



Based on
New Sindh Curriculum
2023-24

TEST EDITION

THE TEXTBOOK OF

MATHEMATICS

For Class

I

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Sindh Textbook Board

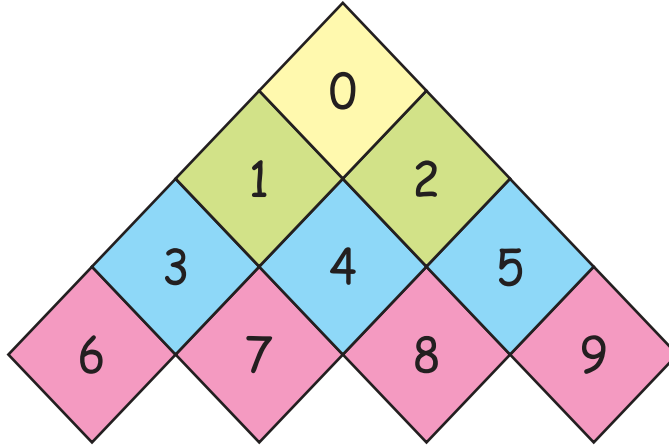
TEST EDITION



THE TEXTBOOK OF
MATHEMATICS

For Class **I**

Based on New Sindh Curriculum 2023-24



Sindh Textbook Board

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PREFACE

It gives me immense pleasure to present the newly developed Mathematics Textbook for Class I, designed in alignment with the Sindh Curriculum 2023-24 developed by DCAR. This textbook represents our commitment to providing quality education that meets international standards while remaining rooted in our local context.

Recognizing that young learners grasp concepts through active engagement, this textbook incorporates hands-on STEAM activities and technology integration through AI activities, website/links and QR code making learning interactive and meaningful. The illustrations promote gender equity, showing boys and girls equally engaged in learning and achieving.

This textbook uniquely integrates the Career Education Framework, connecting mathematical concepts to real-world professions and practical life. The accompanying Mathematics Workbook strengthens basic skills while enhancing cooperation among students, parents and teachers, creating a supportive learning environment that motivates students and helps reduce dropout rates.

I extend heartfelt gratitude to the Secretary SE&LD, Chief Executive Advisor (CW), GRACE project team, STEAM Regional Focal Person for Hyderabad Region, Reviewers, Authors, DCAR curriculum developers, subject specialists, teachers, illustrators and all stakeholders who contributed their expertise.

This is a test edition. We warmly welcome suggestions and feedback from students, teachers, parents and educators to improve future editions.

May this textbook nurture young mathematicians who think critically, solve problems creatively and contribute meaningfully to society.

Chairman
Sindh Textbook Board

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Unit

1

NUMBERS

Student Learning Outcomes:

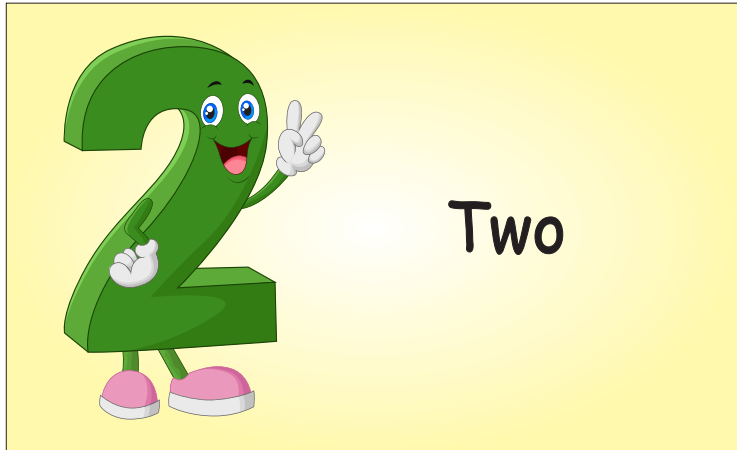
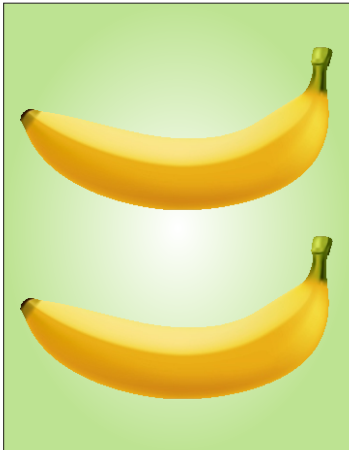
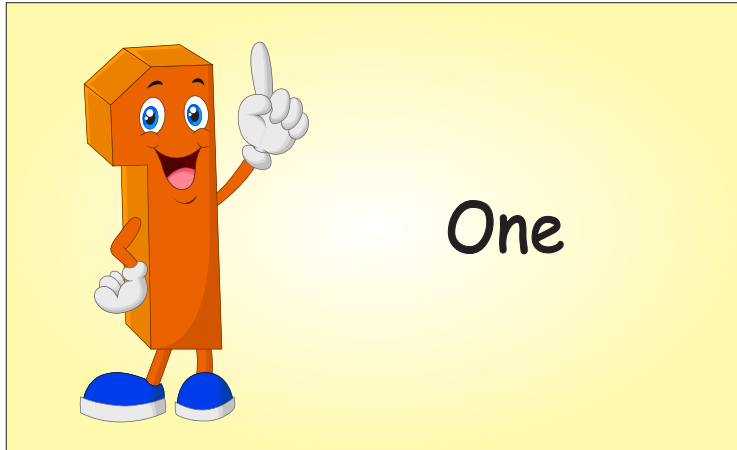
At the end of the unit, Students will be able to:

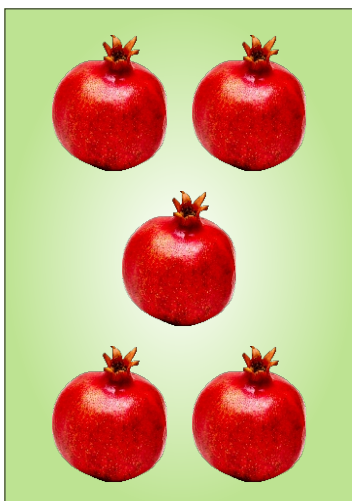
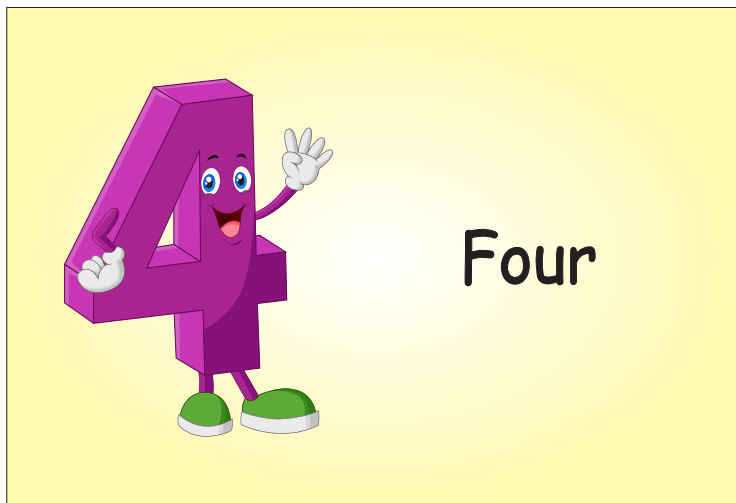
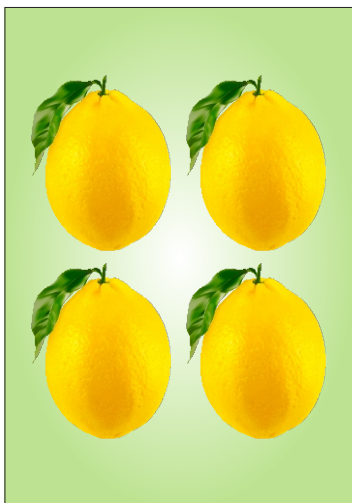
- ✓ Count objects and numbers to and across 99 (2-digit numbers) forwards and backwards, beginning from zero, one, or any given number.
- ✓ Read and write numbers up to 99 (2-digit numbers) in numerals and up to 10 in words.
- ✓ Recognize the place value of each digit in 2-digit numbers (tens, ones/units).
- ✓ Compare and order numbers up to 99 using appropriate language (for instance: more and less, greater, smaller, equal to, same as, increasing, decreasing, smallest to largest and vice versa etc.)
- ✓ Identify numbers before, after and between two numbers.
Recognize the position of objects and write it using ordinal numbers up to 10.

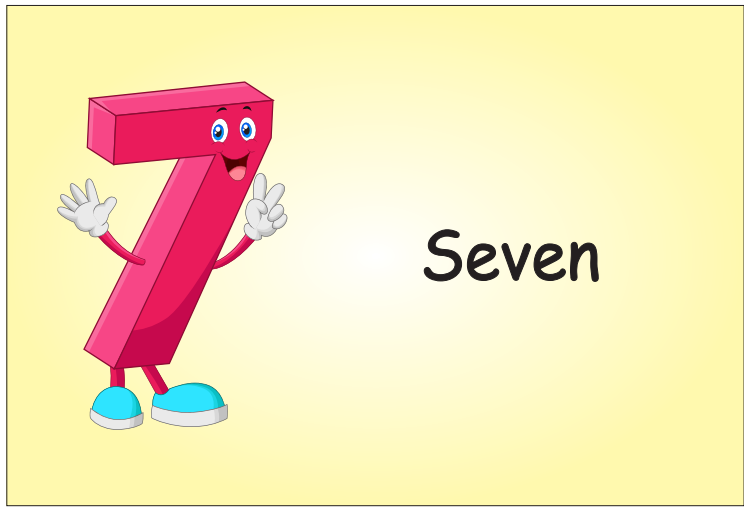
Counting Objects and Numbers up to 99

Numbers from 1 to 9

Count the objects and read the numbers aloud.



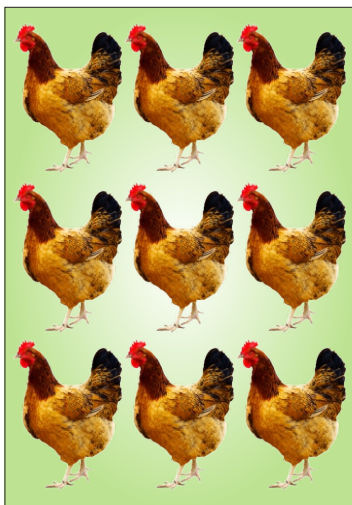




Seven




Eight

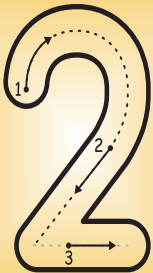


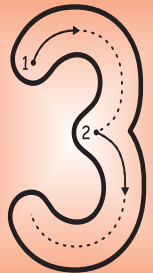
Nine

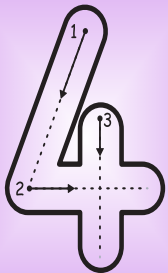
Unit 1: Numbers

Read, trace and write the numbers.

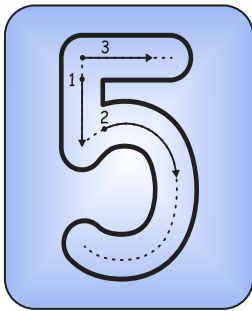
	1	1	1	1	1	1
	1	1	1	1	1	1

	2	2	2	2	2	2
	2	2	2	2	2	2

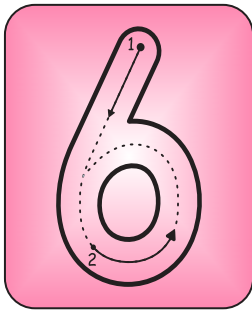
	3	3	3	3	3	3
	3	3	3	3	3	3

	4	4	4	4	4	4
	4	4	4	4	4	4

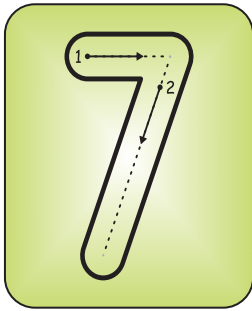
Unit 1: Numbers



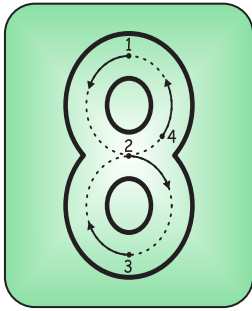
5	5	5	5	5	5
5	5	5	5	5	5



6	6	6	6	6	6
6	6	6	6	6	6



7	7	7	7	7	7
7	7	7	7	7	7



8	8	8	8	8	8
8	8	8	8	8	8


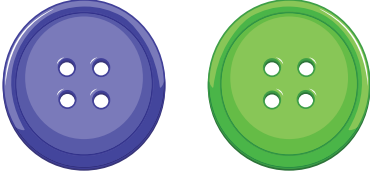



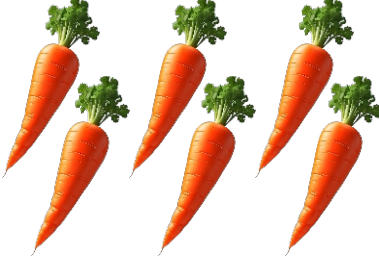


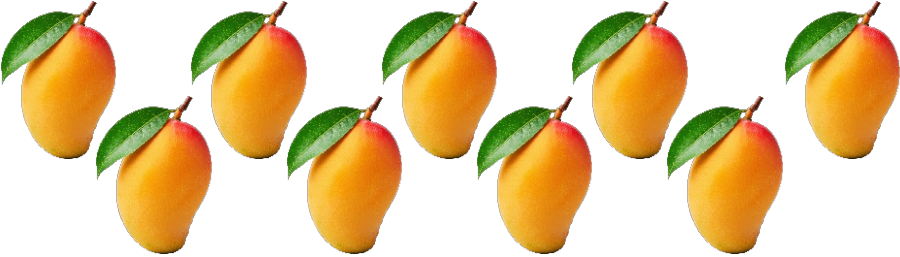


9	9	9	9	9	9
9	9	9	9	9	9



Activity

Count and write the number of objects.

