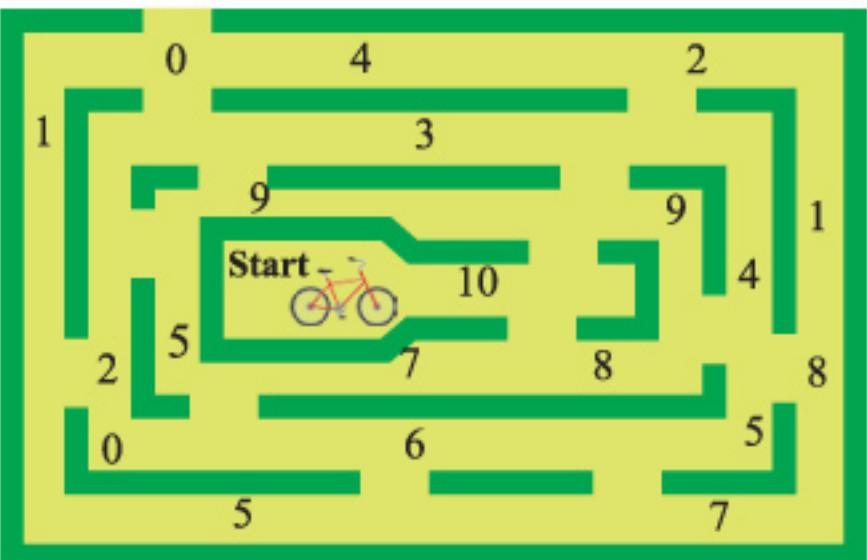
7. Pluck flower by going from 0 and smaller to bigger in order.

8. Look for the way to go out of the loom by going with bicycle from 10 to 0 in order.

7. Concept of Addition (1 to 10)
7.1. Addition

Dipu and Ema have brought flowers to the Shaheed Minar.

How many flowers have they brought altogether?

Dipu brought three flowers.

Ema brought four flowers.
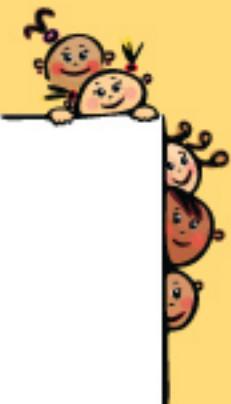
Let us arrange the flowers in a line.

Let us count how many flowers are there in total.

Dipu's flowers   Ema's flowers

If we put 3 and 4 together, it makes 7. Mathematical we can write:

$$3 + 4 = 7$$

(Three   plus   four   equals   seven)

If we put together, how many will there be?

and   together

3   +   2   =

and   together

$\square$ + $\square$ =

7.2. Addition

Five children are playing in a park.
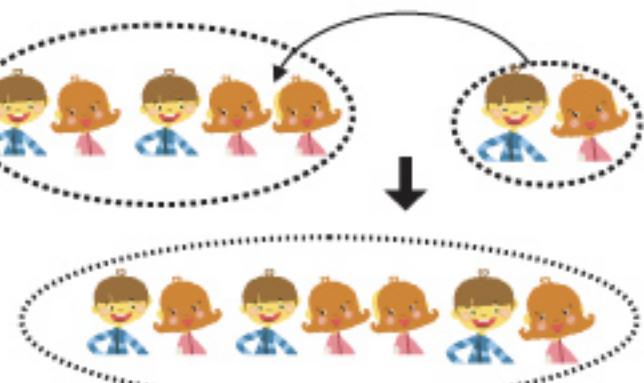
Later two more children came. How many children are in the park now?
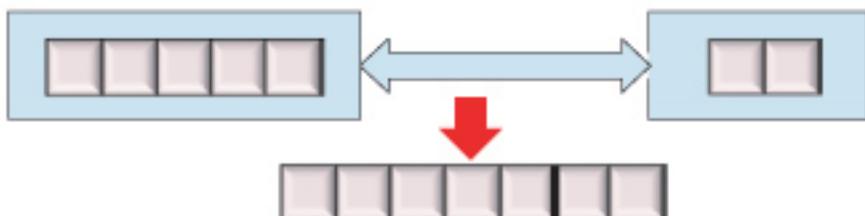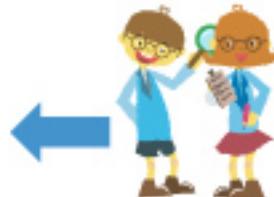
There were 5 children at the beginning.

Two children joined.

There were 5 children at the beginning.

Two children joined later.

Adding 2 to 5 makes 7.

$$5 \quad + \quad 2 \quad = \quad 7$$
(Five   plus   two   equals   seven)

If we put together, how many will there be?

5   +   3   =

+   =

1. Write in number and add.

(1) 🍅🍅🍅 and 🍅🍅 together

(2) 🍌 and 🍌 together

(3)

Add 🍆🍆🍆🍆🍆 to 🍆🍆

(4)

Add 🍒🍒🍒🍒 to 🍒🍒🍒🍒🍒🍒

2. Add :

(1)	$2 + 1 =$	(2)	$3 + 2 =$
(3)	$2 + 2 =$	(4)	$5 + 1 =$
(5)	$6 + 3 =$	(6)	$2 + 5 =$
(7)	$1 + 7 =$	(8)	$8 + 2 =$
(9)	$9 + 1 =$	(10)	$3 + 7 =$

7.3. Addition of zero

How many balls will there be when we put together?

$3 + \boxed{} = \boxed{}$

$3 + \boxed{} = \boxed{}$

$3 + \boxed{} = \boxed{}$

How many oranges do Reza and Meena have altogether?
Write in number.

$\boxed{} + \boxed{} = \boxed{}$

Add :

(1) $4 + 0 =$ (2) $8 + 0 =$ (3) $10 + 0 =$

(4) $6 + 0 =$ (5) $0 + 5 =$ (6) $0 + 7 =$

(7) $0 + 3 =$ (8) $0 + 9 =$ (9) $0 + 0 =$

7.4. A Variety of Additions

Sum of which numbers will be 7 ?

What number comes in the blank box?

$$1 + \boxed{6} = 7 \qquad 4 + \boxed{} = 7$$

$$0 + \boxed{} = 7 \qquad 5 + \boxed{} = 7$$

Find other additions whose answer is 7.

$$\boxed{} + \boxed{} = 7 \qquad \boxed{} + \boxed{} = 7$$

$$\boxed{} + \boxed{} = 7 \qquad \boxed{} + \boxed{} = 7$$

Let's observe

I found
$$1 + 6 = 7$$
$$6 + 1 = 7$$

Same numbers are used in these additions what are about other additions ?

In addition of two numbers, the answer remains the same if the numbers are interchanged .

1. (Q) $\boxed{}$ Find the hidden number in the blank box.

(1) The answer of $6 + 3$ is the same with the answer of $3 + \boxed{}$

(2) The answer of $2 + 8$ is the same with the answer of $\boxed{} + 2.$

Challenge!

2 boys were playing in a field. Then 1 boy came in, and later 4 more boys joined with them. How many boys are playing in the field, now?

How do you calculate it?

$$2 + 1 + 4 = \boxed{}$$

☐☐ ☐ ☐☐☐☐

Add numbers from left to right.

$$2 + 1 + 4 = \boxed{}$$

☐

☐

2. Add :

(1) $3 + 2 + 1 =$ (2) $4 + 2 + 4 =$ (3) $1 + 1 + 1 =$

(4) $2 + 2 + 2 =$ (5) $3 + 3 + 3 =$ (6) $1 + 2 + 3 =$

(7) $2 + 5 + 3 =$ (8) $1 + 0 + 8 =$ (9) $0 + 7 + 0 =$

(10) $1 + 1 + 1 + 1 =$ (11) $2 + 2 + 2 + 2 =$ (12) $1 + 2 + 3 + 4 =$

3. Raju is reading a book. The day before yesterday he read 3 pages, yesterday he read 2 pages, and today he read 4 pages. How many pages did he read in total?

4. Mitu had 1 biscuit. Her father gave her 7 more biscuits, and her mother gave her 2 more biscuits. How many biscuits does she have now?

Find the hidden numbers.

$$3 \ + \ \bigcirc \ = \ 5$$

A number is hidden in the cloud!

There are 5 circles to colour. We paint 3 from left. How many circles can we colour more?

$$3 \ + \ ?$$

5

5. Find the hidden number in the blank box.

(1) $1 \ + \ \boxed{} \ = \ 4$

(2) $\boxed{} \ + \ 2 \ = \ 5$

(3) $4 \ + \ \boxed{} \ = \ 6$

(4) $\boxed{} \ + \ 3 \ = \ 8$
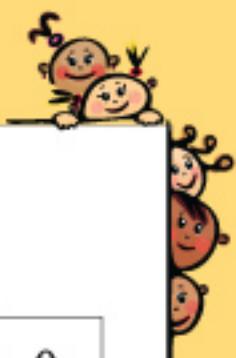
(5) $3 \ + \ \boxed{} \ = \ 10$

(6) $\boxed{} \ + \ 4 \ = \ 10$

7.5. Do ourselves

1. Add and match with it's answer.

3 + 2	7	2 + 7	0
5 + 4	5	0 + 10	5
1 + 9	8	2 + 2	4
6 + 0	9	1 + 4	9
4 + 3	10	4 + 4	10
0 + 8	6	0 + 0	8

2. Match two calculations that have the same answer.

1 + 8	6 + 2	3 + 4	2 + 3	5 + 1
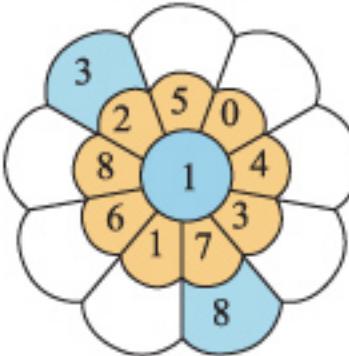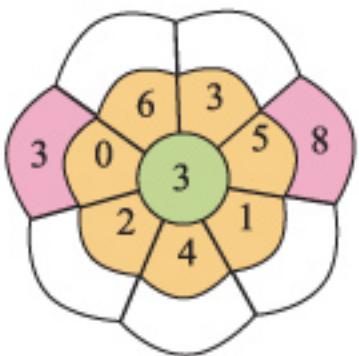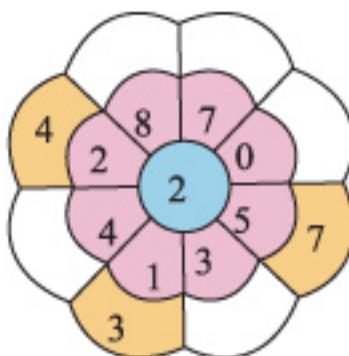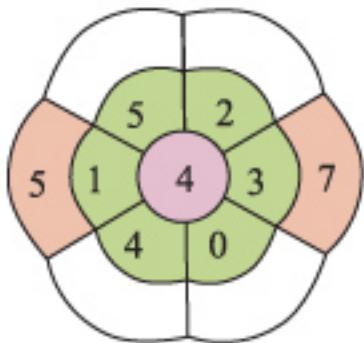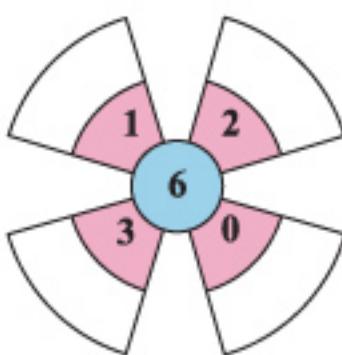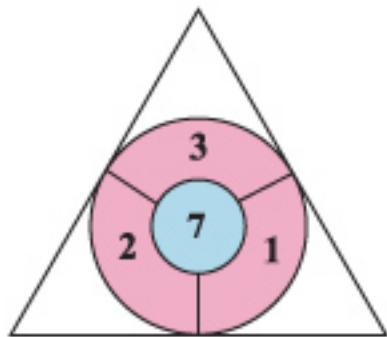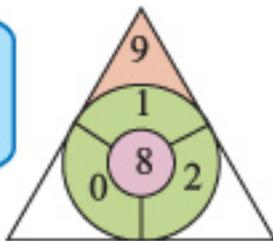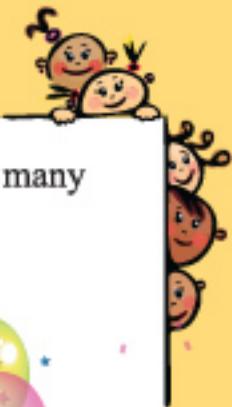
3 + 2	2 + 6	8 + 1	1 + 5	4 + 3

3. Add and fill in the blanks.

8 + 1 = 9

4. Rumi has 4 balloons. She is given 2 more balloons. How many balloons does she have now?

$$4 \qquad + \qquad 2 \qquad = \qquad 6$$

5. Sumon coloured 3 flowers red 5 flowers yellow. How many flowers in all did Sumon colour?

6. What is the sum of the numbers in the two cards? **4** **3**

7. 4 children were in the garden. 5 more children joined with them. How many children are there in the garden now?

8. There were 3 bananas with Reza. His father gave him 7 more bananas. How many bananas does he have now?

9. Let's make a story for the mathematical sentence 2 + 3.

My story is –
"I had 2 books. My father bought me 3 more books. How many books do I have?"
Now your turn, make your own story.

Let us find 10

Find and circle two or three numbers whose sum is 10. How many 10s can you find?

I found
$3 + 7 = 10$

I also found
$6 + 4 = 10$

4	5	1	4	7	2	8	3	8	2
3	2	9	6	8	4	5	6	7	5
7	6	7	5	1	6	9	1	3	5
6	5	3	8	3	7	5	4	8	1
3	7	4	9	6	2	8	8	3	5
9	2	6	3	4	2	5	6	4	7
1	4	5	5	3	1	4	3	8	2
2	9	3	9	1	4	7	1	8	7
3	7	9	7	5	3	5	8	1	9
7	4	6	8	2	3	7	1	4	2
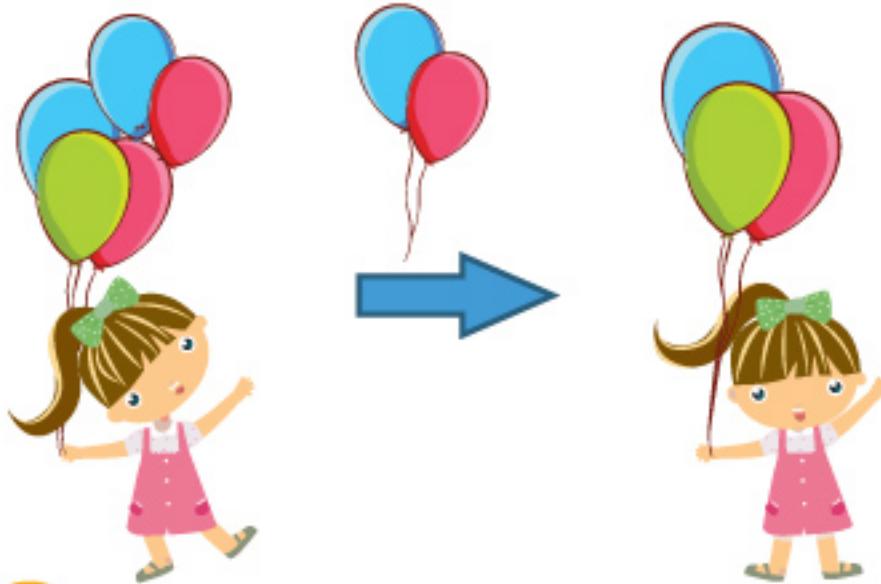
8. Concept of Subtraction (1 to 10)

8.1. Subtraction

There were five balloons. Two balloons were flown away.
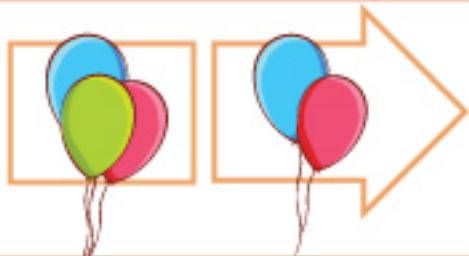
How many balloons are left?

Seems that the calculation is not same as addition.

Yes, the number will decrease, when balloons fly away.

If it takes 2 away from 5, then 3 remains .
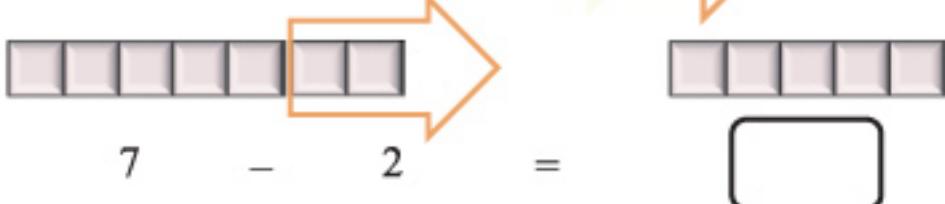
$$5 - 2 = 3$$
(Five minus two equals three)

There are 7 balls. Now we see, what does happen when we take away some balls.

If we take 2 balls away, how many balls will be left?

$$7 - 2 = \boxed{}$$
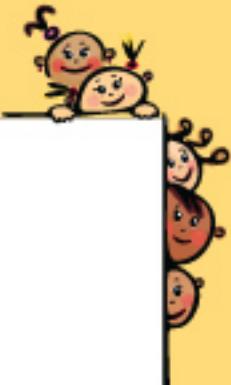
If we take 6 balls away, how many balls will be left?

$$\boxed{} - \boxed{} = \boxed{}$$

1. How many ways the ball can be away?

2020
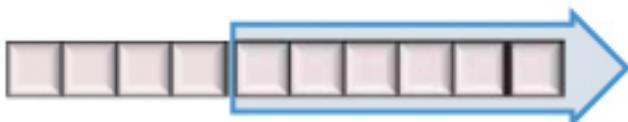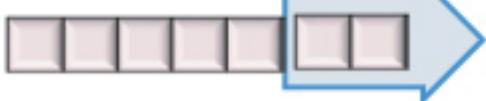
2. Look at the picture and write in number.

$5 - 3 = 2$

....

....

3. Subtract :

(1) $3 - 1 =$ (2) $4 - 2 =$ (3) $5 - 1 =$

(4) $6 - 5 =$ (5) $3 - 2 =$ (6) $8 - 4 =$

(7) $7 - 3 =$ (8) $9 - 7 =$ (9) $10 - 9 =$

(10) $4 - 3 =$ (11) $10 - 2 =$ (12) $8 - 2 =$

(13) $5 - 2 =$ (14) $6 - 3 =$ (15) $10 - 5 =$

8.2. Comparison of Numbers

Are there more children or more hats in the picture?

Why don't you count the number of children and the number of hats?

I Think, is there any easy way to compare?

Arrange the children and hats in a line and connect one by one. How many more children than hats?
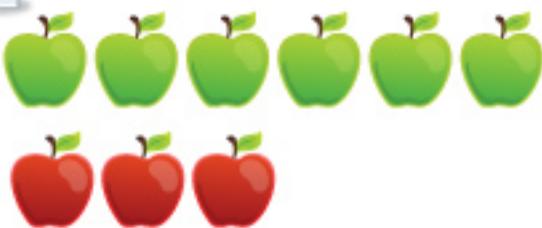
More

In number, we write:

7 – 5 = 2

1. How many more green apples are there than red apples?

In number we write :

6 – 3 = ☐
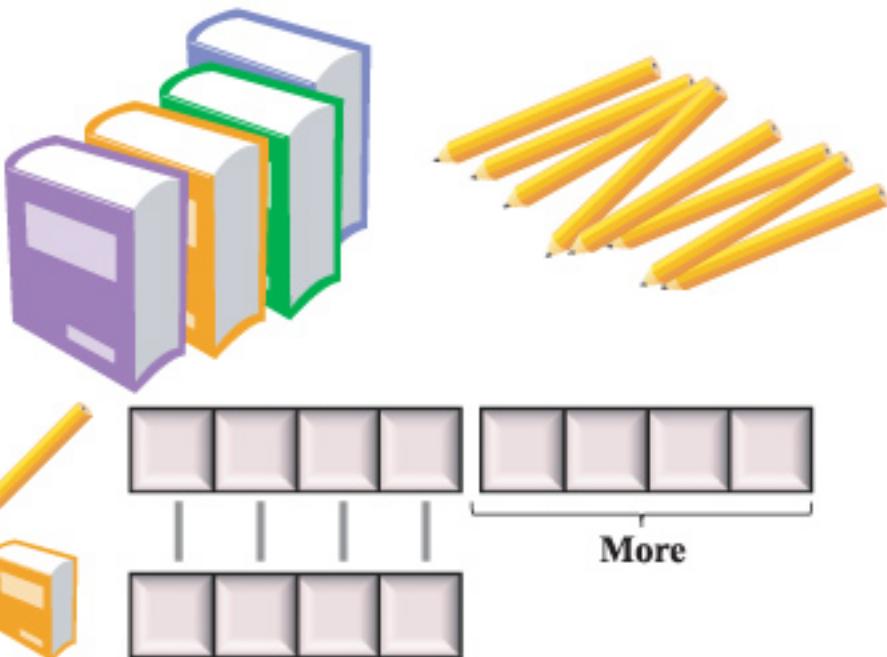
2. How many more plates than cakes?

Write in number: . . . .

? What is the difference between the number of pencils and books?

Write in number: . . . .

Answer: There are ☐ more Pencils than books.
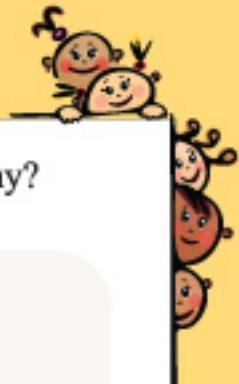
3. What is the difference between the number of boys and the number of girls?
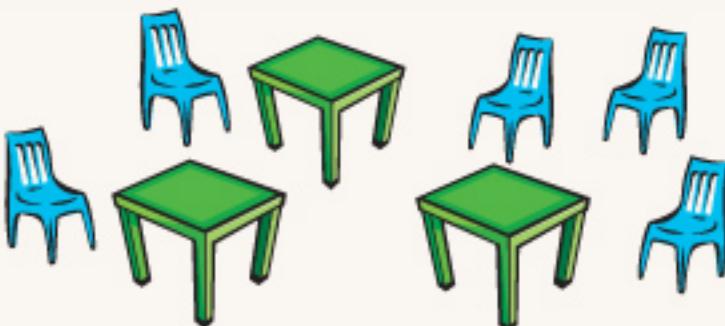
There are ☐ more girls than boys.

4. Which is more within tables and chairs? How many?

5. Tapu had 9 balloons. He gave Khisa 5 balloons. Now what is the difference between the number of balloons that Khisa and Tapu have?

Tapu had 9 balloons.

He gave 5 balloons to Khisa. How many balloons do Tapu has? Find the difference between Tapu&Khisa's Balloons.

6. Let's make a story for the mathematical sentence 6 – 2.

I made this story. I have 6 pencils and Meena has 2 pencils. What is the difference between the number of pencils we have? Now tell your story…..

8.3. Subtraction of Zero (0)

There are 4 apples on a plate. Reza and Meena will eat these apples.

If they eat 4 apples, then how many will be left?

If they eat 3 apples, then ......

$$4 - 3 = 1$$

If they eat 4 apples, then ......

$$4 - 4 = \boxed{}$$

How many apples will be left if they eat 0 apple ?

If they eat 1 apple, then ......

$$4 - 1 = 3$$

If they eat 0 apple, then ......

$$4 - 0 = \boxed{}$$

Subtract.
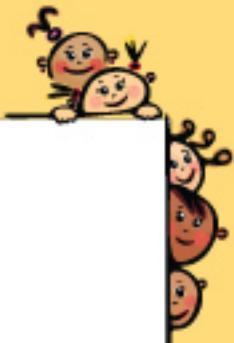
| $5 - 5$ | $9 - 9$ | $6 - 0$ | $8 - 0$ | $0 - 0$ |

8.4. A Variety of Subtractions

Challenge!
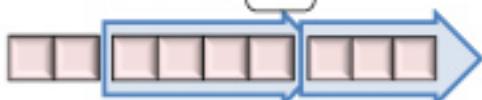
There were 9 birds on a tree. 3 of them flew away, again 4 more birds went somewhere. How many birds were left on the tree now?

How will you calculate it?

$9 - 3 = \boxed{}$ $6 - 4 = \boxed{}$

Subtract numbers from left to right.

$9 - 3 - 4 = \boxed{}$

$\boxed{}$

$\boxed{}$

1. Ali had 10 papers. He gave 4 of them to his sister and 5 of them to his brother. How many papers were left with his?
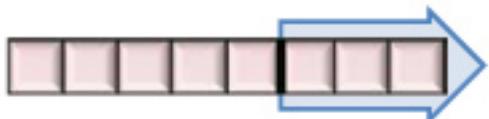
2. Santi had 10 biscuits. She ate 2 of them and gave 4 of them to her sister. How many biscuits were left with her?

Write numbers in the blank box.

$$8 - \boxed{} = 5$$

$$\boxed{} - 2 = 4$$
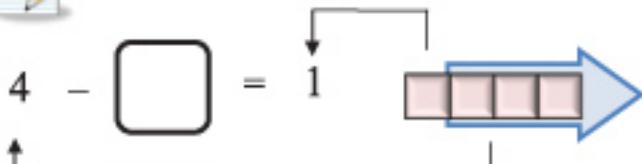
3. Find the hidden number in the box .