 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	 <input type="text"/>
 <input type="text"/>	

Concept of Zero

Count the parrots in the cage and read the number. Read and write number.



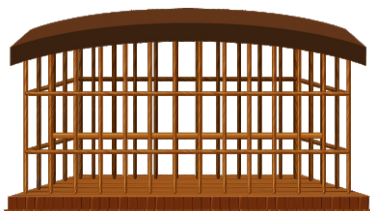
Three parrots



Two parrots



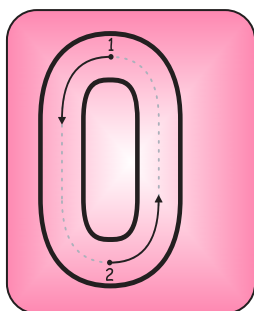
One parrot



No parrot

This cage has no parrot so we say it has zero parrot. We write zero as 0.

Read, trace and write



0	0	0	0	0	0
0	0	0	0	0	0



Activity

Count and match the numbers.



0

1

2

3

4

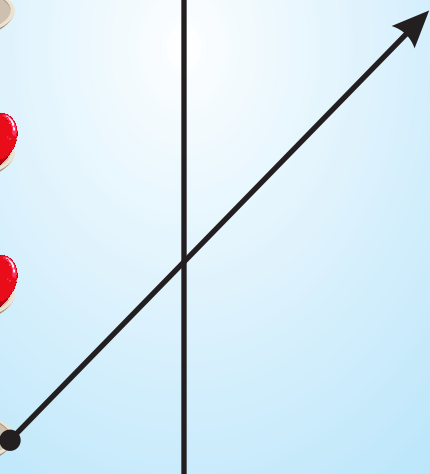
5

6

7

8

9





Activity

Abdul Rafay visits a park. He observes/sees different things, including birds, animals, objects and trees.











Count and write the number of given things.



				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
				
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Counting forward from 0 to 9.

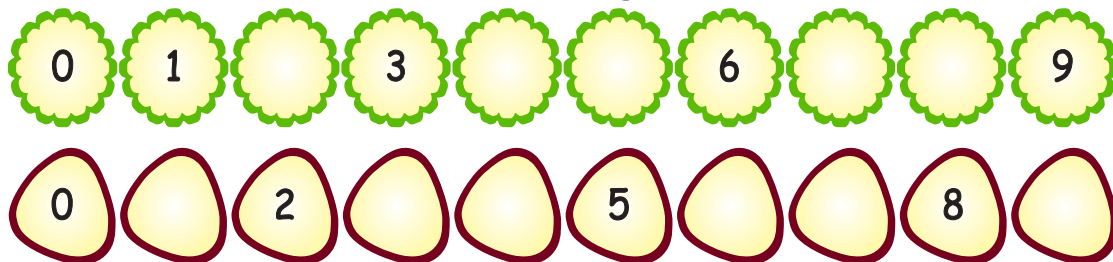
Count and read the numbers.

	0	Zero
	1	One
	2	Two
	3	Three
	4	Four
	5	Five
	6	Six
	7	Seven
	8	Eight
	9	Nine

We can write these numbers as:



Count forward and write the missing numbers.



Counting backward from 9 to 0.

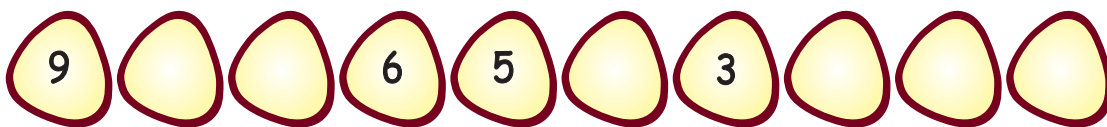
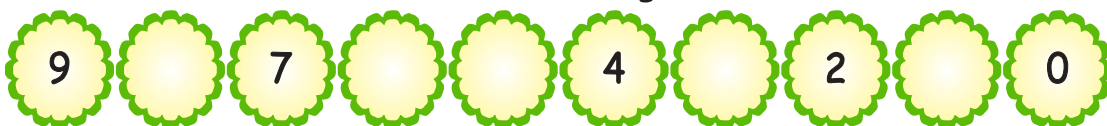
Count and read the numbers.

	9	Nine
	8	Eight
	7	Seven
	6	Six
	5	Five
	4	Four
	3	Three
	2	Two
	1	One
	0	Zero

We can write these numbers as:



Count backward and write the missing numbers.


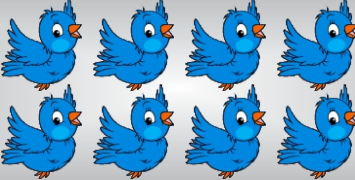
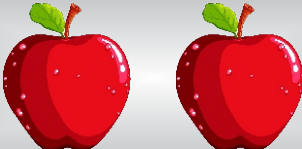





Exercise 1

1. Count and write the number.

Objects

Number

	4
	
	
	
	
	
	

2. Count and match.

Objects	Number
	1
	2
	3
	4
	5
	6
	7
	8
	9

3. Count forward and write the missing numbers.

2			5		7
---	--	--	---	--	---

3		5			8
---	--	---	--	--	---

0		2			5
---	--	---	--	--	---

4. Count backward and write the missing numbers.

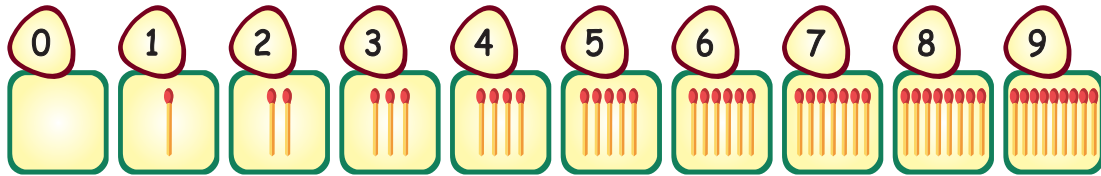
9		7			4
---	--	---	--	--	---

8			5		3
---	--	--	---	--	---

5		3			0
---	--	---	--	--	---

Concept of Ten

We have learnt numbers from 0 to 9 which are as follows.



If we include one more match stick in 9 sticks, we get ten sticks. We write ten as 10.



i.e. $10 \text{ ones} = 10$



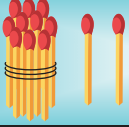
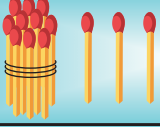
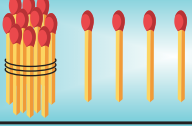
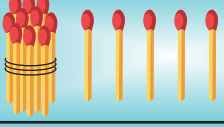
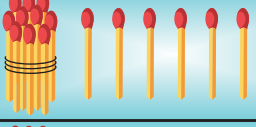
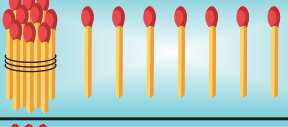
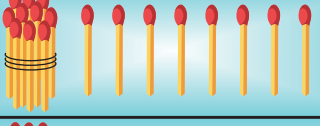
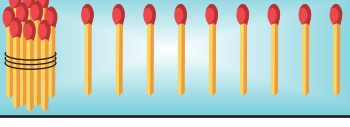
10 is a first two digit number.

Note:

2 tens make twenty	20	
3 tens make thirty	30	
4 tens make forty	40	
5 tens make fifty	50	
6 tens make sixty	60	
7 tens make seventy	70	
8 tens make eighty	80	
9 tens make ninety	90	

Numbers upto 99

Count and read numbers from 10 to 19.

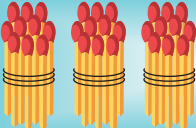
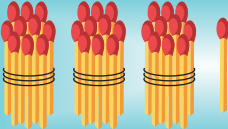
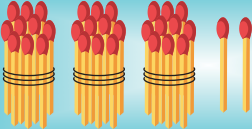
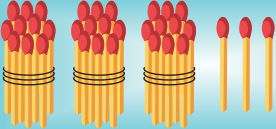
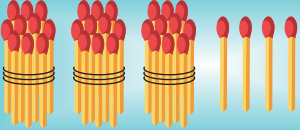
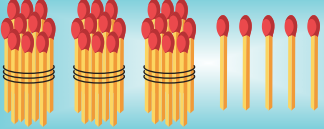
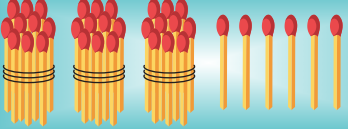
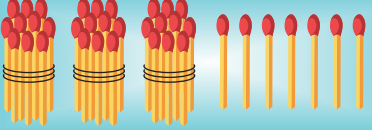
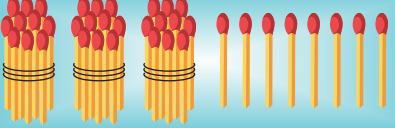
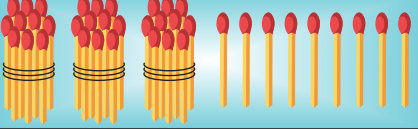
Objects	Tens	Ones	Number	
			In figures	In Words
	1	0	10	Ten
	1	1	11	Eleven
	1	2	12	Twelve
	1	3	13	Thirteen
	1	4	14	Fourteen
	1	5	15	Fifteen
	1	6	16	Sixteen
	1	7	17	Seventeen
	1	8	18	Eighteen
	1	9	19	Nineteen

Unit 1: Numbers

Count and read numbers from 20 to 29.

Objects	Tens	Ones	Number	
			In figures	In Words
	2	0	20	Twenty
	2	1	21	Twenty one
	2	2	22	Twenty two
	2	3	23	Twenty three
	2	4	24	Twenty four
	2	5	25	Twenty five
	2	6	26	Twenty six
	2	7	27	Twenty seven
	2	8	28	Twenty eight
	2	9	29	Twenty nine

Count and read numbers from 30 to 39.

Objects	Tens	Ones	Number	
			In figures	In Words
	3	0	30	Thirty
	3	1	31	Thirty one
	3	2	32	Thirty two
	3	3	33	Thirty three
	3	4	34	Thirty four
	3	5	35	Thirty five
	3	6	36	Thirty six
	3	7	37	Thirty seven
	3	8	38	Thirty eight
	3	9	39	Thirty nine

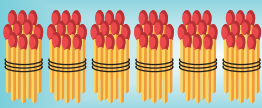
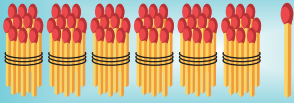


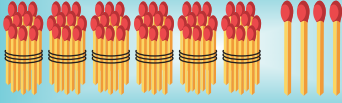





Count and read numbers from 40 to 49.

Objects	Tens	Ones	Number	
			In figures	In Words
	4	0	40	Forty
	4	1	41	Forty one
	4	2	42	Forty two
	4	3	43	Forty three
	4	4	44	Forty four
	4	5	45	Forty five
	4	6	46	Forty six
	4	7	47	Forty seven
	4	8	48	Forty eight
	4	9	49	Forty nine

Count and read numbers from 50 to 59.

Objects	Tens	Ones	Number	
			In figures	In Words
	5	0	50	Fifty
	5	1	51	Fifty one
	5	2	52	Fifty two
	5	3	53	Fifty three
	5	4	54	Fifty four
	5	5	55	Fifty five
	5	6	56	Fifty six
	5	7	57	Fifty seven
	5	8	58	Fifty eight
	5	9	59	Fifty nine

Count and read numbers from 60 to 69.

Objects	Tens	Ones	Number	
			In figures	In Words
	6	0	60	Sixty
	6	1	61	Sixty one
	6	2	62	Sixty two
	6	3	63	Sixty three
	6	4	64	Sixty four
	6	5	65	Sixty five
	6	6	66	Sixty six
	6	7	67	Sixty seven
	6	8	68	Sixty eight
	6	9	69	Sixty nine




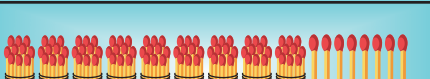
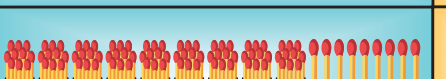
Count and read numbers from 70 to 79.

Objects	Tens	Ones	Number	
			In figures	In Words
	7	0	70	Seventy
	7	1	71	Seventy one
	7	2	72	Seventy two
	7	3	73	Seventy three
	7	4	74	Seventy four
	7	5	75	Seventy five
	7	6	76	Seventy six
	7	7	77	Seventy seven
	7	8	78	Seventy eight
	7	9	79	Seventy nine

Count and read numbers from 80 to 89.