(1) $\quad 4 - \boxed{} = 1$
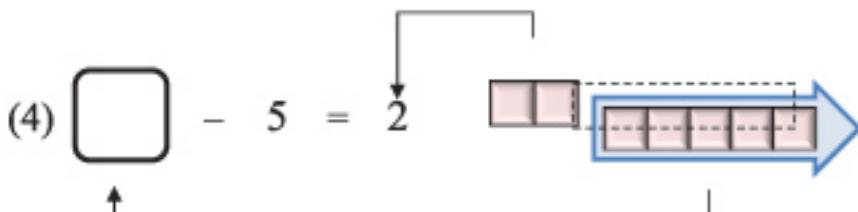
(2) $\quad 6 - \boxed{} = 4$

(3) $\quad 10 - \boxed{} = 3$

(4) $\quad \boxed{} - 5 = 2$
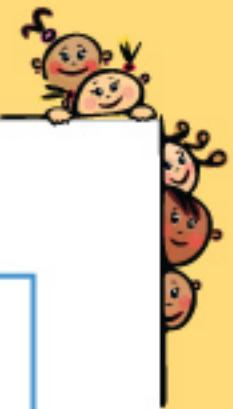
(5) $\quad \boxed{} - 4 = 4$
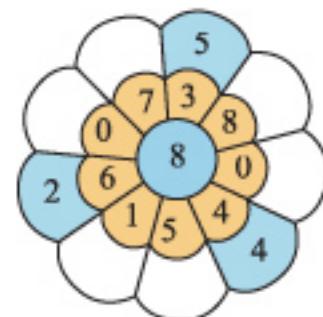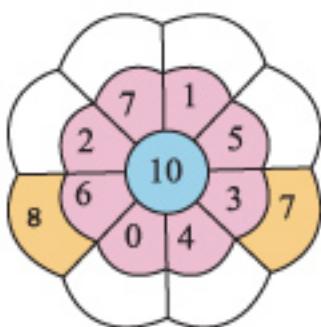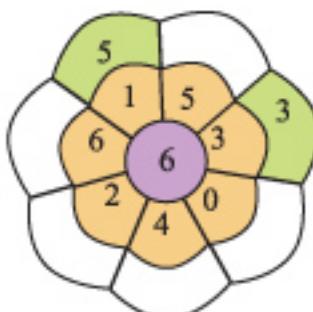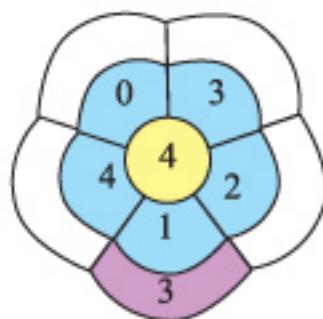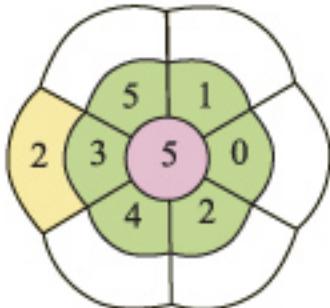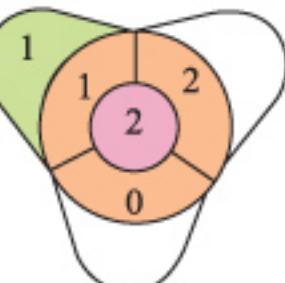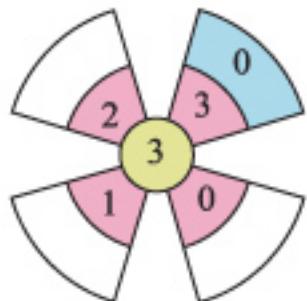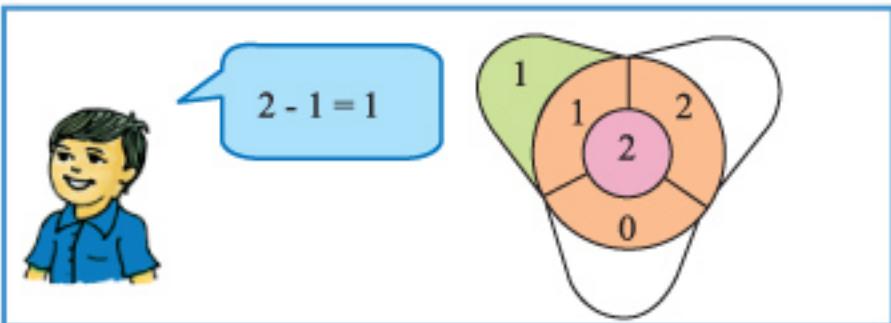
(6) $\quad \boxed{} - 2 = 8$
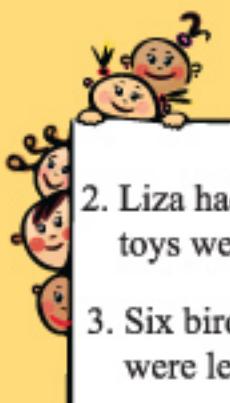
8.5. Do ourselves

1. Subtract and fill in the blanks.

2. Liza had 8 toys. She gave her younger sister 3 toys. Then how many toys were left with her.

3. Six birds were sitting on a tree. Two birds flew away. How many birds were left on the tree?

4. There are 8 students sitting in a classroom. 3 of them are girls. How many boys are in the classroom?

5. Fill in the blank boxes .

(1) $5 - \boxed{} = 2$

(2) $7 - \boxed{} = 3$

(3) $\boxed{} - 4 = 2$

(4) $\boxed{} - 5 = 4$

6. Let's make a story for $5 - 2$.
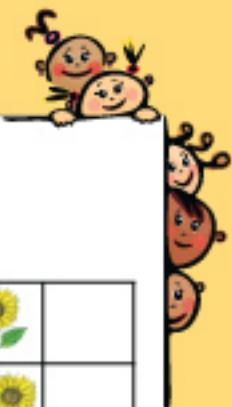
I made a story.
"There were 5 boats in the bank of a river. 2 of them left away the bank. How many boats were in the bank?"
Now tell your story…..
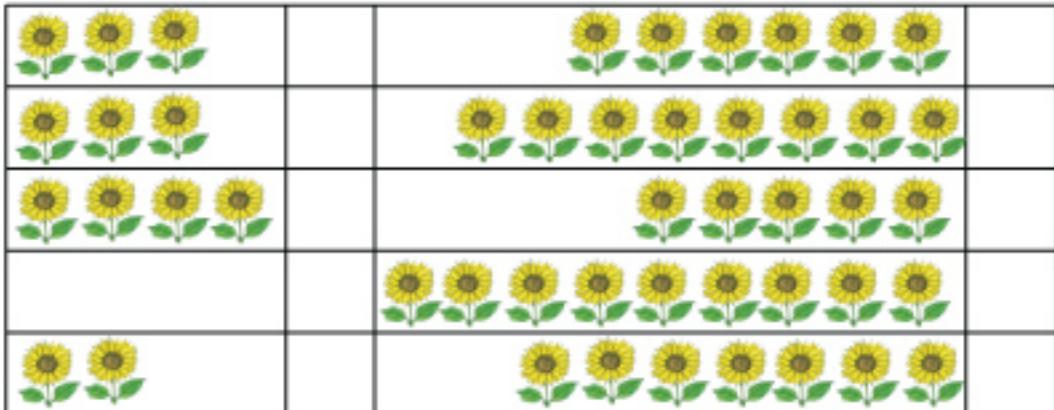
9. Do ourselves

1. Count the pictures and write numbers in the blank boxes.

🌻🌻🌻		🌻🌻🌻🌻🌻🌻	
🌻🌻🌻		🌻🌻🌻🌻🌻🌻🌻	
🌻🌻🌻🌻		🌻🌻🌻🌻🌻	
		🌻🌻🌻🌻🌻🌻🌻	
🌻🌻		🌻🌻🌻🌻🌻🌻	

2. Write the numbers in-between.

3		5		6		8		8		10

3. Write the next number.

2			5			6			9	

4. Write the previous numbers.

	4			7			3			10

5. Arrange the numbers from smaller to greater
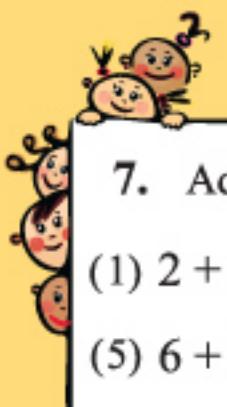
8, 6, 3, 5		1, 4, 9, 2	

6. Arrange the numbers from greater to smaller

2, 6, 4, 7		3, 8, 5, 1	

7. Add :

(1) $2 + 4 =$ (2) $3 + 0 =$ (3) $4 + 1 =$ (4) $0 + 5 =$

(5) $6 + 2 =$ (6) $3 + 7 =$ (7) $5 + 4 =$ (8) $1 + 9 =$

(9) $4 + 4 =$ (10) $5 + 5 =$ (11) $2 + 8 =$ (12) $0 + 0 =$

8. Subtract :

(1) $4 - 1 =$ (2) $3 - 2 =$ (3) $2 - 1 =$ (4) $6 - 3 =$

(5) $7 - 4 =$ (6) $3 - 0 =$ (7) $9 - 7 =$ (8) $8 - 2 =$

(9) $7 - 7 =$ (10) $0 - 0 =$ (11) $10 - 5 =$ (12) $10 - 8 =$

9. Rony has 5 story books. Rumi has 3 story books. How many story books do they have together?

10. Bini had 8 pencils. His father gave him 2 more pencils. How many pencils does Bini have now?

11. What must be added to 6 to make 9? $6 + \boxed{} = 9$

12. 7 flowers blossom in the Moly's china flower plant. She gave 3 flowers to her brother. How many flowers are left in the plant?

13. Thomas catches 5 fishes. Kabita catches 7 fishes. Who catches more fishes and how many ?

14. What must be subtracted from 8 to make 4? $8 - \boxed{} = 4$

10. Addition and Subtraction (0 to 10)

Make additions and subtractions by using the 3 cards.

| 2 | 6 | 8 |

2 + 6 = ☐   6 + ☐ = ☐

8 – 6 = ☐   ☐ – 2 = 6

We can make a variety of additions and subtractions by the same numbers!

1. Make additions and subtractions by using the 3 cards.

| 2 | 3 | 5 |

☐ + 2 = ☐   ☐ + ☐ = ☐
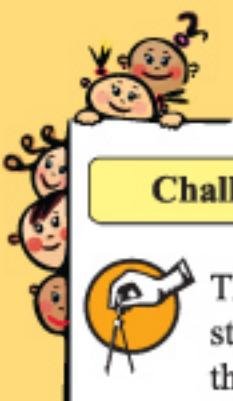
☐ – ☐ = 2   ☐ – ☐ = 3
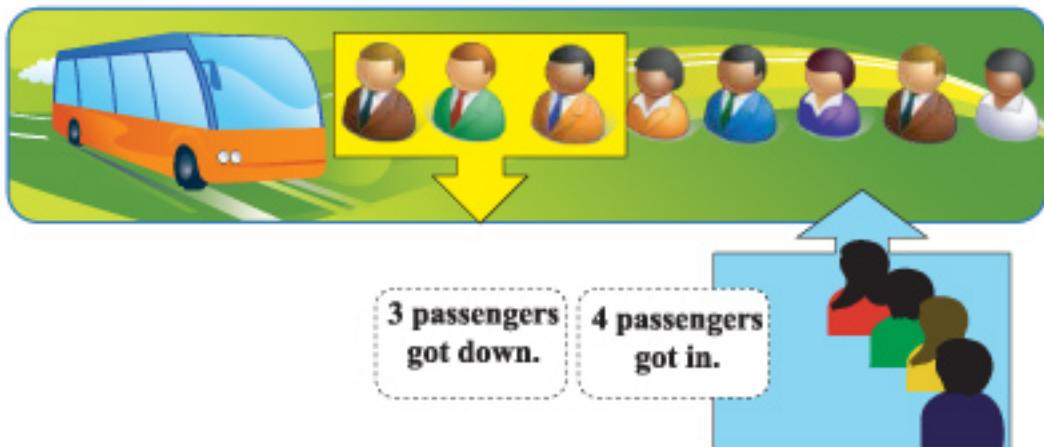
2. Make additions and subtractions by using the 3 cards.

| 3 | 6 | 9 | | 2 | 8 | 10 |

Challenge!

There were 8 passengers in a bus. 3 passengers got down in a stoppage and 4 passengers got in. How many passengers are there in the bus now?

3 passengers got down.

4 passengers got in.

$8 - 3 + 4 = \square$

(1) $\square$

(2) $\square$

We calculate from left to right.

3. Riya had 7 dolls. She gave 5 dolls to her brother, her father bought for her 3 more dolls. How many dolls does she have now?
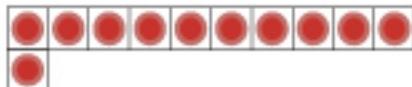
4. Reza had 2 chocolates. His mother gave him 3 more chocolates. After that, he ate 5 of these chocolates. How many chocolates were left?
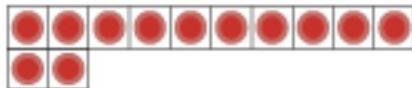
11. Numbers (11 to 20)
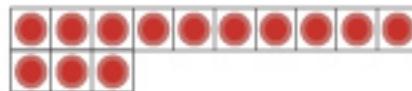
11.1   Numbers: 11 to 20
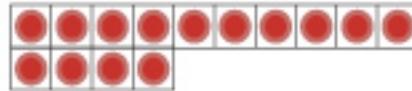
11
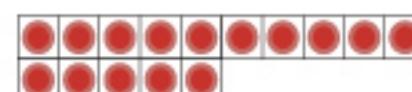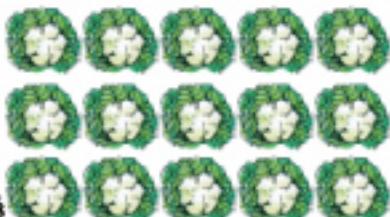
12

13

14

15
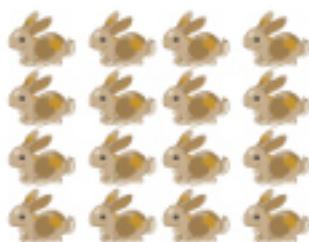
Count different things which are in your class and school.
Count the things which are within 15 in your home?
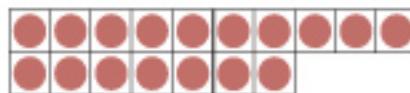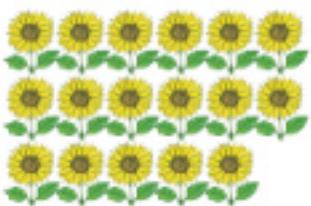
I have 13 books
in my home.

There are 15
girls in my class.

16

17

18

19
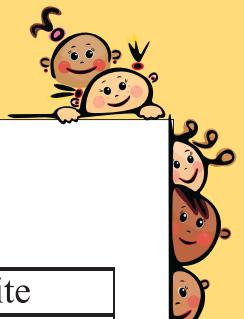
20
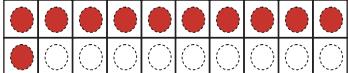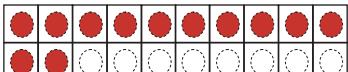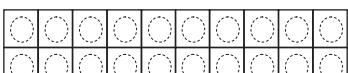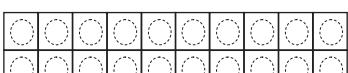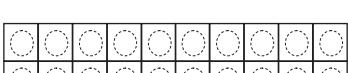
Count different things which are within 20 in your class and school. Count the things which are within 20 in your home?

Count, read, colour and to write.

Count	Colour the circles	Read	Write	
		11	11	11
		12	12	12
		13	13	13
		14	14	14
		15	15	15

Let's play "Number Game" in Appendix 3.
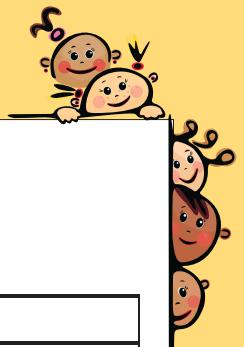
Count, read, colour and to write.

We count	We colour the circles as many as shown on the left.	We read	We write	
🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎	●●●●●●●●●● ●●●●●●○○○○	16	16	16
🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎	●●●●●●●●●● ●●●●●●●○○○	17	17	17
🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎	○○○○○○○○○○ ○○○○○○○○○○	18	18	18
🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎🍎	○○○○○○○○○○ ○○○○○○○○○○	19	19	19
🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎 🍎🍎🍎🍎🍎	○○○○○○○○○○ ○○○○○○○○○○	20	20	20

Let's play "Number Game" in Appendix 2.
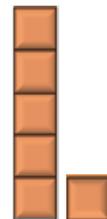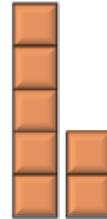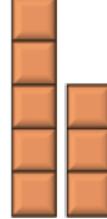
Write in words.

Count	Read	Word	Write in word	
▪	1	One	One	One
▪	2	Two	Two	Two
▪	3	Three	Three	Three
▪	4	Four	Four	Four
▪	5	Five	Five	Five

Write in words.
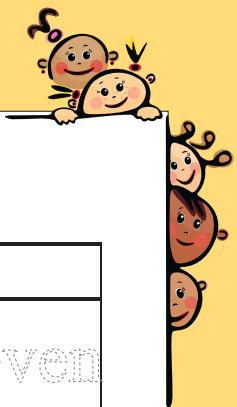
Count	Read		Write in word	
	6	Six	Six	Six
	7	Seven	Seven	Seven
	8	Eight	Eight	Eight
	9	Nine	Nine	Nine
	10	Ten	Ten	Ten
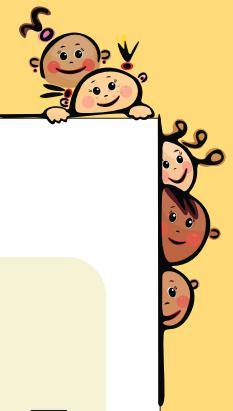
Write in words.

Count	Read	Write in word	
	11 Eleven	Eleven	Eleven
	12 Twelve	Twelve	Twelve
	13 Thirteen	Thirteen	Thirteen
	14 Fourteen	Fourten	Fourteen
	15 Fifteen	Fifteen	Fifteen
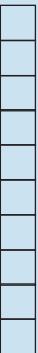
Write in words.

Count	Read		Write in word	
	16	Sixteen	Sixteen	Sixteen
	17	Seventeen	Seventeen	Seventeen
	18	Eighteen	Eighteen	Eighteen
	19	Nineteen	Nineteen	Nineteen
	20	Twenty	Twenty	Twenty

How many blocks are there?

10	2

12

Twelve
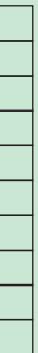
10	
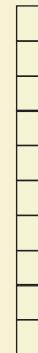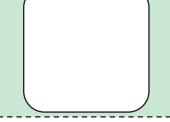
15
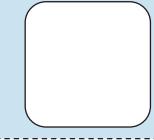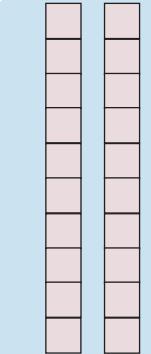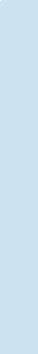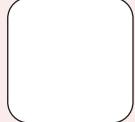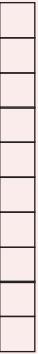
Fifteen

10	
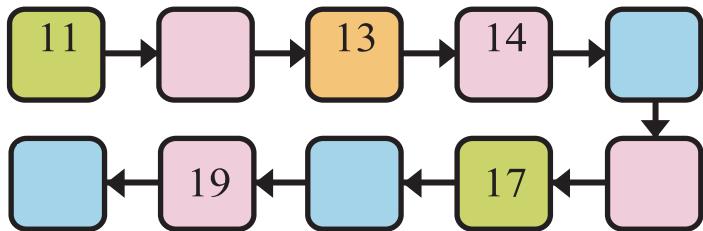
10	
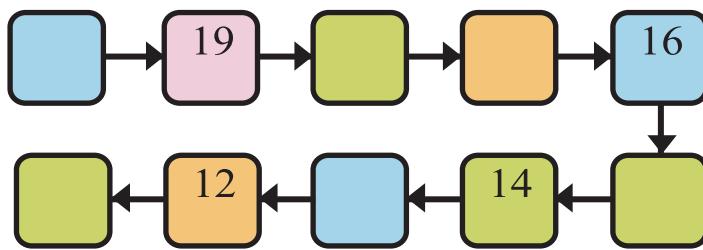
Fill in the blank boxes?

Greater from smaller

11 → ☐ → 13 → 14 → ☐

☐ ← 19 ← ☐ ← 17 ← ☐

Smaller from Greater

☐ → 19 → ☐ → ☐ → 16

☐ ← 12 ← ☐ ← 14 ← ☐

Write the number in between .

| 17 | | 19 |

| 10 | | 12 |

| 16 | | 18 |

| 12 | | 14 |

Write the next number.

| 14 | |

| 19 | |

| 17 | |

| 12 | |

| 10 | |

Write the previous number.

| | 18 |

| | 13 |

| | 15 |

| | 12 |

| | 20 |

1. Do ourselves

Circle the larger number.

15 (18)	14 11	16 19
13 12	20 17	11 20

2. Write same mathematical sentence as above and ask your classmate:

3. Arrange numbers in order.

	Numbers	Smaller to greater	Greater to smaller
	11, 18, 19, 14, 15	11, 14, 15, 18, 19	19, 18, 15, 14, 11
(1)	16, 20, 13, 12, 17		
(2)	18, 13, 15, 20, 11		
(3)	12, 9, 13, 15, 4		
(4)	14, 8, 0, 20, 17		

4. Find the number from number line.
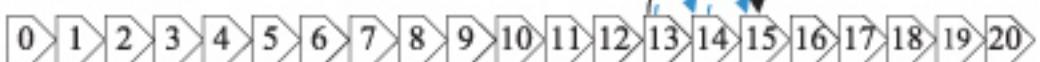
What is the number that is 2 more than 13?

It's 15.

Number line

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

(1) What is the number that is 3 more than 16?

(2) What is the number that is 4 less than 12?
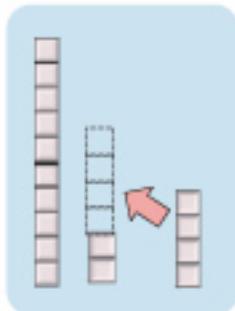
12. Addition

12.1. Addition

Mithu had 12 pencils and her father gave her 4 more pencils. How many pencils does she have?

$$12 + 4 = \boxed{}$$

1. Add :

(1) $12 + 2 =$ (2) $12 + 5 =$ (3) $12 + 7 =$

(4) $11 + 1 =$ (5) $14 + 3 =$ (6) $15 + 1 =$

(7) $6 + 12 =$ (8) $1 + 18 =$ (9) $3 + 14 =$

(10) $10 + 4 =$ (11) $10 + 8 =$ (12) $5 + 10 =$

2. On the birth day of Maisha 13 friends and 5 relatives came to their house. How many came to their house on the birthday?

3. Mangoes fall down due to storm in the Apu's house? Apu picked up 6 and her sister picked up 11 mangoes. How many mangoes they picked up altogether ?

4. Rafiq had 10 coloured pencils for drawing pictures. He bought 9 more pencils from a shop. How many coloured pencil does he have?

12.2 Addition

There are 9 pomegranates on the large tree and 4 pomegranates on the small tree.

How many pomegranates are there altogether?

☐ + ☐

I think if it is more than 10.

How many do we add to 9 to make 10?
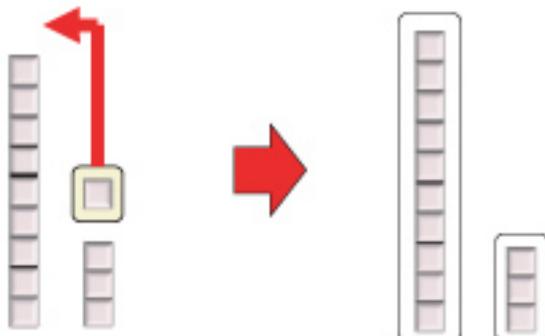
$$9 \quad + \quad 4$$

Make a set of 10 blocks by adding 1 from 4 with 9.

Remain 3 leaving 1 from 4.

$$9 \quad + \quad 4 \quad = \quad \boxed{}$$

How to calculate 9 + 4

[1]   9 needs 1 more to make 10.

[2]   Split 4 into 1 and 3.

[3]   Adding 1 from 4 with 9 and make 10.

[4]   Remain 3 leaving1 from 4.

[5]   10 and 3 makes13.

$$9 + 4$$

$$1 \qquad$$

$$10 \qquad 3$$

How do you calculate 8 + 3?
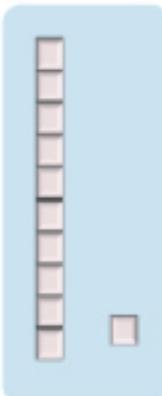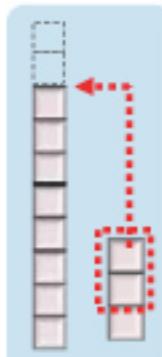
8 needs ____ to make 10.
Split 3 into 2 and ____ .
Add ____ taking from 3 and make 10.
Remain 1 leaving ____ from 3.
10 and ____ make ____ .