Objects	Tens	Ones	Number	
			In figures	In Words
	8	0	80	Eighty
	8	1	81	Eighty one
	8	2	82	Eighty two
	8	3	83	Eighty three
	8	4	84	Eighty four
	8	5	85	Eighty five
	8	6	86	Eighty six
	8	7	87	Eighty seven
	8	8	88	Eighty eight
	8	9	89	Eighty nine

Count and read numbers from 90 to 99.

Objects	Tens	Ones	Number	
			In figures	In Words
	9	0	90	Ninety
	9	1	91	Ninety one
	9	2	92	Ninety two
	9	3	93	Ninety three
	9	4	94	Ninety four
	9	5	95	Ninety five
	9	6	96	Ninety six
	9	7	97	Ninety seven
	9	8	98	Ninety eight
	9	9	99	Ninety nine



Activity

Count forward and write the missing numbers.

10	11	12	13		15	16	17		19
----	----	----	----	--	----	----	----	--	----

30	31	32		34	35		37
----	----	----	--	----	----	--	----

61	62		64		66		68
----	----	--	----	--	----	--	----

Count backward and write the missing numbers.

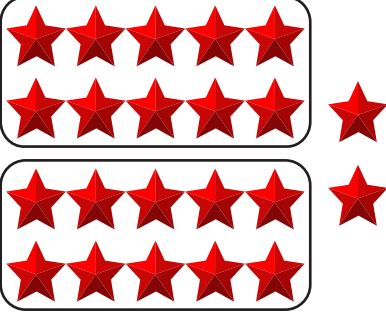
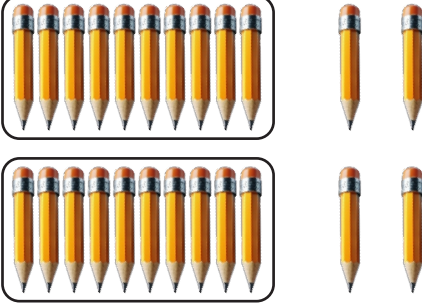
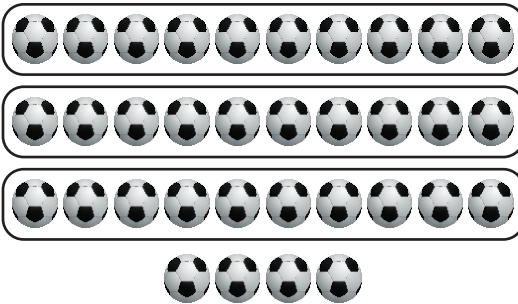
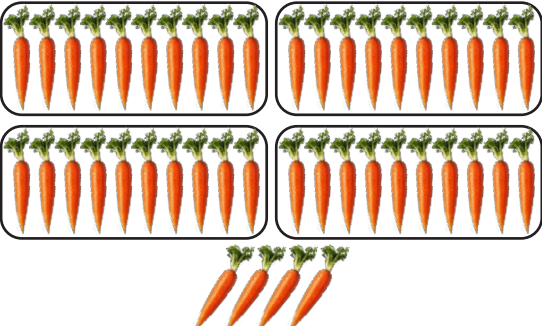
20	19	18		16	15		13	12
----	----	----	--	----	----	--	----	----

50	49	48		46			43
----	----	----	--	----	--	--	----

90	89	88		86	85		83
----	----	----	--	----	----	--	----

Exercise 2

1. Count and write the number.

	22
	
	
	

2. Count and match the number.

5 tens and 6 ones	72
7 tens and 2 ones	97
9 tens and 7 ones	56
2 tens and 4 ones	45
4 tens and 5 ones	24

Note: An arrow points from '5 tens and 6 ones' to the number 56.

3. Count forward and write the missing numbers.

17	18		20	21			24	
40	41		43			46		
75		77				80		

4. Count backward and write the missing numbers.

90		88		86		84
16	15		13		11	
50		48		46		

Reading and writing numbers up to 99 in numerals.



Activity

Write the missing numbers.

0	1	2	3		5		7	8	9
10	11		13	14		16	17		19
20			23	24	25	26			29
	31				35	36	37	38	39
40	41	42				46	47	48	
50	51			54	55		57		59
60		62		64		66	67		
70	71			74	75		77		79
	81	82	83			86	87	88	
90			93	94	95		97		99

Writing numbers up to 10 in words.



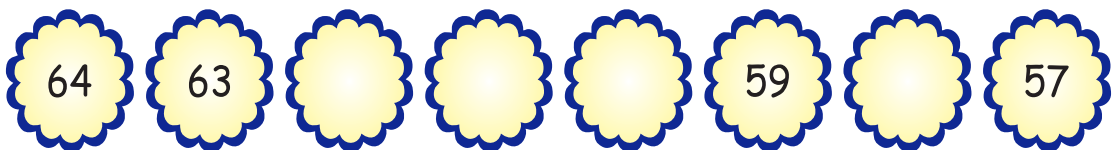
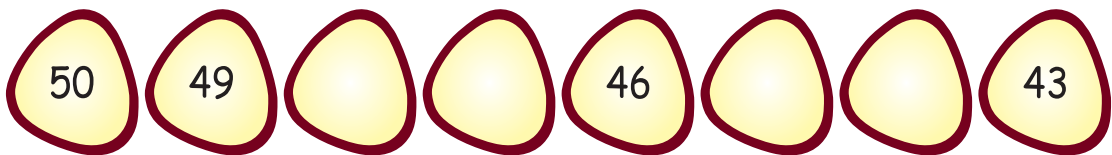
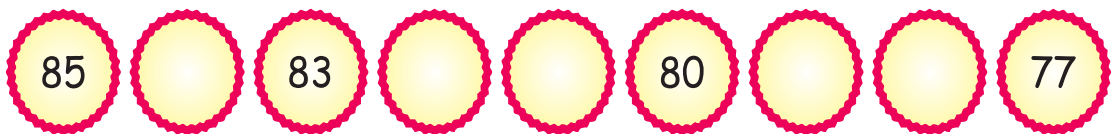
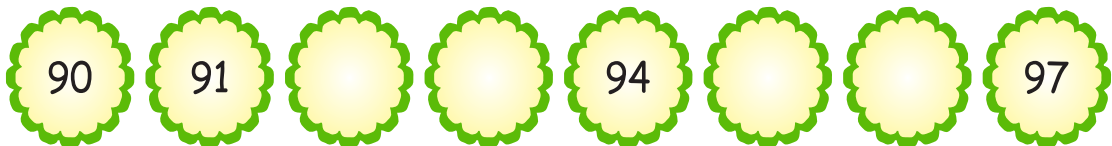
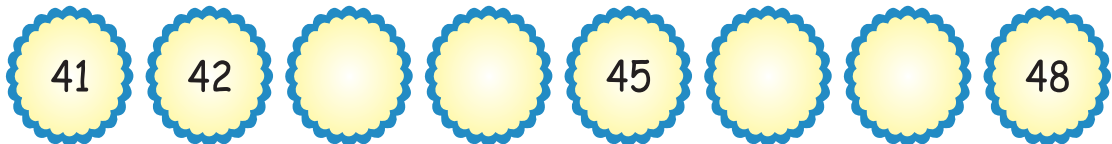
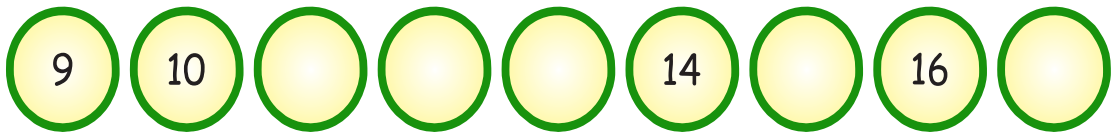
Activity

Read and trace the numbers up to 10.

0	Zero
1	One
2	Two
3	Three
4	Four
5	Five
6	Six
7	Seven
8	Eight
9	Nine
10	Ten

Exercise 3

1. Write the missing numbers.



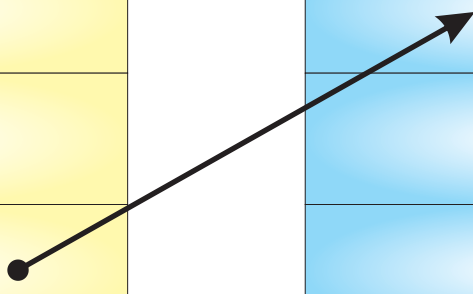
2. Match the numbers in words with numbers in figures.

In words

Six
Zero
Nine
Two
Five
Three
Four
Eight
One
Ten
Seven

In figures

0
1
2
3
4
5
6
7
8
9
10



3. Write the numbers in figures.

In words

In figures

Nine	9
Five	
Three	
Seven	
Four	
Eight	

4. Write the numbers in words.

In figures

In words

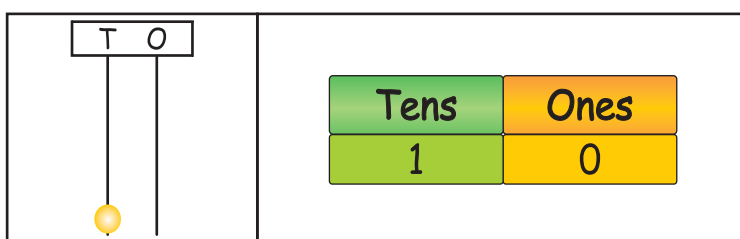
10	Ten
2	
7	
6	
8	
1	

Recognizing the place value of each digit in 2-digit numbers.

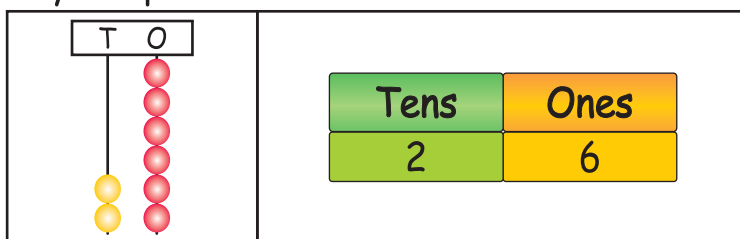
We have learnt one digit numbers which are 0,1,2,3 and up to 9.

We have also learnt two-digit numbers which are 10,11,12,13 and up to 99.

Each digit in two-digit numbers has its value, we call it place value. The smallest 2-digit number is 10 and its place value chart is as under.



Similarly the place value chart for 26 is



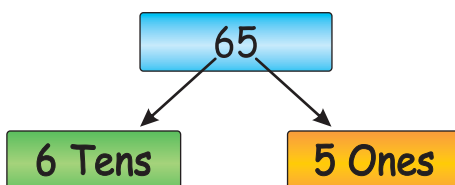
i.e. 26 has 2 tens and 6 ones

so, the place value of 6 is 6 ones = 6

the place value of 2 is 2 tens = 20

so, $26 = 20 + 6$

Also the place values of 65 is shown below



The place value of 5 is 5 ones = 5

The place value of 6 is 6 tens = 60

so, $65 = 60 + 5$

Example:

Identify the place value of the digit given in green box.

7 4 Place value of 7 is 7 tens = 70

8 **9** Place value of 9 is 9 ones = 9



Activity

Count tens, ones and write the numbers.

T O					
	<table border="1"> <tr> <th>Tens</th> <th>Ones</th> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">3</td> </tr> </table> <p>Number = <input type="text" value="53"/></p>	Tens	Ones	5	3
Tens	Ones				
5	3				

T O					
	<table border="1"> <tr> <th>Tens</th> <th>Ones</th> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </table> <p>Number = <input type="text"/></p>	Tens	Ones		
Tens	Ones				

T O					
	<table border="1"> <tr> <th>Tens</th> <th>Ones</th> </tr> <tr> <td style="text-align: center;"> </td> <td style="text-align: center;"> </td> </tr> </table> <p>Number = <input type="text"/></p>	Tens	Ones		
Tens	Ones				



Activity

Write the numbers.

5 tens and 6 ones make

56

7 tens and 2 ones make

8 tens and 3 ones make

1 ten and 6 ones make

Exercise 4

1. Write the place value of the digit in blue box.

7

4

Place value of 4 is

4 ones = 4

3

5

Place value of 3 is

4

2

Place value of 4 is

8

7

Place value of 7 is

2. Write the place value of the encircled digit.

⑤8

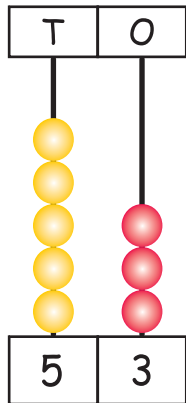
5 tens = 50

8⑨

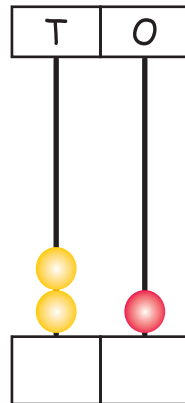
2⑧

①4

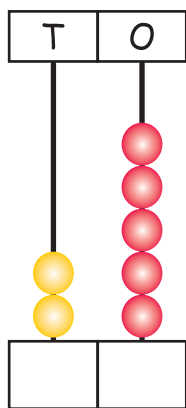
3. Count tens, ones and write the numbers.



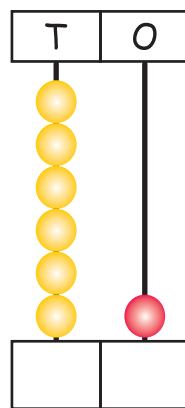
Number =



Number =



Number =



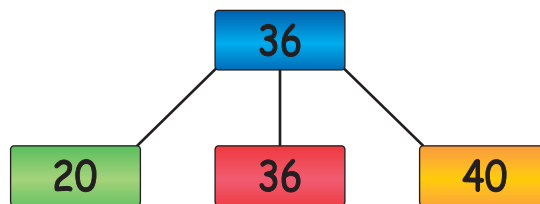
Number =

Comparing and ordering numbers up to 99

Example:

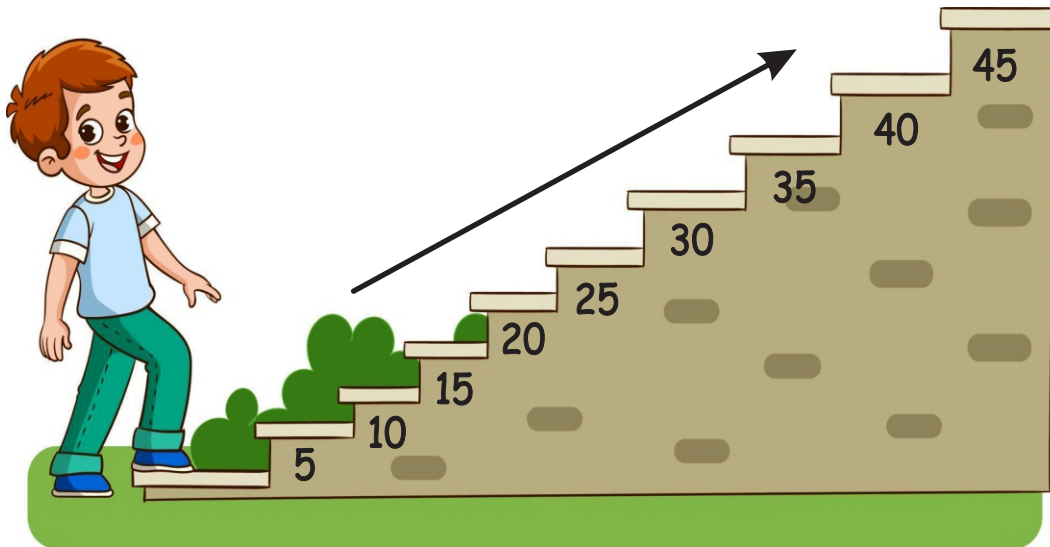
Colour yellow the greater, colour green the smaller and colour red the number which is equal to the given number.

Given Number



Increasing order

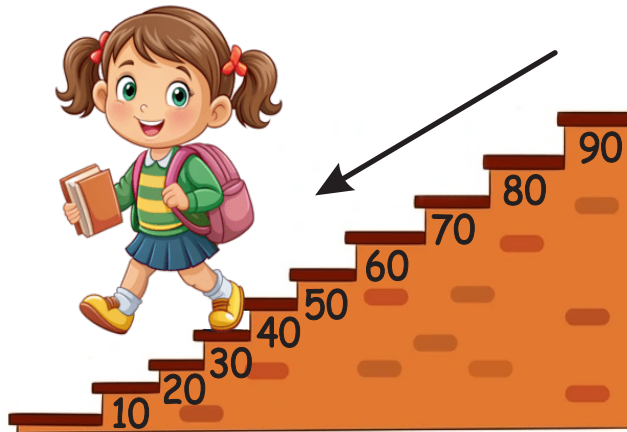
Increasing order means arranging numbers from the smallest to the largest.



Increasing order: 5, 10, 15, 20, 25, 30, 35, 40, 45

Decreasing order:

Decreasing order means arranging numbers from greatest to smallest.



Decreasing order: 90, 80, 70, 60, 50, 40, 30, 20, 10



Activity

Write the given numbers in decreasing order.



Decreasing order:

Identifying numbers before, after and between two numbers.



Activity

Write the missing numbers

Before		After		Between		
15	16	32	33	24	25	26
	14	93		43		45
	36	84		66		68
	52	76		18		20
	78	52		69		71

Exercise 5

1. For each given number, tick the number which is more, cross the less and encircle the number which is same as the given number

26	11	✗	44	57
	26	◯		28
	39	✓		44
72	72		86	92
	89			74
	39			86

2. Colour blue for greater, red for smaller and yellow for equal to the given number.

15	32	58	72
	12		58
	15		34
63	63	90	82
	24		90
	74		97

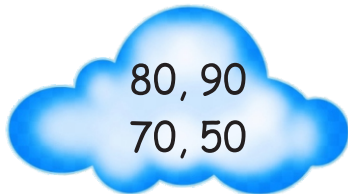
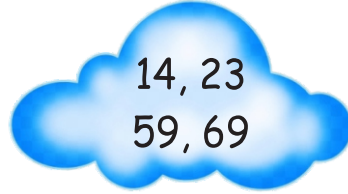
3. Write the numbers in increasing order.

27, 46, 54, 11	95, 13, 57, 82	9, 66, 39, 26	88, 22, 77, 49
11, 27, 46, 54			

4. Write the numbers in decreasing order.



73, 55, 31, 15



5. Write the missing numbers.

Before		After		Between		
25	26	51	52	42	43	44
	34	73		36		38
	56	19		90		92
	98	44		87		89
	88	63		53		55
	92	84		0		2
	1	33		11		13

6. Write the missing numbers.

Before	After
57	
	69
29	
	34
77	

7. Write the missing numbers.

Before	Between	After
62		64
36	37	
	55	56
19		21
73		75
	88	89

Recognizing position of objects using ordinal numbers.

We use ordinal numbers to show the positions of objects.
First ten ordinal numbers are shown in the following activity.



Activity

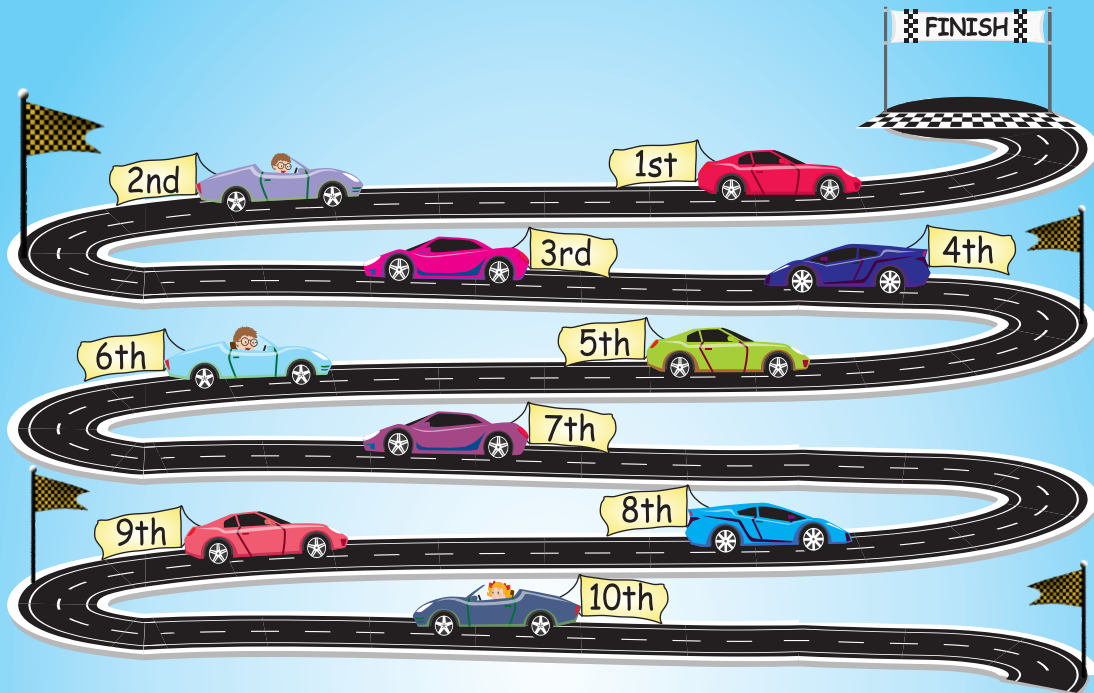
Read the ordinal numbers up to 10.






In figures	In words
1st	First
2nd	Second
3rd	Third
4th	Fourth
5th	Fifth
6th	Sixth
7th	Seventh
8th	Eighth
9th	Ninth
10th	Tenth



Activity

Read and write the position of cars.

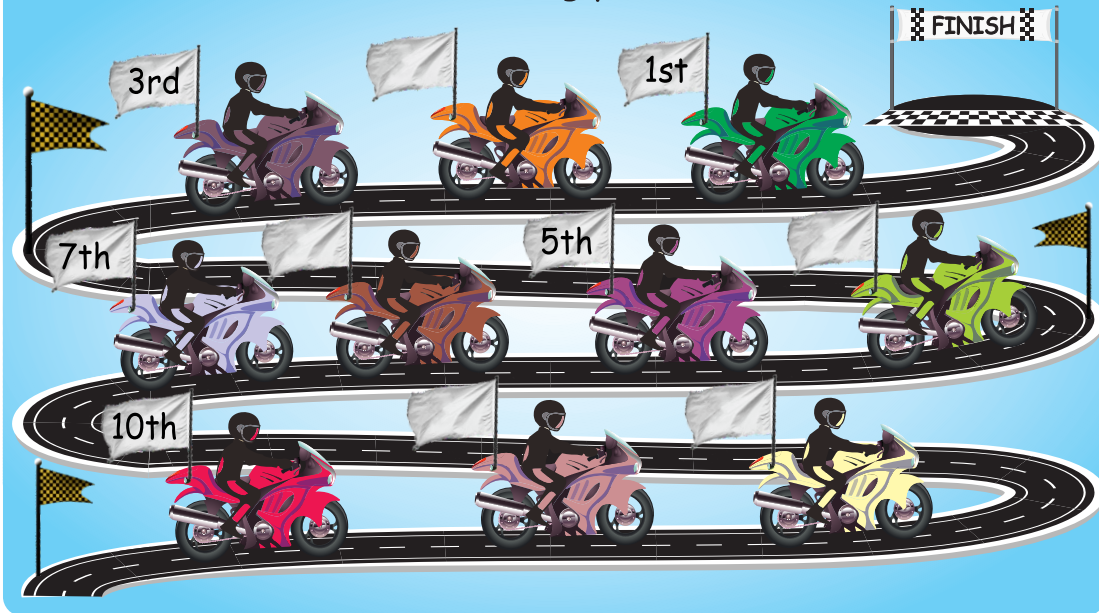


	In figures	In words
	3rd	Third
		
		
		
		



Activity

Write the missing positions.



Exercise 6

1. Match the following.

In figures

1st

2nd

3rd

4th

5th

6th

7th

8th

9th

10th

In words

Third

Fifth

Eighth

First

Sixth

Ninth

Second

Tenth

Seventh

Fourth

2. Write in words.

In figures	In words
5th	Fifth
10th	
8th	
2nd	
1st	
6th	

3. Write in figures.

In words	In figures
Fourth	4th
Seventh	
Ninth	
Third	
Fifth	

4. Write the position of days in a week

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
1st						

Unit

2

NUMBER OPERATIONS

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Find, recall and use addition and subtraction facts to 20.
- ✓ Compare numbers to find how many more and how many less.
- ✓ Add and subtract numbers mentally and in written form including: up to three 1-digit numbers 2-digit numbers and tens.
- ✓ Add and subtract numbers mentally and in written form including: 2-digit numbers and 1-digit numbers (without regrouping) Two 2-digit numbers (without regrouping).
- ✓ Solve real-life word problems with addition and subtraction using concrete objects and pictorial representations (involving missing numbers, money, quantities and measures).
- ✓ Estimate the answer to an addition and subtraction question. (using various approaches).
- ✓ Count and write in 2's, 5s & 10s using concrete objects (such as counters, pebbles, popsicle sticks etc.) and pictorial representations (such as number line, hundred square grid).
- ✓ Recognize counting in 2s, 5s and 10s as multiplication tables of two, five and ten.
- ✓ Recognize multiplication as repeated addition using concrete objects and pictorial representations (for instance materials, groups and arrays).
- ✓ Recognize using concrete objects and pictorial representations that the multiplication of any two numbers can be done in any order.
- ✓ Recognize division as repeated subtraction using concrete objects and pictorial representation. (groups, arrays and sharing).
- ✓ Recognize using concrete objects and pictorial representation that the division of one number by another number cannot be done in any order.
- ✓ Solve simple real-life word problems involving multiplication and division using any method (for instance materials, repeated addition, groups and arrays, mental methods, and known multiplication tables).

Finding, recalling and using addition and subtraction facts up to 20

Addition means combining things to get total

Example: Count and add.



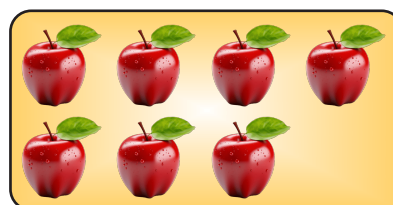
4 apples

and



3 apples

makes



7 apples

We write it as

$$4 + 3 = 7$$

and read as

Four plus three is equal to seven

Where,

"+" is the sign of addition

and "=" is the sign of equality.