1. Add :

(1) 9 + 5 =   (2) 9 + 7 =   (3) 9 + 8 =

(4) 8 + 4 =   (5) 8 + 5 =   (6) 8 + 6 =

(7) 6 + 5 =   (8) 7 + 8 =   (9) 5 + 7 =

(10) 7 + 7 =   (11) 6 + 6 =   (12) 8 + 8 =

(13) 3 + 8 =   (14) 2 + 9 =   (15) 9 + 9 =

2. Two teams are playing Ha-Du-Du with 6 players in each. How many players are playing?

3. There are 8 bananas in a bunch and 9 bananas in another bunch. What is the total number of bananas?
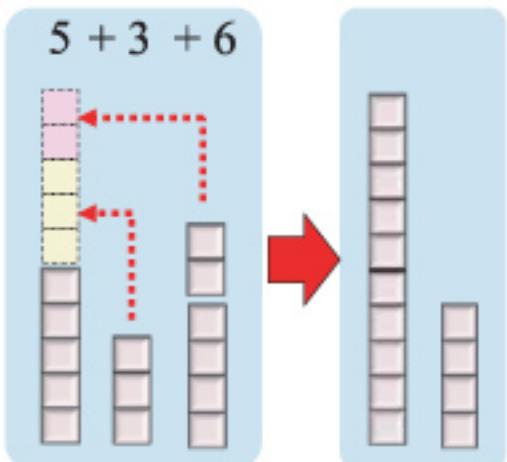
4. Make a story for 6 + 7.

2020

Challenge!

Ranu has three rose plants in her garden. There blooms 5 in one, 3 in another and 6 in another one. How many flowers bloom in the garden?

$$5 + 3 + 6 = \boxed{}$$

$$5 + 3 + 6$$

Rama eats 7 lychees, Shoma eats 8 and Ripon eats 4. How many lychees do they eat?

$$\boxed{} + \boxed{} + \boxed{} = \boxed{}$$

5. Add :

(1) $11 + 2 + 3 =$ (2) $13 + 1 + 5 =$ (3) $2 + 6 + 4 =$

(4) $4 + 4 + 4 =$ (5) $5 + 3 + 5 =$ (6) $3 + 8 + 1 =$

(7) $3 + 9 + 5 =$ (8) $6 + 6 + 6 =$ (9) $5 + 5 + 5 =$

13. Subtraction

13.1 Subtraction
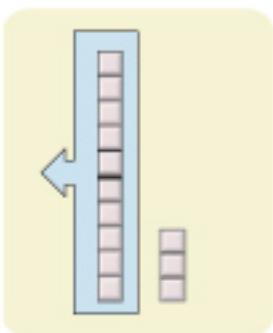
There were 14 balls in the Almirah of a school. Students are playing in the field with 4 balls taking from the Almirah. How many balls were left in the Almirah?

$$14 - 4 = \boxed{}$$

There were 13 bananas, but Raju and Rajia ate 10 of them. How many bananas were left?

$$13 - 10 = \boxed{}$$

1. Subtract:

(1) $12 - 2 =$ (2) $18 - 8 =$ (3) $15 - 5 =$

(4) $14 - 10 =$ (5) $16 - 10 =$ (6) $19 - 10 =$

(7) $14 - 3 =$ (8) $18 - 4 =$ (9) $19 - 7 =$

2. There were 17 students practising subtraction in the classroom. 5 of them did not calculate accurately. How many students solved it accurately?
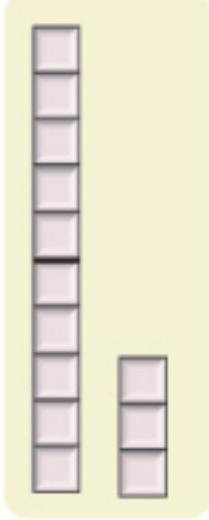
13.2 Subtraction

There were 13 toy cars in the shop. Out of them 9 were sold.

How many toy cars were left in the shop?

☐ − ☐

One by one take 9 from 13.

I think we can use the group of 10 to calculate more easily.
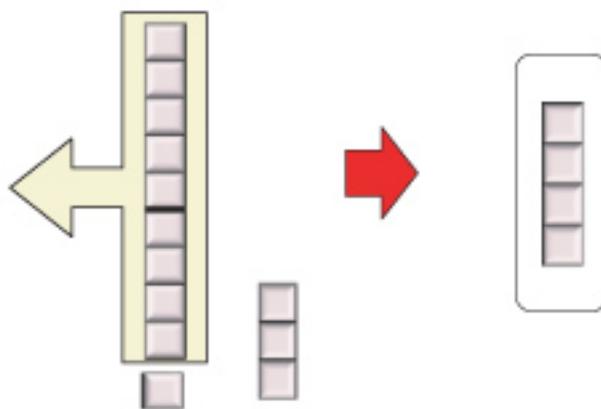
$13 - 9$

We can take 9 from the group of 10, can we?

If we take 9 from 10, how many will be left?

$$13 \ - \ 9 \ = \ \boxed{}$$

How to calculate 13 – 9?

[1]   Split 13 into 10 and 3.

[2]   9 can be subtracted from 10.

[3]   Subtract 9 from 10 and get 1.

[4]   1 and 3 make 4.

$13 - 9$

10

3   1
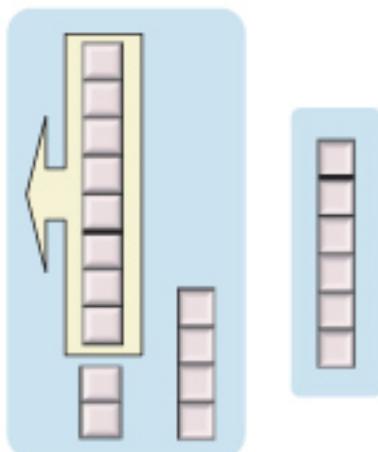
How do you subtract 8 from 14?

We can subtract 8 from 10.

Split 14 into ____ and ____ .

Subtract 8 from ____ and get ____.

2 and ____ make

1. Substract :

(1) $14 - 9 =$ (2) $14 - 6 =$ (3) $14 - 5 =$

(4) $11 - 8 =$ (5) $11 - 4 =$ (6) $11 - 2 =$

(7) $12 - 7 =$ (8) $13 - 9 =$ (9) $15 - 6 =$

(10) $18 - 9 =$ (11) $12 - 6 =$ (12) $16 - 8 =$

(13) $12 - 3 =$ (14) $13 - 5 =$ (15) $17 - 8 =$

2. Karim had 14 spinning tops, from which he gave Bithi 6 spinning tops. How many spinning tops were left with Karim?
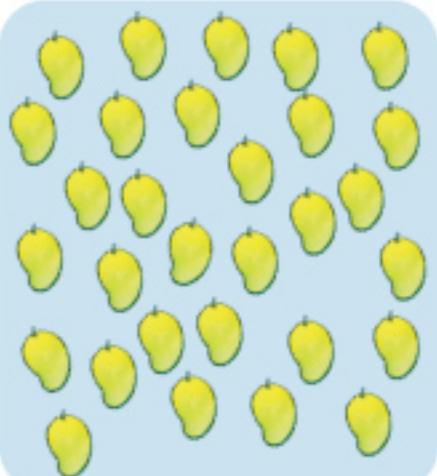
3. Esha's mother gave Esha 4 guavas out of 11 guavas. How many guavas were left with her mother?

4. Make a story for the mathematical sentence $13 - 6$.

14. Numbers (21 to 50)

Reza and Meena are counting flowers and mangoes.

Count the number of flowers and mangoes in the picture.
Do you have any good idea to count them easily?
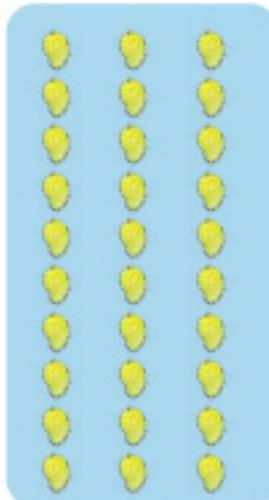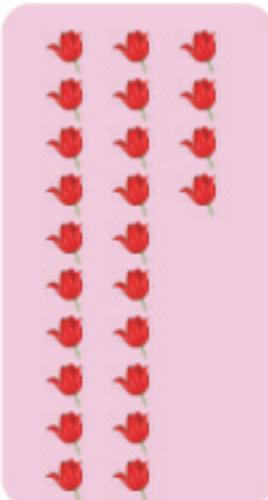
I have forgotten how many I have counted.

How about making a group of 10?

The number of flowers
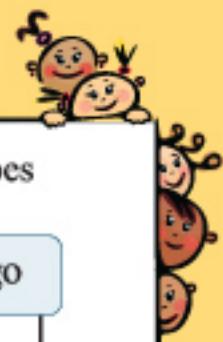
➔ two groups of 10 and 4
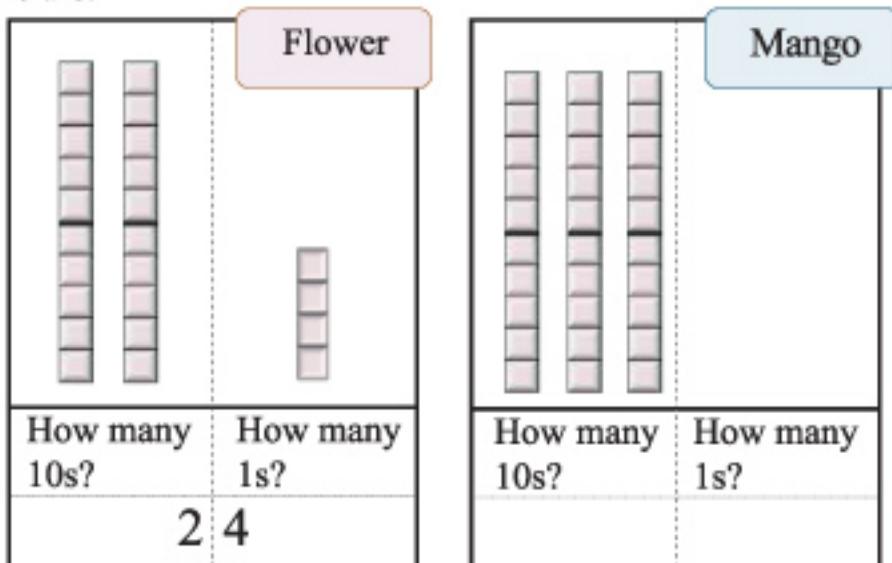
The number of mangoes

➔ Three groups of 10

Write in numbers and words how many flowers and mangoes there are.

Flower	
How many 10s?	How many 1s?
2	4

Mango	
How many 10s?	How many 1s?

| Number	Word	Number	Word	Number	Word
21	Twenty one	31	Thirty one	41	Forty one
22	Twenty two	32	Thirty two	42	Forty two
23	Twenty three	33	Thirty three	43	Forty three
24	Twenty four	34	Thirty four	44	Forty four
25	Twenty five	35	Thirty five	45	Forty five
26	Twenty six	36	Thirty six	46	Forty six
27	Twenty seven	37	Thirty seven	47	Forty seven
28	Twenty eight	38	Thirty eight	48	Forty eight
29	Twenty nine	39	Thirty nine	49	Forty nine
30	Thirty	40	Forty	50	Fifty
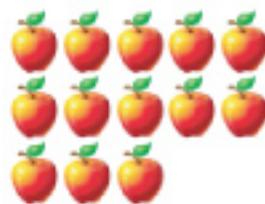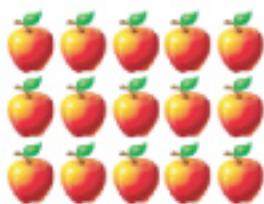
1. Write numbers in blanks.

1			4		6		8		10
11		13				17			20
	22			25	26		28	29	
31		33			36			39	
		44				47			50
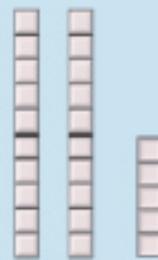
2. How many apples are there?
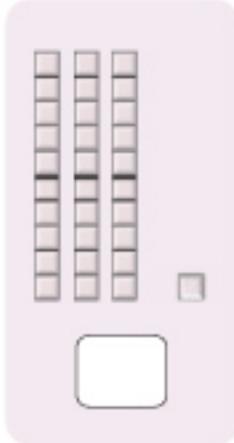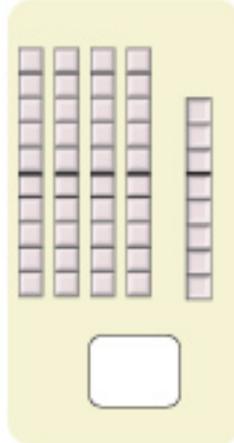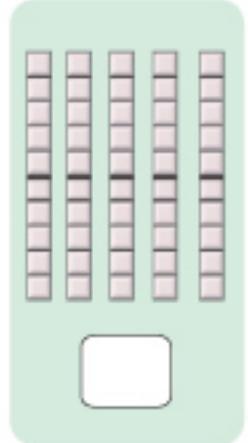
3. Write in numbers.
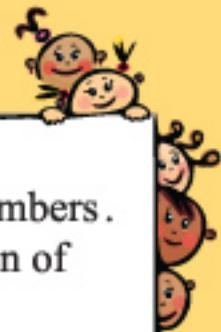
25
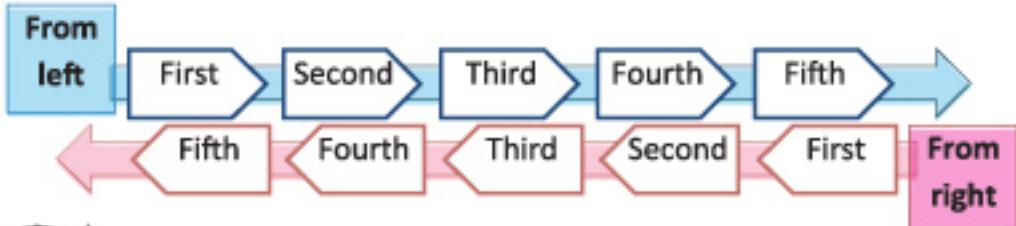
15. Ordinal numbers

We use counting numbers like 1, 2, 3 when we count numbers.
But we use ordinal numbers when we say the positition of
something.

| Counting number	One	Two	Three	Four	Five
Ordinal number	First	Second	Third	Fourth	Fifth

Different animals are standing in a line.

Left   Right

From left → First → Second → Third → Fourth → Fifth →

← Fifth ← Fourth ← Third ← Second ← First   From right

Use ordinal numbers to say the position of the animals.

- Who is the second from left? _____
- Who is the first from right? _____
- Who is the fifth from right? _____
- Who is the fourth from left? _____
- Who is the third from right? _____

Meena, where do you sit in the classroom?

I sit in third from the front and second from left.

1. **You also say, where do you sit in your class ?**

2020

2. Tell the position of each fruit from left and from right.

Left

Right

Five students are standing holding hands .

Left

Right

(1) Circle the four persons from left.
(2) Circle the fourth person from left.

Four persons from left

Fourth person from left

3. Ali is one of the 5 children in the picture below. His friend says, "Ali is sitting in the second seat". Another friend says, "There are 3 children on the right side of Ali". Find and colour Ali in the picture.

Alis Right side

Alis left side
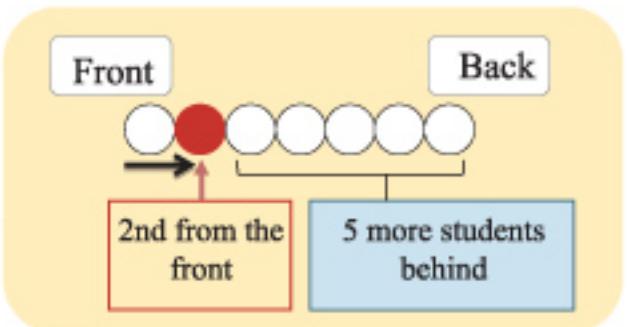
Some children are standing in a line. Sabita is the second from the front and there are 5 more children behind her. How many children are there in the line?

We can solve easily by draw-ing a figure.

Front   Back

2nd from the front

5 more students behind
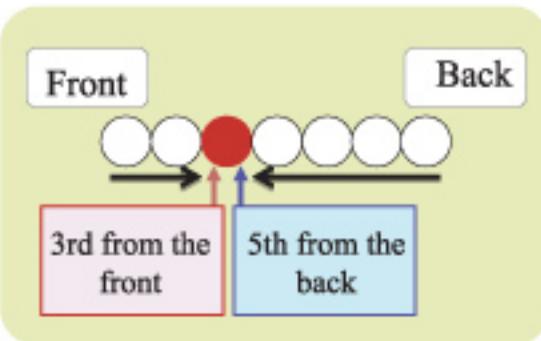
How do you calculate the number of children?

$$\square + \square = \square$$

Some children are standing in a line. Raju is the third from the front and the fifth from the back. How many children are there in the line?

Front   Back

3rd from the front

5th from the back

How do you calculate the number of children?

_____

4. Tamim is the 3rd youngest and the 4th eldest member in his family. How many members does his family have?

2020

16. Bangladeshi Coins and Notes

50 Paisa

1 Taka

2 Taka

5 Taka

1 Taka

2 Taka

5 Taka

10 Taka

20 Taka

50 Taka

If Reza has following notes, how much taka does he have?

Count the notes of each kind and how much taka he has .

$$5 + 5 = 10$$
10 Taka

$$2 + 2 + 2 = 6$$
6 Taka

$$10 + 6 = 16$$

Answer: 16 Taka

1. Meena has money as below. She wants to buy a pen of 18 Taka. Can she buy it?

2. Taslima went to a shop with 13 Taka, she bought a notebook of 8 Taka. How much money was left with her?

Think about how we can exchange Taka with use of 1 Taka, 2 Taka, and 5 Taka notes.

I know 2 Taka is equal to 2 pieces of 1 Taka note.

So how can we change 5 Taka?

Fill up the blanks in the following table

Note		2 Taka notes	1 Taka notes
	➡	__ pieces	__pieces
5 Taka	➡	__ pieces	__pieces
	➡	0 pieces	5 pieces

3. How can we exchange 10 Taka note with use of 1 Taka, 2 Taka and 5 Taka notes?
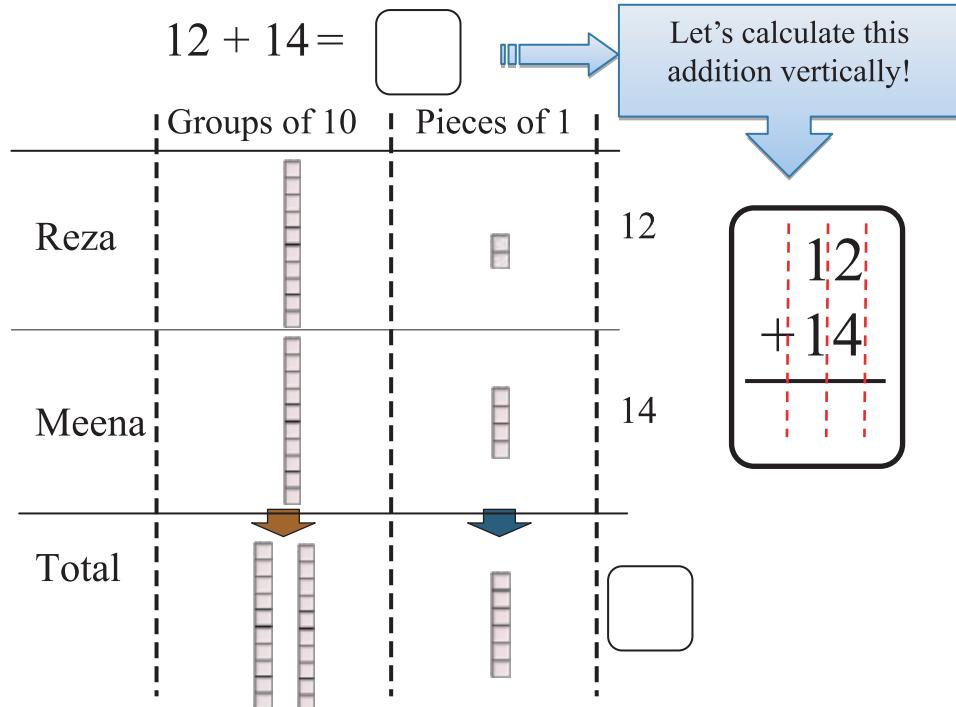
17. Addition and Subtraction (21 to 50)
17.1 Addition
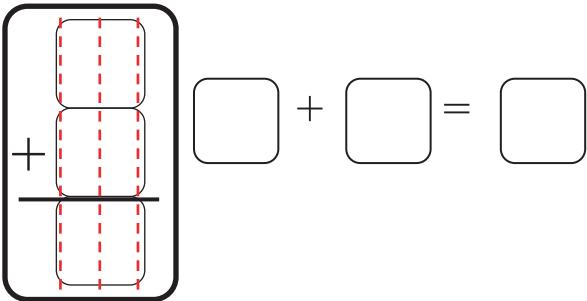
Reza has 12 papers and Meena has 14 papers. How many papers do they have altogether?

How do you calculate ?

$$12 + 14 = \boxed{}$$

Let's calculate this addition vertically!

	Groups of 10	Pieces of 1	
Reza			12
Meena			14
Total			

$$
\begin{array}{r}
12 \\
+\,14 \\
\hline
\end{array}
$$

Mili had 20 Taka and her father gave her 25 Taka to buy pen. Then how much Taka did Mili have?

Let's calculate this addition vertically!

$$+\qquad \boxed{} + \boxed{} = \boxed{}$$

1. Add :

(1)
```
  1 1
+ 1 8
```

(2)
```
  2 2
+ 1 5
```

(3)
```
  3 4
+ 1 4
```

(4)
```
  1 2
+ 2 4
```

(5)
```
  2 5
+ 2 3
```

(6)
```
  3 0
+ 1 4
```

(7)
```
  2 9
+ 2 0
```

(8)
```
  1 0
+ 2 0
```

(9)
```
  4 0
+ 1 0
```

(10)
```
  1 0
+ 4 0
```

(11)
```
  3 2
+   4
```

(12)
```
    7
+ 4 2
```

(13)
```
  2 0
+   8
```

(14)
```
    6
+ 4 0
```

(15)
```
  5 0
+   0
```

(16) 15 + 13 =   (17) 21 + 27 =   (18) 34 + 12 =

(19) 19 + 30 =   (20) 10 + 28 =   (21) 20 + 20 =

(22) 30 + 20 =   (23) 43 + 5 =   (24) 9 + 30 =

2. In Grade 1 of a school, there are 24 boys and 25 girls. How many students are in Grade 1 of the school?
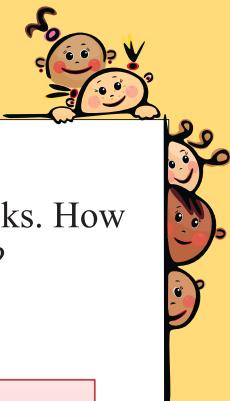
3. Sabita has been reading a book. She read 13 pages yesterday and 10 pages today. How many pages did she read in these two days?

4. Bina spent 20 Taka for guava and 30 Taka for wood apple. How much Taka did she spend?

5. Hadi had 40 blank papers and his father gave him 7 more papers. How many papers does he have now?
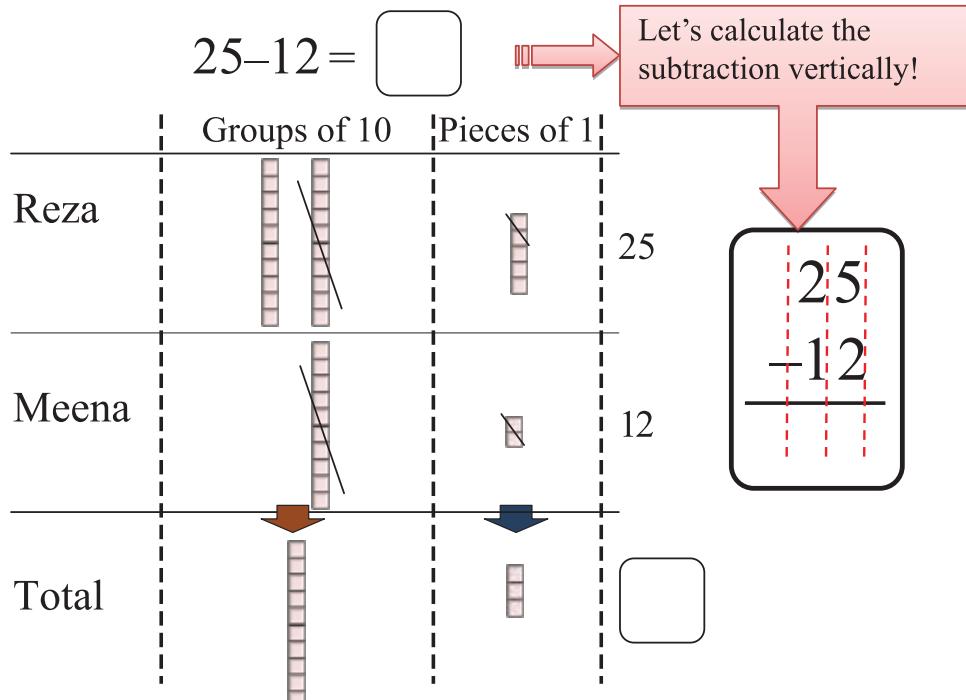
17.2.   Subtraction

Reza has 25 story books and Meena has 12 story books. How many more story books does Reza have than Meena?