Activity

Count and add.



3 balloons

+



5 balloons

=



8 balloons


3

+

5

=

8



5 bananas + 6 bananas = 11 bananas

5 + 6 = 11



3 Stars + 8 Stars = 11 Stars

+ =

These are some addition facts

- 4 + 3 = 7
- 3 + 5 = 8
- 5 + 6 = 11
- 6 + 8 = 14

Unit 2: Number Operations

Some other addition facts up to 20 are

Addition of 1

$$\begin{array}{l} 1 + 1 = 2 \\ 2 + 1 = 3 \\ 3 + 1 = 4 \\ 4 + 1 = 5 \\ 5 + 1 = 6 \end{array}$$

Addition of 2

$$\begin{array}{l} 1 + 2 = 3 \\ 2 + 2 = 4 \\ 3 + 2 = 5 \\ 4 + 2 = 6 \\ 5 + 2 = 7 \end{array}$$

Addition of 3

$$\begin{array}{l} 1 + 3 = 4 \\ 2 + 3 = 5 \\ 3 + 3 = 6 \\ 4 + 3 = 7 \\ 5 + 3 = 8 \end{array}$$

Addition of 4

$$\begin{array}{l} 6 + 4 = 10 \\ 7 + 4 = 11 \\ 8 + 4 = 12 \\ 9 + 4 = 13 \end{array}$$

Addition of 5

$$\begin{array}{l} 6 + 5 = 11 \\ 7 + 5 = 12 \\ 8 + 5 = 13 \\ 9 + 5 = 14 \end{array}$$

Addition of 6

$$\begin{array}{l} 6 + 6 = 12 \\ 7 + 6 = 13 \\ 8 + 6 = 14 \\ 9 + 6 = 15 \end{array}$$

Addition of 7

$$\begin{array}{l} 7 + 7 = 14 \\ 8 + 7 = 15 \\ 9 + 7 = 16 \\ 10 + 7 = 17 \end{array}$$

Addition of 8

$$\begin{array}{l} 7 + 8 = 15 \\ 8 + 8 = 16 \\ 9 + 8 = 17 \\ 10 + 8 = 18 \end{array}$$

Addition of 9

$$\begin{array}{l} 7 + 9 = 16 \\ 8 + 9 = 17 \\ 9 + 9 = 18 \\ 10 + 9 = 19 \end{array}$$

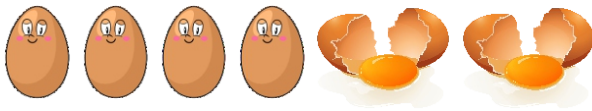
Addition of 10

$$\begin{array}{l} 7 + 10 = 17 \\ 8 + 10 = 18 \\ 9 + 10 = 19 \\ 10 + 10 = 20 \end{array}$$

Subtraction means taking away

Example:

2 eggs are broken from 6 eggs how many are left?



Total eggs	<input type="text" value="6"/>
Broken eggs	<input type="text" value="2"/>
Remaining eggs	<input type="text" value="4"/>

We write it as

$$6 - 2 = 4$$

Where

"-" is the symbol of subtraction.



Activity

Complete the following

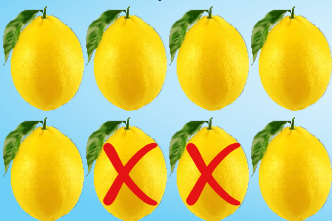


Total parrots	Flew away	Remaining
<input type="text" value="5"/>	<input type="text" value="2"/>	<input type="text"/>



Activity

Complete the following



Total lemon	Taken away	Remaining
<input type="text"/>	<input type="text"/>	<input type="text"/>

These are
some
subtraction
facts

$6 - 2 = 4$

$5 - 2 = 3$

$8 - 3 = 5$

Some other addition and subtraction facts:

$8 + 2 = 10$

$9 + 6 = 15$

$8 + 9 = 17$

$12 + 8 = 20$

$10 - 8 = 2$

$15 - 6 = 9$

$17 - 9 = 8$

$20 - 8 = 12$



Activity

Complete the following.

$7 + 4 = 11$

$6 + 3 = \square$

$14 + 6 = \square$

$17 + 2 = \square$

$11 - 7 = 4$

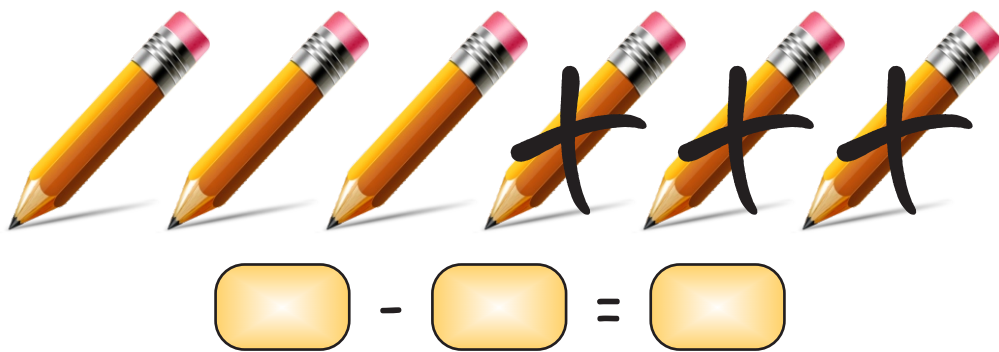
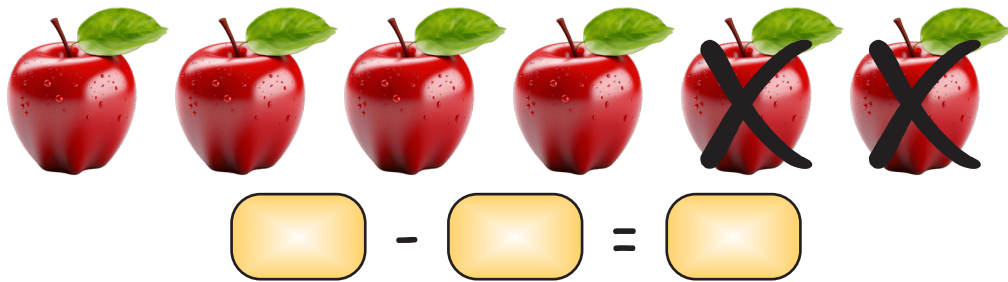
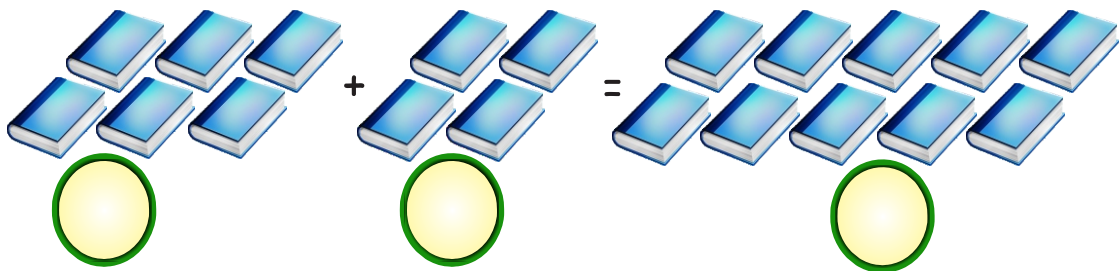
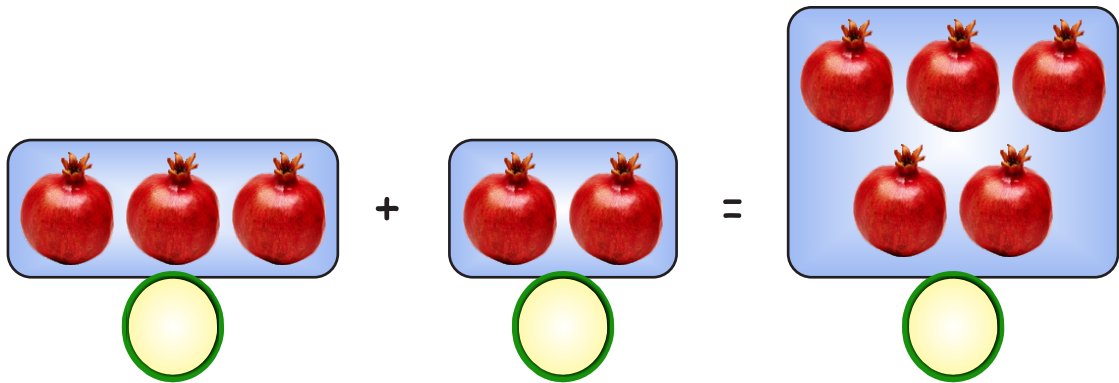
$9 - 6 = \square$

$20 - 14 = \square$

$19 - 2 = \square$

Exercise 1

1. Complete the following



2. Match the following.

$5 + 7$

$8 + 6$

$9 + 8$

$8 - 3$

$10 - 4$

$18 - 2$

14

12

6

17

16

5

3. Complete the following addition and subtraction facts.

$2 + 5 = 7$

$9 + 8 = \square$

$16 + 4 = \square$

$7 + \square = 13$

$11 + \square = 20$

$17 - 5 = 12$

$15 - 8 = \square$

$20 - 16 = \square$

$13 - \square = 6$

$20 - \square = 11$

4. Match the following.

$5 + 7$

$13 + 4$

$17 + 3$

$8 + 6$

$15 + 4$

$3 + 17$

$4 + 15$

$6 + 8$

$7 + 5$

$4 + 13$

Comparing numbers

Lets us compare numbers to find how many more or less by the following activities.



Activity

Count and write the number. Also tick (✓) the number of more objects and find how many more.

8 ✓ balls

5 balls

$$8 - 5 = 3$$

8 is more than 5 by 3

bananas

bananas

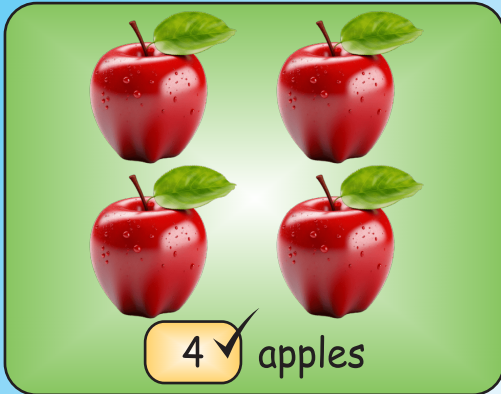
$$9 - 5 = 4$$

is more than by



Activity

Count and write the number. Also tick (✓) the number of less objects and find how many less.



$$6 - 4 = 2$$

4 is less than 6 by 2

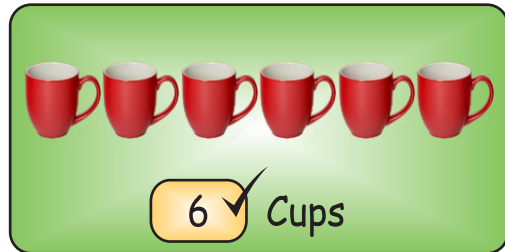


$$7 - 3 = 4$$

___ is less than ___ by ___

Exercise 2

1. Count and write the number. Tick the number of more objects and find how many more.



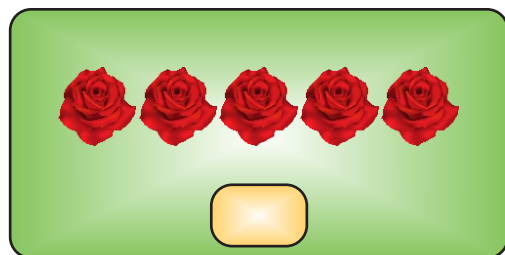
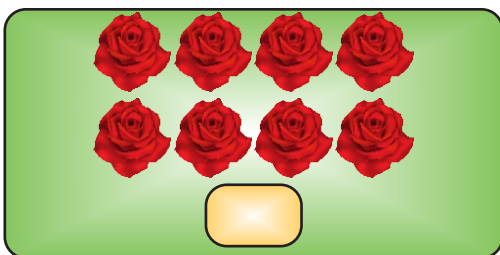
$$6 - 4 = 2$$

6 is more than 4 by 2



$$\square - \square = \square$$

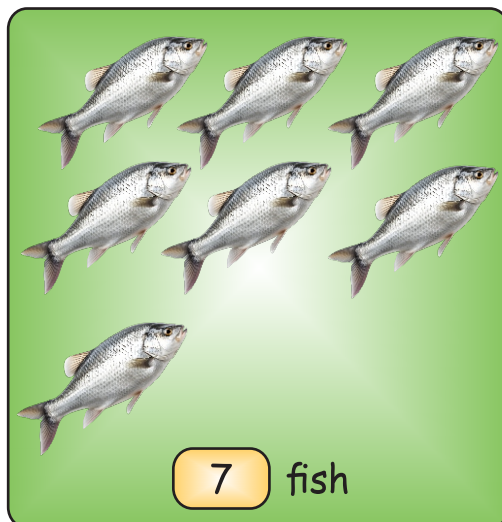
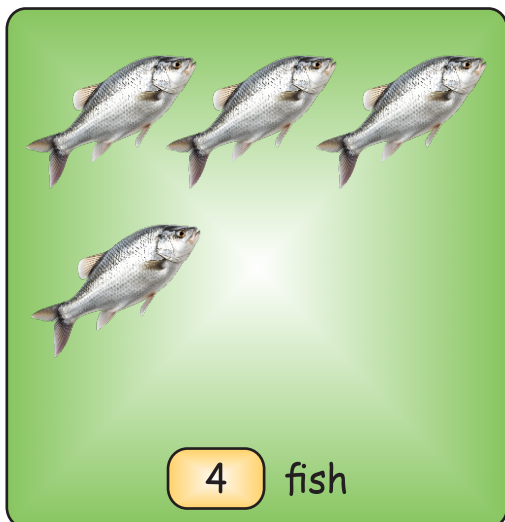
__ is more than __ by __



$$\square - \square = \square$$

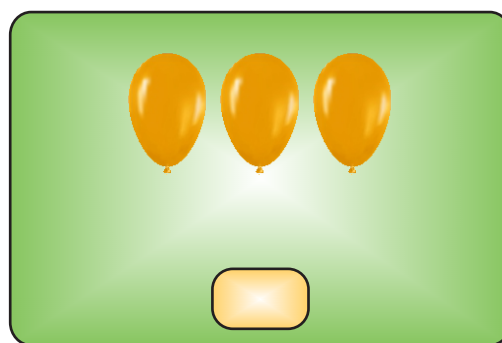
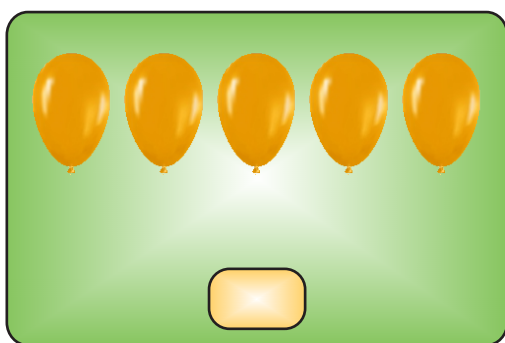
__ is more than __ by __

2. Count and write the number. Tick the number of less objects and find how many less.



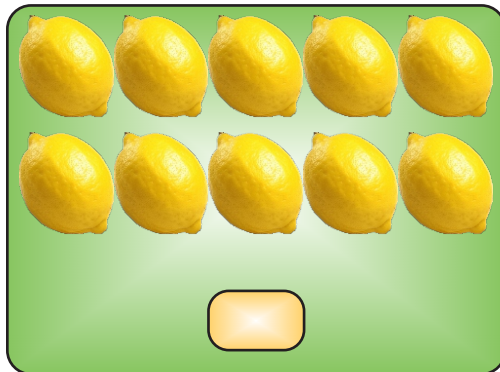
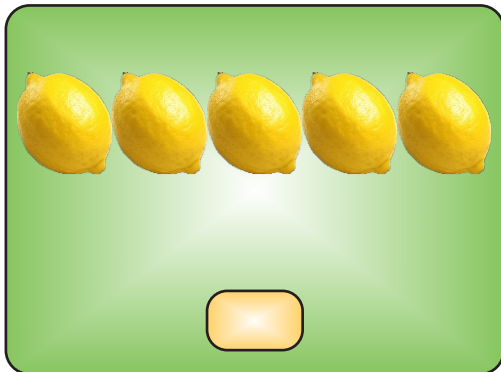
$$7 - 4 = 3$$

4 is less than 7 by 3



$$\square - \square = \square$$

___ is less than ___ by ___



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

$\boxed{}$ is less than $\boxed{}$ by $\boxed{}$

Addition of 1-digit numbers

We can add 1-digit numbers by using addition facts or by just counting together.

Example Add the following numbers mentally.

$$\boxed{5 + 2 = 7}$$

$$\boxed{7 + 3 = 10}$$

$$\boxed{3 + 0 = 3}$$

$$\boxed{4 + 9 = 13}$$

Example Add mentally.

$$\boxed{2 + 3 + 6 = 11}$$

Explanation:

First we add any two numbers then add the result with the remaining number.

$$2 + 3 + 6 = 11$$



Activity

Add the following mentally.

$$6 + 2 = \boxed{8}$$

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

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



Activity

Add the following mentally.

$$6 + 4 + 5 = \boxed{15}$$

10

$$7 + 4 + 2 = \boxed{}$$

11

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

11

Longhand addition: In long hand addition, we add numbers vertically by aligning the place values as explained in the following example

Example Add 6 and 8 by long hand addition

$$\begin{array}{r} 6 \\ + 8 \\ \hline 14 \end{array}$$

Explanation:

Ten	One
-----	-----

$$\begin{array}{r} 6 \\ + 8 \\ \hline \end{array}$$



Ten	One
-----	-----

$$\begin{array}{r} 6 \\ + 8 \\ \hline 4 \end{array}$$

1



Ten	One
-----	-----

$$\begin{array}{r} 6 \\ + 8 \\ \hline 14 \end{array}$$

1

Write numbers in a consistent order.

$6+8=14$
Write only 4 in the ones place. For 10, write a small 1 in the tens place.

Calculate the tens place. Since it is just 1 carried over, write 1 in the tens place.



Activity

Add the following.

$$\begin{array}{r} 7 \\ + 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ + 8 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ + 5 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ + 9 \\ \hline \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ 5 \curvearrowright 9 \\ + 3 \\ \hline 12 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ 4 \curvearrowright 10 \\ + 8 \\ \hline \\ \hline \end{array}$$

Mental addition of 2-digit numbers with tens

Example

Add the following mentally:

$$\boxed{54} + \boxed{20} = \boxed{74}$$

We just add ones mentally i.e. $4 + 0 = 4$

and then add tens mentally i.e. $5 + 2 = 7$

Similarly

$$\boxed{75} + \boxed{23} = \boxed{98}$$

Addition of 2-digit numbers with tens in written form

We add respective place values for addition as shown below

Example

Add the following:

T	O		T	O		T	O	
3	4		2	7		5	6	
+	5	0	+	6	0	+	2	0
8	4		8	7		7	6	

Subtraction of 1-digit numbers

We can easily subtract 1-digit numbers by using subtraction facts as done in the following examples.

Example

Perform the subtraction mentally.

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

$$\boxed{12 - 4 = 8}$$

$$\boxed{9 - 5 = 4}$$

$$\boxed{8 - 7 = 1}$$

Example

Perform the subtraction in written form.

$$\begin{array}{r} 8 \\ - 5 \\ \hline 3 \end{array}$$

$$\begin{array}{r} 7 \\ - 2 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 6 \\ - 3 \\ \hline 3 \end{array}$$

Subtraction of tens from 2-digit numbers mentally

In order to subtract tens from 2-digit numbers mentally, we only subtract ones from ones and tens from tens as done in the following example.

Example

Perform the subtraction mentally.

$$46 - 30 = 16$$

$$57 - 20 = 37$$

$$64 - 40 = 24$$

$$75 - 20 = 55$$

Subtraction of tens from 2-digit numbers in written form

We subtract respective place values for subtraction of tens from 2-digit numbers in written form as shown in the following example.

Example

Subtract the following.

$$\begin{array}{r} \text{T O} \\ 84 \\ - 60 \\ \hline 24 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 95 \\ - 30 \\ \hline 65 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 76 \\ - 10 \\ \hline 66 \end{array}$$

Exercise 3

1. Add and subtract mentally.

$5 + 4 = 9$

$8 + 7 = \square$

$6 + 7 = \square$

$9 + 0 = \square$

$3 + 5 = \square$

$9 - 3 = 6$

$8 - 5 = \square$

$5 - 2 = \square$

$7 - 6 = \square$

$4 - 0 = \square$

2. Add and subtract mentally.

$35 + 20 = 55$

$17 + 40 = \square$

$64 + 30 = \square$

$54 + 10 = \square$

$27 + 50 = \square$

$65 - 20 = 45$

$92 - 50 = \square$

$78 - 40 = \square$

$59 - 30 = \square$

$48 - 30 = \square$

3. Add and subtract the following.

$\begin{array}{r} 5 \\ + 4 \\ \hline \end{array}$	$\begin{array}{r} 6 \\ + 2 \\ \hline \end{array}$	$\begin{array}{r} 36 \\ + 20 \\ \hline \end{array}$	$\begin{array}{r} 9 \\ - 4 \\ \hline \end{array}$	$\begin{array}{r} 8 \\ - 3 \\ \hline \end{array}$	$\begin{array}{r} 23 \\ - 10 \\ \hline \end{array}$
$\begin{array}{r} 47 \\ + 30 \\ \hline \end{array}$	$\begin{array}{r} 59 \\ + 40 \\ \hline \end{array}$	$\begin{array}{r} 65 \\ + 30 \\ \hline \end{array}$	$\begin{array}{r} 85 \\ - 30 \\ \hline \end{array}$	$\begin{array}{r} 77 \\ - 40 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ - 20 \\ \hline \end{array}$
$\begin{array}{r} 28 \\ + 30 \\ \hline \end{array}$	$\begin{array}{r} 81 \\ + 50 \\ \hline \end{array}$	$\begin{array}{r} 73 \\ + 40 \\ \hline \end{array}$	$\begin{array}{r} 82 \\ - 20 \\ \hline \end{array}$	$\begin{array}{r} 45 \\ - 30 \\ \hline \end{array}$	$\begin{array}{r} 29 \\ - 10 \\ \hline \end{array}$

Mental Addition of a 2-digit number with 1-digit number

To add a 2-digit number with 1-digit number mentally, we only add ones of both numbers as explained in the following examples.

$$\begin{array}{c} \text{56} + \text{3} = \text{59} \quad | \quad \text{23} + \text{5} = \text{28} \end{array}$$

Addition of a 2-digit number with 1-digit number in written form

To add a 2-digit number with 1-digit number, we add place value of ones in written form as explained by the following example.

Example

$$\begin{array}{r} \text{T O} \\ 52 \\ + 4 \\ \hline 56 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 94 \\ + 3 \\ \hline 97 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 67 \\ + 2 \\ \hline 69 \end{array}$$

Mental addition of two 2-digit numbers

For mental addition, we add ones with ones and tens with tens as explained in the following examples.

$$\begin{array}{c} \text{23} + \text{54} = \text{77} \quad | \quad \text{65} + \text{24} = \text{89} \end{array}$$

Addition of two 2-digit numbers in written form

To add two 2-digit numbers in written form, we only add respective place values as explained in the following examples.

$$\begin{array}{r} \text{T O} \\ 52 \\ + 36 \\ \hline 88 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 64 \\ + 25 \\ \hline 89 \end{array}$$

$$\begin{array}{r} \text{T O} \\ 86 \\ + 12 \\ \hline 98 \end{array}$$

Mental subtraction of a 2-digit number with 1-digit number

For this subtraction, we only subtract ones as explained in the following example.

$$\begin{array}{c} \text{56} \\ \text{3} \\ \hline \end{array} = \text{53} \quad | \quad \begin{array}{c} \text{75} \\ \text{4} \\ \hline \end{array} = \text{71}$$

Subtraction of a 2-digit number with 1-digit number in written form

For subtraction in written form we just subtract place value of ones as explained below

T	O
5	6
-	2
5 4	

T	O
3	9
-	5
3 4	

T	O
8	4
-	3
8 1	

Mental subtraction of two 2-digit numbers

For mental subtraction we subtract ones from ones and tens from tens as explained below.

$$\begin{array}{c} \text{67} \\ \text{23} \\ \hline \end{array} = \text{44} \quad | \quad \begin{array}{c} \text{89} \\ \text{53} \\ \hline \end{array} = \text{36}$$

Subtraction of two 2-digit numbers in written form

For subtraction of two 2-digit numbers in written form, we subtract the respective place values as explained in the following examples.

T	O
8	7
-	2 3
6 4	

T	O
9	5
-	6 3
3 2	

T	O
4	7
-	2 3
2 4	

Exercise 4

1. Add and subtract mentally.

$$47 + 2 = \square$$

$$15 + 3 = \square$$

$$92 + 6 = \square$$

$$32 + 54 = \square$$

$$51 + 43 = \square$$

$$38 - 5 = \square$$

$$47 - 7 = \square$$

$$88 - 5 = \square$$

$$75 - 42 = \square$$

$$96 - 43 = \square$$

3. Add and subtract the following.

$$\begin{array}{r} \text{TO} \\ 35 \\ + 3 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 62 \\ + 7 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 48 \\ - 4 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 99 \\ - 8 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 93 \\ + 4 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 24 \\ + 3 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 56 \\ - 3 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 79 \\ - 6 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 24 \\ + 63 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 66 \\ + 23 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 28 \\ - 15 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 43 \\ - 21 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 12 \\ + 85 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 48 \\ + 30 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 52 \\ - 41 \\ \hline \hline \end{array}$$

$$\begin{array}{r} \text{TO} \\ 68 \\ - 35 \\ \hline \hline \end{array}$$

Solve real-life word problems of addition and subtraction

Let us see some real - life problems of addition and subtraction.