How do you calculate ?

$$25-12 = \boxed{}$$

Let's calculate the subtraction vertically!

	Groups of 10	Pieces of 1	
Reza			25
Meena			12
Total			$\boxed{}$

$$\begin{array}{r} 25 \\ -12 \\ \hline \end{array}$$

Akash went to a market with 34 Taka, and bought vegetables. Now he has 14 Taka. How much money did he spend for the vegetables?

$$\begin{array}{r} 34 \\ -14 \\ \hline \end{array}$$
$$34-14 = \boxed{}$$

4 – 4 = 0 and
3 – 1 = 2

Don't forget to write 0!

2020

1. Subtract:

(1)
$$\begin{array}{r} 29 \\ -16 \\ \hline \end{array}$$

(2)
$$\begin{array}{r} 37 \\ -15 \\ \hline \end{array}$$

(3)
$$\begin{array}{r} 48 \\ -13 \\ \hline \end{array}$$

(4)
$$\begin{array}{r} 24 \\ -14 \\ \hline \end{array}$$

(5)
$$\begin{array}{r} 38 \\ -31 \\ \hline \end{array}$$

(6)
$$\begin{array}{r} 49 \\ -43 \\ \hline \end{array}$$

(7)
$$\begin{array}{r} 25 \\ -10 \\ \hline \end{array}$$

(8)
$$\begin{array}{r} 45 \\ -40 \\ \hline \end{array}$$

(9)
$$\begin{array}{r} 30 \\ -20 \\ \hline \end{array}$$

(10)
$$\begin{array}{r} 50 \\ -10 \\ \hline \end{array}$$

(11)
$$\begin{array}{r} 41 \\ -41 \\ \hline \end{array}$$

(12)
$$\begin{array}{r} 20 \\ -20 \\ \hline \end{array}$$

(13)
$$\begin{array}{r} 39 \\ -2 \\ \hline \end{array}$$

(14)
$$\begin{array}{r} 46 \\ -6 \\ \hline \end{array}$$

(15)
$$\begin{array}{r} 32 \\ -0 \\ \hline \end{array}$$

(16) $35 - 13 =$ (17) $47 - 26 =$ (18) $31 - 11 =$

(19) $29 - 22 =$ (20) $30 - 10 =$ (21) $23 - 23 =$

(22) $24 - 3 =$ (23) $38 - 8 =$ (24) $50 - 0 =$

2. Taslima had 37 blank papers. She used 15 of them to draw pictures. How many blank papers were left with her?

**3.** Sakib wants to buy a toy of 48 Taka. But he has only 28 Taka. How much Taka does he need more to buy the toy?
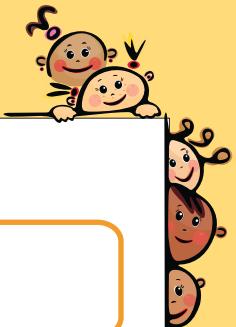
4. There are 22 children in Grade 2 and 34 in Grade 1. Which grade has more and how many more ?

**5.** A story book of 50 pages, Mita already read 20 pages. How many pages has she not yet read?
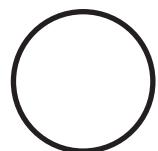
18. Geometric shapes
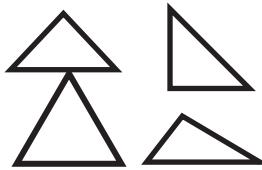
Let's find round shapes, three-corner shapes and four-corner shapes in the picture.
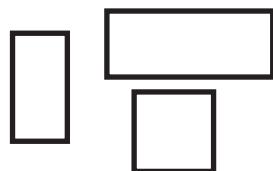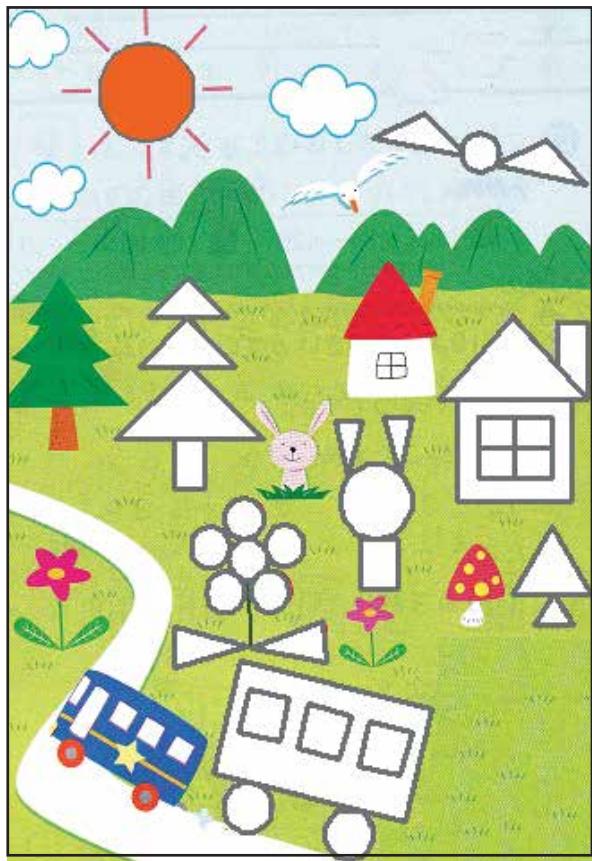
Round shape	Three-corner shapes	Four-corner shapes

I found a round shape in the sun!

I also find some three-corner shapes in the tree.

2020

Find round, Three-corner and four-corner shapes in your classroom and school. Where you find these shapes?
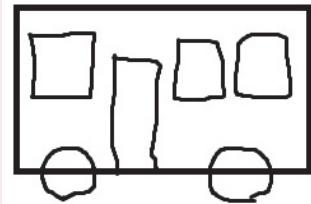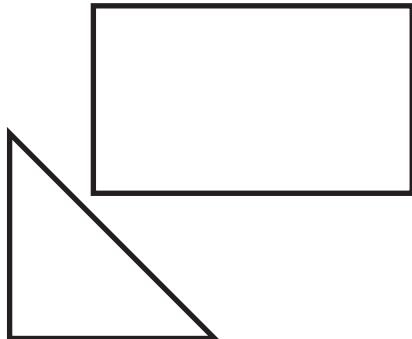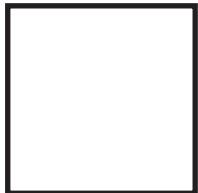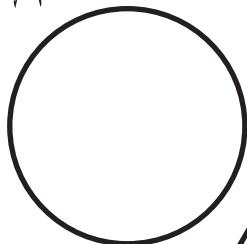
| ◯ Round shape	△ Three-corner shapes	▢ Four-corner shapes

Let's draw pictures using round, Three-corner and four-corner shapes.

I used a round shape to draw a face!

I used a long four-corner shape to draw a bus!
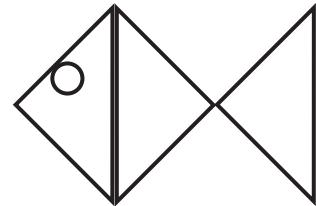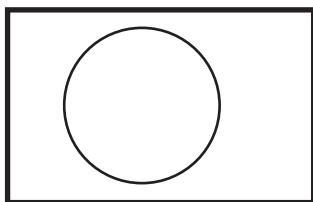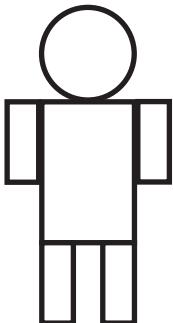
Let's make various shapes using round, Three-corner and four-corner shapes.

We have made a man, national flag and fish.

Draw pictures whatever you like!
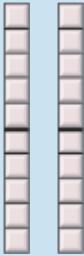
Challenge

Draw figures as you like .

2020
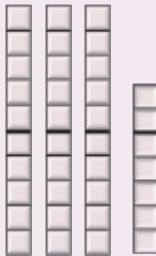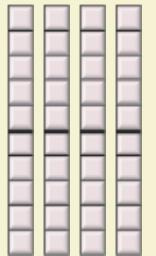
19. Do ourselves
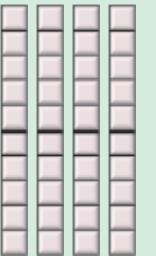
1. Write in numbers

	22		

2. Write in numbers

(1) Nineteen   (2) Nine   (3) Four

(4) Five   (5) Fifteen   (6) Eight

(7) Eleven   (8) Thirteen   (9) Seventeen

3. Write in words.

(1) 2   (2) 12   (3) 7   (4) 3

(5) 16   (6) 10   (7) 18   (8) 1
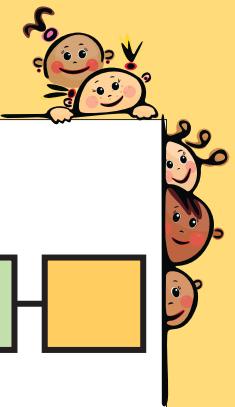
4. Circle the greater number.

| 15 | 11 | | 8 | 19 | | 16 | 14 | | 17 | 12 |

2020

5. Put numbers in the blank boxes.

From greater to smaller

(1)

| 19 | | 17 | | 15 | | 13 | |
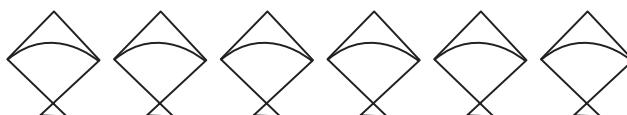
From smaller to greater

(2)

| | 38 | 39 | | | 42 | | 44 |

6 (a) Colour the fourth picture from left.
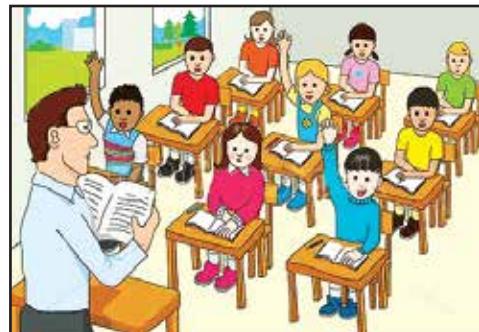
(b) Colour two pictures from right.

(c) Colour the fifth picture from right.

7. Reza says, "I am sitting in the second line from the front and there are two students on my right hand side. Where did Reza sit? Round it.

Class room

Challenge

Make same type of question using your own class and answer it.

8. Add :

(1) $10 + 6 =$ (2) $12 + 4 =$ (3) $16 + 3 =$

(4) $5 + 11 =$ (5) $9 + 3 =$ (6) $6 + 5 =$

(7) $4 + 7 =$ (8) $2 + 9 =$ (9) $6 + 8 =$

9. Subtract :

(1) $16 - 2 =$ (2) $18 - 4 =$ (3) $14 - 10 =$

(4) $15 - 10 =$ (5) $14 - 6 =$ (6) $11 - 5 =$

(7) $12 - 3 =$ (8) $17 - 8 =$ (9) $16 - 9 =$

10. Calculate :

(1) $7 + 6 =$ (2) $2 + 8 + 5 =$ (3) $16 - 3 =$

(4) $14 + 4 + 2 =$ (5) $6 + 7 + 3 =$ (6) $5 + 9 + 4 =$
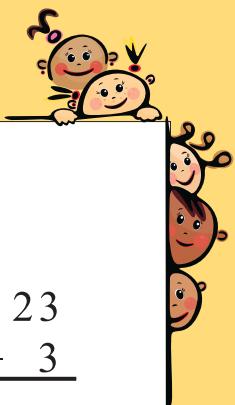
(7) $15 - 8 =$ (8) $13 - 5 =$ (9) $8 + 5 =$

11. Add :

(1)   (2)   (3)   (4)   (5)

$$\begin{array}{r} 23 \\ +14 \\ \hline \end{array} \qquad \begin{array}{r} 11 \\ +32 \\ \hline \end{array} \qquad \begin{array}{r} 20 \\ +18 \\ \hline \end{array} \qquad \begin{array}{r} 10 \\ +30 \\ \hline \end{array} \qquad \begin{array}{r} 9 \\ +40 \\ \hline \end{array}$$

(6) $21 + 25 =$ (7) $35 + 13 =$ (8) $11 + 33 =$

(9) $10 + 28 =$ (10) $20 + 20 =$ (11) $30 + 7 =$

12. Subtract :

(1)
$$28 - 11$$

(2)
$$36 - 26$$

(3)
$$45 - 40$$

(4)
$$50 - 10$$

(5)
$$23 - 3$$

(6) $38 - 24 =$ (7) $26 - 13 =$ (8) $44 - 22 =$

(9) $33 - 13 =$ (10) $28 - 21 =$ (11) $47 - 47 =$

13. Halima had 25 books. She purchased 14 more books from the book-fair. How many books did she then have?

14. In a cricket match, Manik's team made 48 runs and Tuhin's team made 32 runs. Which team made more runs and how many more?
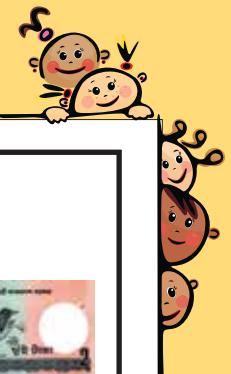
15. Rony is 49 years old and Apu 33 years old. By how many years is Apu younger than Rony?