Example 1

Hina has 20 rupees
 Her friend has 15 rupees
 $+$
 Total amount is 35 rupees



Example 2

Moeen bought 15 kg of flour
 His son bought 5 kg of flour
 $+$
 Total quantity 20 kg of flour



Example 3

Total number of students in a class = 29
 Number of absent students = -4
 $+$
 Number of present students = 25



Example 4

A teacher has two number cards.

Sum of numbers = 54
 If one card has number = -34
 $+$
 The missing number = 20



Exercise 5

1. Number of girls in a class = 16
Number of boys in the class = 23
Total number of students =

2. Abdul Rafay has = 36 rupees
Muhammad Taha has = 52 rupees
Their total amount =

3. Faiza bought 60 grams of almonds
Elsa bought 30 grams of almonds
Total weight = grams

4. A shopkeeper has = 46 eggs
He sold = 23 eggs
The number of remaining eggs =

5. The total cost of two toys = 95 rupees
Cost of one toy = 40 rupees
The cost of other toy =

6. Total number of parrots on a tree = 26
Number of parrots that flew = 12
The number of remaining parrots =

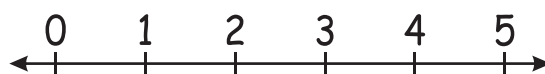
Estimation of the answer of addition and subtraction questions.

For estimation we will learn rounding off a number

Rounding a number means making the number simple

For rounding a number, we should know the number line.

A number line is the line with numbers as shown below.

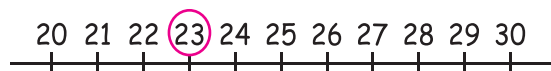


Note: Divisions must be equal on the line.

At this stage, we round numbers to the nearest ten as explained in the following examples.

Example Round off 23 to the nearest ten.

Solution:



20 is nearer to 23

So 23 is rounded to 20

we say 23 is rounded down to 20

i.e. 23 ↓ 20

Explanation:

1. First we, identify two tens.
One ten before 23 and other after 23.
Here 20 is before 23 and 30 is after 23.
2. Draw a number line indicating numbers from 20 to 30
3. See which ten is nearer to 23
Here 20 is nearer to 23. So 23 is rounded to 20


Rounding down







We ignore ones if they are less than 5 and keep the tens same.

Unit 2: Number Operations

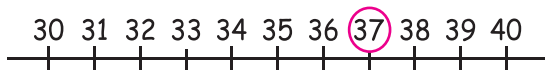
Some examples of rounding down are given below

Rounding down 

42		40	64		60
51		50	83		80

Example Round off 37 to the nearest ten

Solution:



40 is nearer to 37

So 37 is rounded to 40

We say 37 is rounded up to 40

i.e.   

Explanation:





1. First we, identify two tens. One ten before 37 and other after 37. Here 30 is before 37 and 40 is after 37.
2. Draw a number line indicating numbers from 30 to 40
3. See which ten is nearer to 37. Here 40 is nearer to 37. So 37 is rounded to 40

Rounding up 

We ignore ones if they are 5 or more and increase one ten.

Some examples of rounding up are given below

Rounding up 

76		80	39		40
45		50	8		10

Estimation means getting approximate answer by rounding

Let us estimate answers of addition and subtraction by the following examples.

Example Estimate the sum of 46 and 21

Solution:

Here 46 ↑ 50

and 21 ↓ 20

Now $50 + 20 = 70$

So Estimated sum = 70

$$\begin{array}{r} 50 \\ + 20 \\ \hline 70 \end{array}$$

Example Estimate the difference: $82 - 36$

Solution:

Here 82 ↓ 80

and 26 ↑ 30

Now $80 - 30 = 50$

So The estimated difference = 50

$$\begin{array}{r} 80 \\ - 30 \\ \hline 50 \end{array}$$

Exercise 6

1. Match by rounding the numbers.

72	30
86	60
17	50
28	20
45	70
62	90

(An arrow points from the number 28 in the left column to the number 30 in the right column.)

2. Estimate the following.

$18 + 58 = \square$

$32 + 49 = \square$

$23 + 56 = \square$

$27 + 61 = \square$

$64 + 15 = \square$

$46 - 21 = \square$

$66 - 53 = \square$

$84 - 17 = \square$

$55 - 39 = \square$

$78 - 22 = \square$

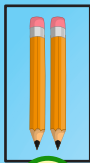
Counting and writing in 2s, 5s and 10s using concrete objects

Counting in 2s

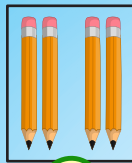


Activity

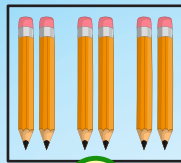
Count and write in 2s



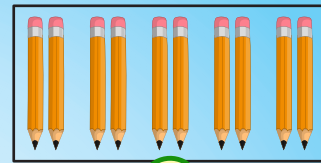
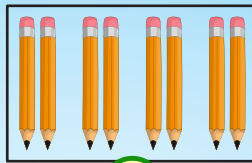
2



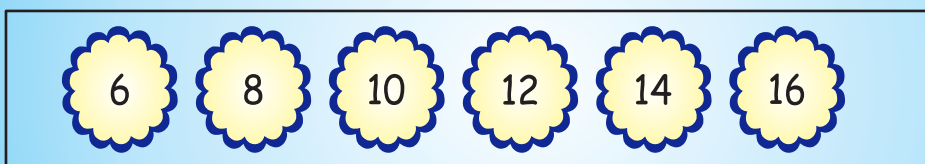
4



6



Count in 2s



Count in 2s and write the missing numbers





Activity

Count and write in 5s.

5	10	15		

Count in 5s

20 25 30 35 40 45 50

Count in 5s and write the missing numbers

5 15 30 45



Activity

Count and write in 10s

10	20	30		

Count in 10s

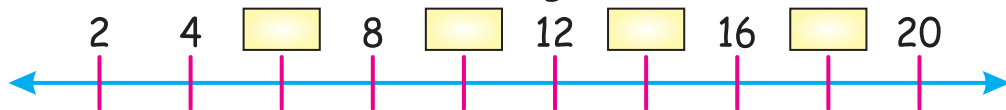
10 20 30 40 50 60 70 80 90

Count in 5s and write the missing numbers

10 30 60 80

Exercise 7

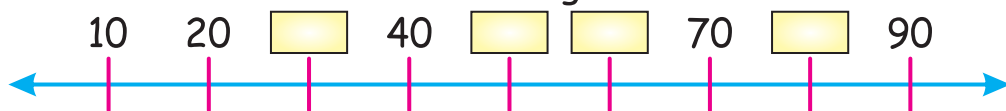
1. Count in 2s and write the missing numbers.



2. Count in 5s and write the missing numbers.



3. Count in 10s and write the missing numbers.



4. Write the missing numbers in empty squares by count in 2s.

1	<input type="text"/>	3	<input type="text"/>	5	<input type="text"/>	7	<input type="text"/>	9	<input type="text"/>
11	<input type="text"/>	13	<input type="text"/>	15	<input type="text"/>	17	<input type="text"/>	19	<input type="text"/>
21	<input type="text"/>	23	<input type="text"/>	25	<input type="text"/>	27	<input type="text"/>	29	<input type="text"/>
31	<input type="text"/>	33	<input type="text"/>	35	<input type="text"/>	37	<input type="text"/>	39	<input type="text"/>
41	<input type="text"/>	43	<input type="text"/>	45	<input type="text"/>	47	<input type="text"/>	49	<input type="text"/>
51	<input type="text"/>	53	<input type="text"/>	55	<input type="text"/>	57	<input type="text"/>	59	<input type="text"/>
61	<input type="text"/>	63	<input type="text"/>	65	<input type="text"/>	67	<input type="text"/>	69	<input type="text"/>
71	<input type="text"/>	73	<input type="text"/>	75	<input type="text"/>	77	<input type="text"/>	79	<input type="text"/>
81	<input type="text"/>	83	<input type="text"/>	85	<input type="text"/>	87	<input type="text"/>	89	<input type="text"/>
91	<input type="text"/>	93	<input type="text"/>	95	<input type="text"/>	97	<input type="text"/>	99	<input type="text"/>

5. Count in 5s and write the missing numbers in empty squares.

1	2	3	4		6	7	8	9	
11	12	13	14		16	17	18	19	
21	22	23	24		26	27	28	29	
31	32	33	34		36	37	38	39	
41	42	43	44		46	47	48	49	
51	52	53	54		56	57	58	59	
61	62	63	64		66	67	68	69	
71	72	73	74		76	77	78	79	
81	82	83	84		86	87	88	89	
91	92	93	94		96	97	98	99	

6. Count in 2s and write the missing numbers.



7. Count in 5s and write the missing numbers.



8. Count in 10s and write the missing numbers.

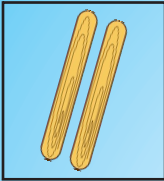
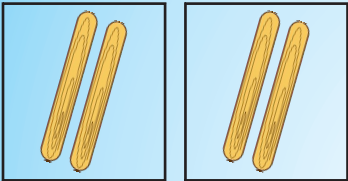
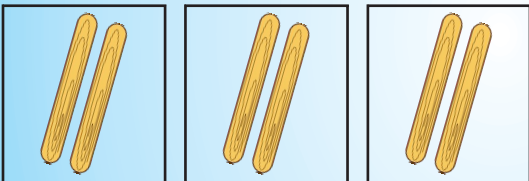


Recognizing counting in 2s, 5s and 10s as multiplication tables of 2, 5 and 10.



Activity

Count in 2s (twos) and write

Objects	Counting
	1 twos are 2
	2 twos are 4
	3 twos are 6

Similarly,

- 4 twos are 8
- 5 twos are 10
- 6 twos are 12
- 7 twos are 14
- 8 twos are 16
- 9 twos are 18
- 10 twos are 20

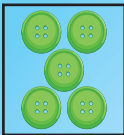
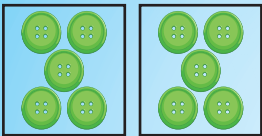
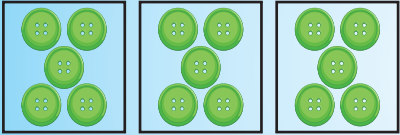
Multiplication table of 2

1	twos are	2
2	twos are	4
3	twos are	6
4	twos are	8
5	twos are	10
6	twos are	12
7	twos are	14
8	twos are	16
9	twos are	18
10	twos are	20



Activity

Count in 5s (fives) and write

Objects	Counting
	1 fives are 5
	2 fives are 10
	3 fives are 15

Similarly,

4	fives are	20
5	fives are	25
6	fives are	30
7	fives are	35
8	fives are	40
9	fives are	45
10	fives are	50


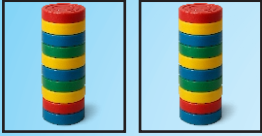

Multiplication table of 5

1	fives are	5
2	fives are	10
3	fives are	15
4	fives are	20
5	fives are	25
6	fives are	30
7	fives are	35
8	fives are	40
9	fives are	45
10	fives are	50



Activity

Count in 10s (tens) and write

Objects	Counting
	1 tens are 10
	2 tens are 20
	3 tens are 30

Similarly,

4	tens are	40
5	tens are	50
6	tens are	60
7	tens are	70
8	tens are	80
9	tens are	90
10	tens are	100

Note:

10 tens are called one hundred and we write it as 100


Multiplication table of 10

1	tens are	10
2	tens are	20
3	tens are	30
4	tens are	40
5	tens are	50
6	tens are	60
7	tens are	70
8	tens are	80
9	tens are	90
10	tens are	100

Exercise 8

1. Match the following.

4 twos	14
5 twos	16
6 twos	8
7 twos	10
8 twos	12



2. Match the following.

3 fives	20
4 fives	30
5 fives	15
6 fives	35
7 fives	25

An arrow points from '3 fives' to '15'.

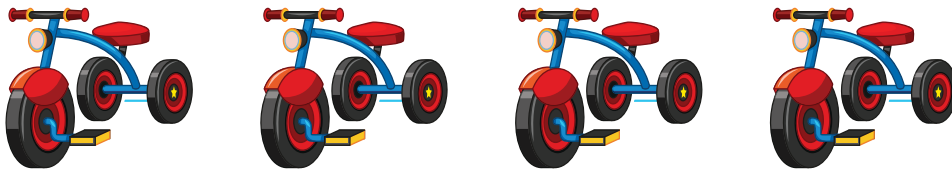
3. Match the following.

2 tens	30
3 tens	20
4 tens	50
5 tens	60
6 tens	40

An arrow points from '2 tens' to '20'.

Recognizing multiplication as repeated addition

Let us count the number of wheels of the following tricycles.



We see each tricycle has 3 wheels.