16. Which number has to be subtracted from 48 to make 20?

17. Rehana had 26 colour pencils. She purchased 12 more from the book-fair. Then she gave her younger sister 7 colour pencils. How many colour pencils were left with Rehana?

18. Mother gave Tapon 24 puli cakes. Tapon gave 12 cakes to his younger sister. Then mother gave 10 cakes to him again. How many cakes did Tapon have?
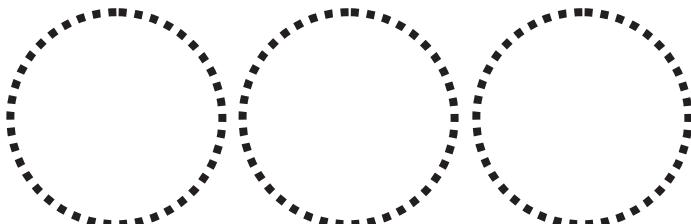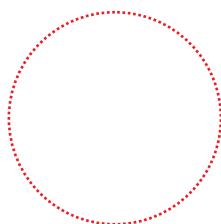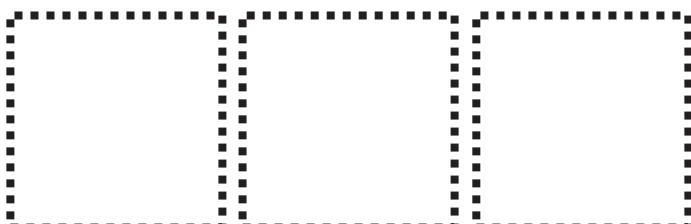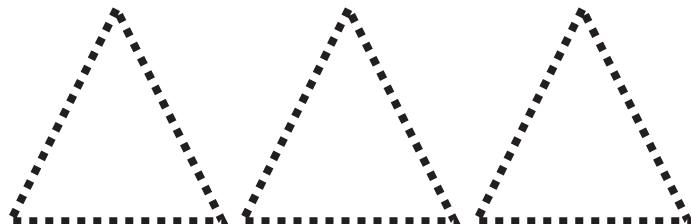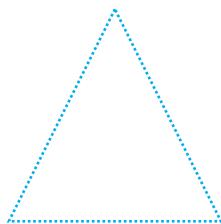
19. The notes are shown in the side box. To buy ice cream with 12 Taka, which and how many notes will be paid for this?
Find all the ways.

20. Write the name of the figures. Then connect the dots to draw figures.

Round shape
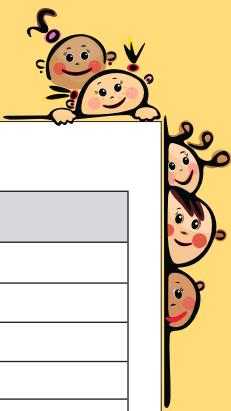
Appendix 1: Reading and writing numbers

List of numbers (1 to 10)

Number	How to read	Number	How to read
1	One	6	Six
2	Two	7	Seven
3	Three	8	Eight
4	Four	9	Nine
5	Five	10	Ten

List of numbers (11 to 20)

Number	Count by 10s	How to read
11	1 ten 1	Eleven
12	1 ten 2	Twelve
13	1 ten 3	Thirteen
14	1 ten 4	Fourteen
15	1 ten 5	Fifteen
16	1 ten 6	Sixteen
17	1 ten 7	Seventeen
18	1 ten 8	Eighteen
19	1 ten 9	Nineteen
20	2 ten	Twenty

List of numbers (21 to 40)

Number	Count by 10s			How to read
21	2	ten	1	Twenty one
22	2	ten	2	Twenty two
23	2	ten	3	Twenty three
24	2	ten	4	Twenty four
25	2	ten	5	Twenty five
26	2	ten	6	Twenty six
27	2	ten	7	Twenty seven
28	2	ten	8	Twenty eight
29	2	ten	9	Twenty nine
30	3	ten		Thirty
31	3	ten	1	Thirty one
32	3	ten	2	Thirty two
33	3	ten	3	Thirty three
34	3	ten	4	Thirty four
35	3	ten	5	Thirty five
36	3	ten	6	Thirty six
37	3	ten	7	Thirty seven
38	3	ten	8	Thirty eight
39	3	ten	9	Thirty nine
40	4	ten		Forty

List of numbers (41 to 50)

| Number	Count by 10s			How to read
41	4	ten	1	Forty one
42	4	ten	2	Forty two
43	4	ten	3	Forty three
44	4	ten	4	Forty four
45	4	ten	5	Forty five
46	4	ten	6	Forty six
47	4	ten	7	Forty seven
48	4	ten	8	Forty eight
49	4	ten	9	Forty nine
50	5	ten		Fifty
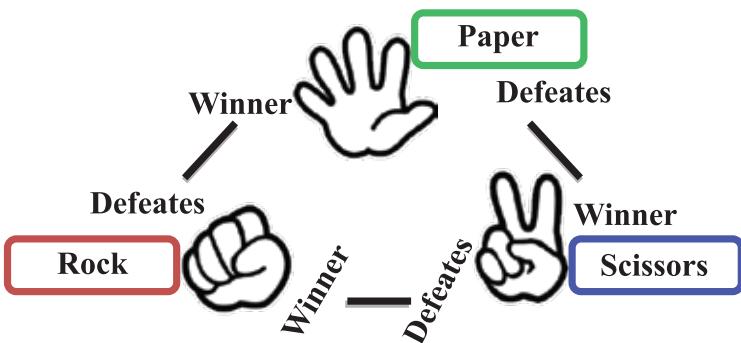
Appendix 2: Rock-scissors-paper Game

How to Play:
This is good tool to decide your turn.
There are 3 things, Rock, Scissors and Paper. You can choose one of them. Everybody says "One, two, three go" At the same time to say "Go" you show one of them which you decided. The power relation is below.


- Paper wins Rock because paper can cover Rock.
- Rock wins Scissor because Rock can blend scissors.
- Scissor wins Paper because Scissors can cut Paper.

[Draw Cases]
- All the participants choose the same one.
- In playing more than 3 persons, all of 3 kinds appear.

Two or more children can play this game
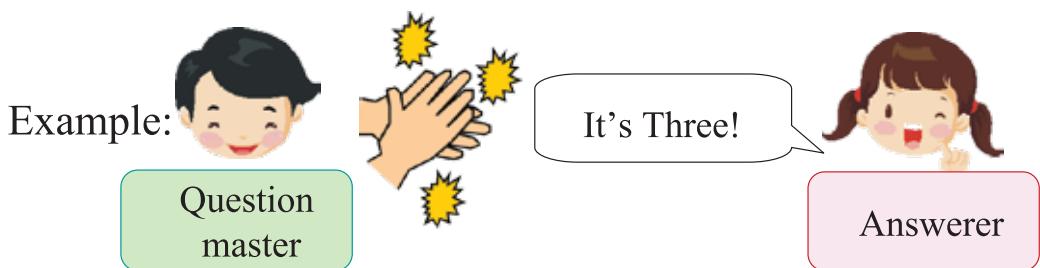
Appendix 3: Number counting Game

How to play:

Make a pair and decide question master and answerer (Please refer to Appendix 2 "Rock-scissors-paper"). The question master claps his/her hands and the answer or replies the number of clapping. If the answerer can answer correctly, he/she gets a point and write "○" in the blank/ If wrong, write "⊠". Then change their role and continue it 5 times. The person who has given more correct answers is the winner.

Example:

| Question master | | It's Three! | Answerer |

Name	Game 1	Game 2	Game 3	Game 4	Game 5	Total number of ○
Reza	○	○	×	○	○	4
Meena	×	○	○	○	○	

In this example, both of them get 4 points. Then they are draw.
Please count the number of "O" and fill in the number.

Date:
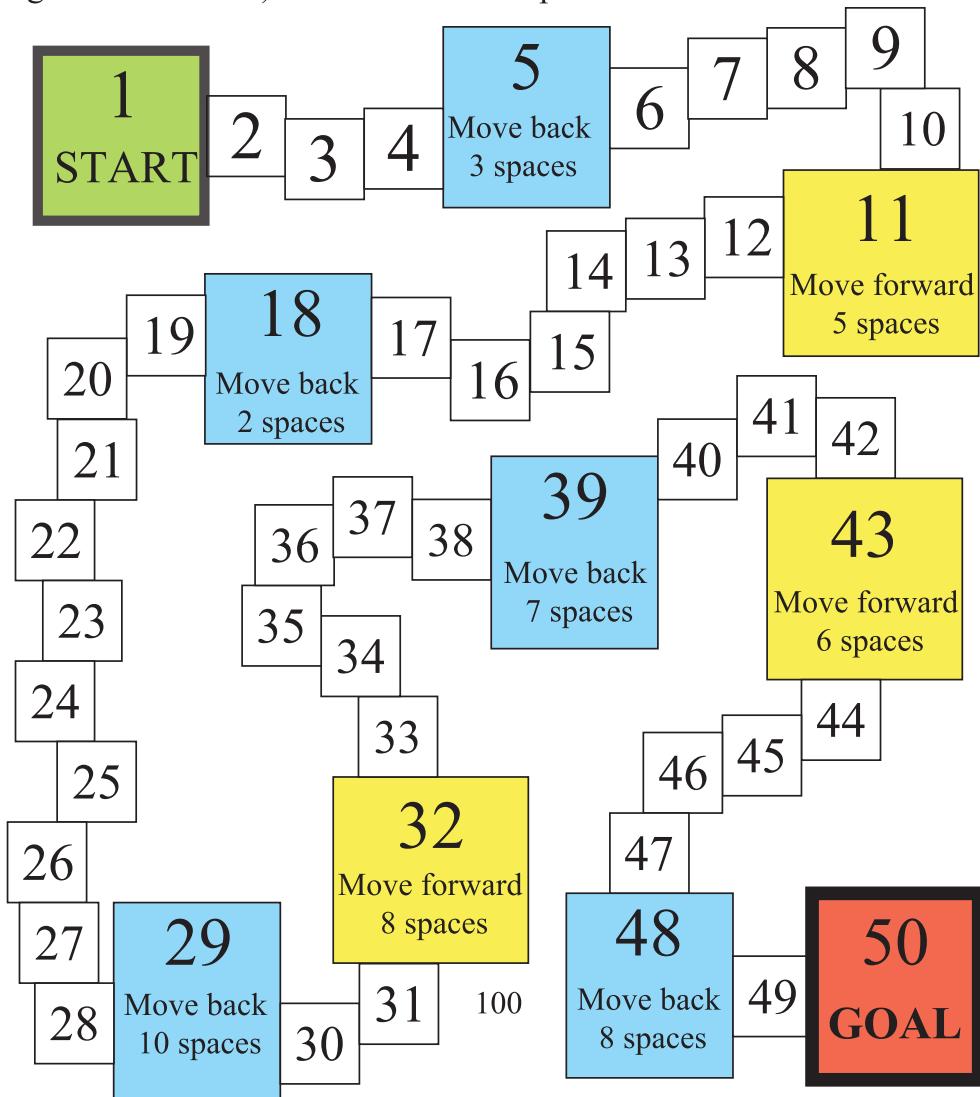
| Name	Game 1	Game 2	Game 3	Game 4	Game 5	Total number of ○

Appendix 4 : Board Game

How to play :
2 to 4 students can play this game. A dice and small round can are needed to play this game. For first or second turn, Rock-seissor-Paper game may be referred. you will go ahead boxes as the number shown after throwing the dice. The game will continu as the instraction in the picture (e.g. if you reach at the box of 5, you must go 3 blocks back). The winner is the person who has reached GOAL first.

Academic year 2020, Math -1

ALWAYS SPEAK THE TRUTH

National Curriculum and Textbook Board, Bangladesh