So, we only add 3 repeatedly four times.

i.e $3 + 3 + 3 + 3 = 12$

or Four times 3 is 12

We write it as $4 \times 3 = 12$
and read it as "4 multiply 3 is equal to 12"

Note:

"x" is the sign of multiplication



Activity

Objects	Counting
	$2 + 2 + 2 = 6$ or $3 \text{ times } 2 = 6$ or $3 \times 2 = 6$
	$4 + 4 + 4 = 12$ or $3 \text{ times } 4 = 12$ or $3 \times 4 = 12$
	$5 + 5 + 5 + 5 = 20$ or $4 \text{ times } 5 = 20$ or $4 \times 5 = 20$



$$6 + 6 + 6 + 6 + 6 = 30$$

or $5 \text{ times } 6 = 30$

or $5 \times 6 = 30$



Activity

Match the following

$$7 + 7 + 7$$

$$6 \times 2$$

$$8 + 8 + 8 + 8$$

$$3 \times 5$$

$$2 + 2 + 2 + 2 + 2 + 2$$

$$4 \times 8$$

$$4 + 4 + 4 + 4 + 4$$

$$3 \times 7$$

$$5 + 5 + 5$$

$$5 \times 4$$

Exercise 9

1. Match the following.

$9 + 9 + 9$

5 times 4

$6 + 6 + 6 + 6$

6 times 3

$4 + 4 + 4 + 4 + 4$

3 times 9

$2 + 2 + 2 + 2 + 2$

4 times 6

$3 + 3 + 3 + 3 + 3 + 3$

5 times 2

2. Match the following.

7 times 2

9×5

9 times 5

8×3

4 times 6

7×2

8 times 3

5×4

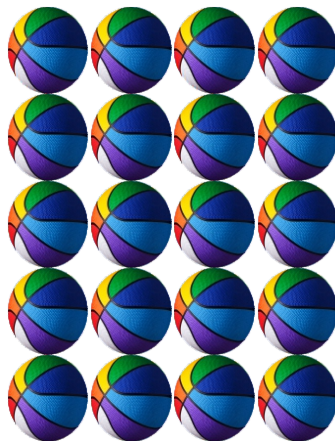
5 times 4

4×6

Recognizing that the multiplication of any two numbers can be done in any order.

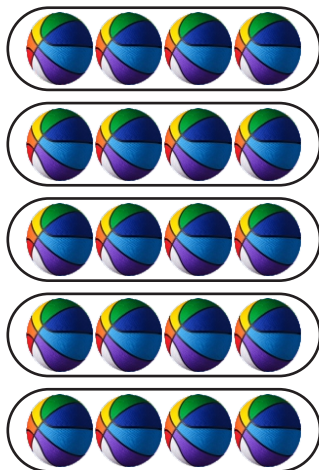
Example

Count the objects and write



We can count in two ways

First way



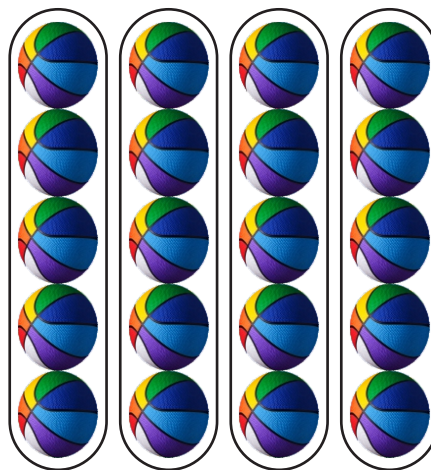
5 times 4

or 5×4

i.e. $5 \times 4 = 20 = 4 \times 5$

Similarly, $2 \times 6 = 6 \times 2$
 $3 \times 4 = 4 \times 3$

Second way



4 times 5

or 4×5

Exercise 10

1. Match the following.

5×6	4×6
3×7	5×8
6×4	2×9
8×5	6×5
9×2	7×3

2. Complete the following.

3	\times	8	$=$		\times	3
9	\times	4	$=$		\times	9
7	\times		$=$	6	\times	7
	\times	6	$=$	6	\times	2
5	\times	8	$=$	8	\times	

Recognizing division as repeated subtraction



Activity

Dividing 8 pieces of cake equally in the plates keeping 2 pieces of cake in each plate.



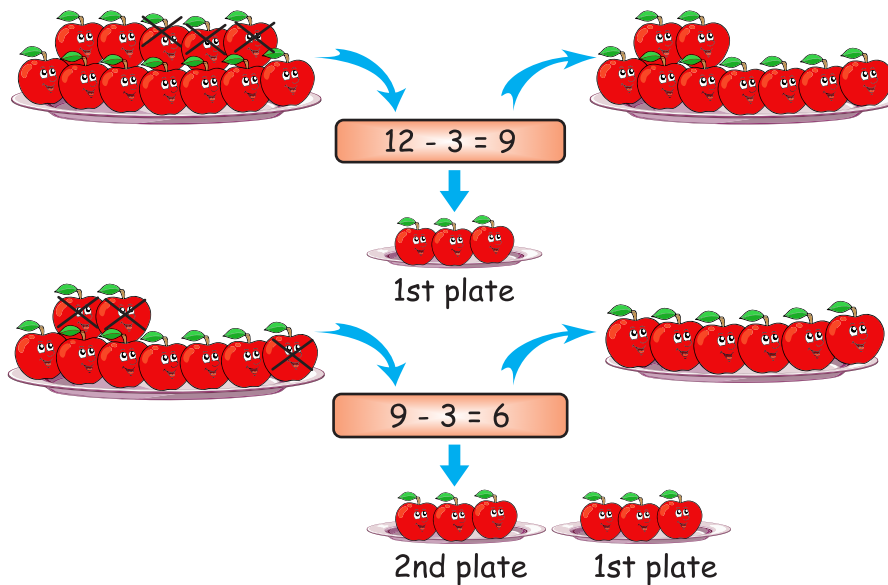
We see that 4 plates are needed. This is equal sharing of pieces of cake in 4 plates.

Division is the process of equal sharing.

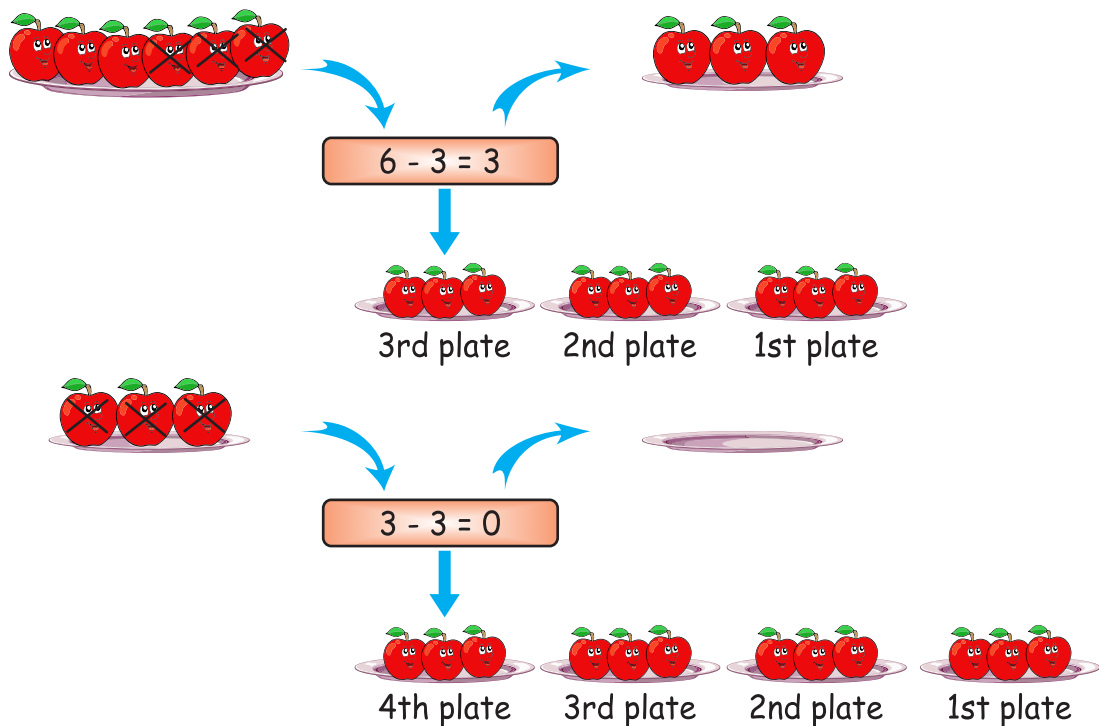
We know that multiplication is repeated addition. In the same way division is repeated subtraction as explained in the following example.

Example How many plates for 12 apples, do you need by putting 3 apples in each plate.

Solution: Let us subtract 3 apples repeatedly



Unit 2: Number Operations



We have got 4 plates of apples

In this process of division, we have subtracted 3 four times

So 12 divided by 3 is 4.

i.e. $12 \div 3 = 4$

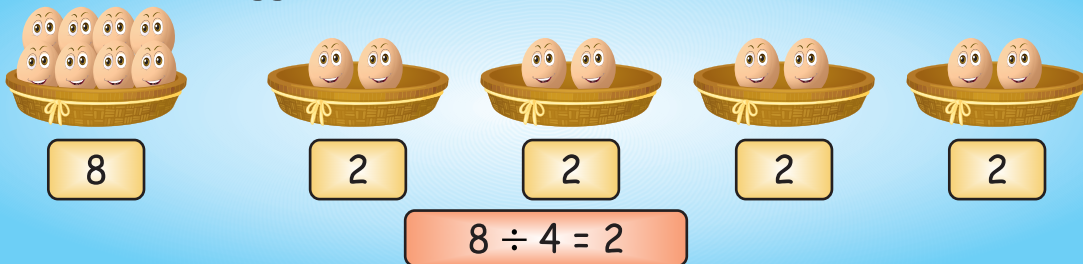
Note: We denote division by the symbol " \div "

Recognizing that division of one number by another number can not be done in any order



Activity

Divide 8 eggs in 4 baskets.



If we try to divide 4 eggs in eight basket. Let us see what happens.



We can not divide 4 eggs in 8 baskets because eggs are less and baskets are more.

So $8 \div 4$ is not same as $4 \div 8$

Hence division can not be done in any order.

Exercise 11

- How many baskets for 15 toffees, do you need by putting 3 toffees in each baskets?



$$15 - 3 = 12$$



$$12 - 3 = \boxed{}$$



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



Unit 2: Number Operations



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



$$3 - \boxed{} = \boxed{0}$$



$$\boxed{} \div \boxed{} = \boxed{}$$

So we need baskets.

2. Write "T" for true and "F" for false

$6 \div 2$ is same as $2 \div 6$

$8 \div 2$ is not same as $2 \div 8$

$10 \div 2 = 2 \div 10$

$18 \div 6$ is not same as $6 \div 18$

$15 \div 3 = 3 \div 15$

Solving simple real - life word problem involving multiplication and division.

Example 1: Each student has 5 balls. How many balls do 4 students have.

Solution:



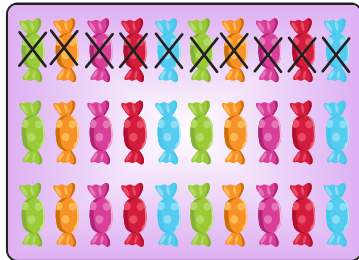
$$4 \times 5 = 20$$

So total number of balls = 20

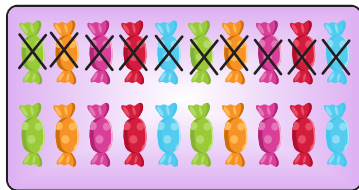
Example 2:

How many packets for 30 toffees, do we need by putting 10 toffees in each packet?

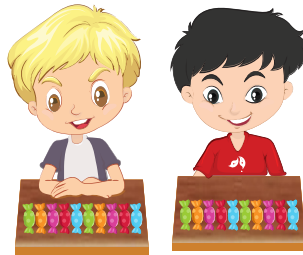
Solution:



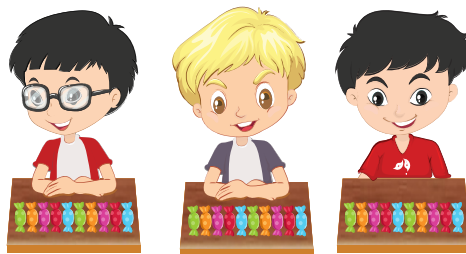
$$30 - 10 = 20$$



$$20 - 10 = 10$$



$$10 - 10 = 0$$




So $30 \div 10 = 3$

So we need 3 packets.

Exercise 12

1. A car has four wheels. How many wheels do 5 cars have?

Solution:




$$4 + 4 + 4 + 4 + 4 = 5 \text{ times } 4$$

$$= 20 \text{ wheels}$$

2. A bicycle has 2 wheels. How many wheels do 6 bicycles have?

Solution:

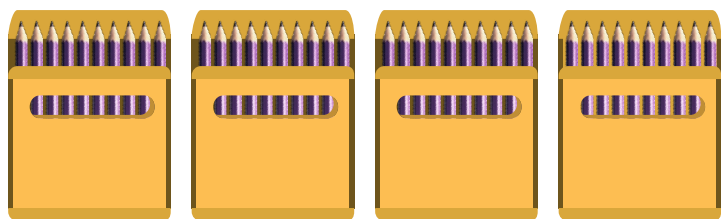


$$\square + \square + \square + \square + \square + \square = \square \text{ times } \square$$

$$= \square \text{ wheels}$$

3. A packet has 10 pencils. How many pencils are in 4 packets?

Solution:

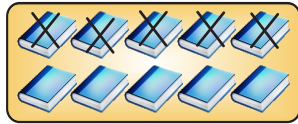


$$\square + \square + \square + \square = \square \text{ times } \square$$

$$= \square \text{ pencils}$$

4. Ten books are divided equally among students. How many students do we need if each student gets 5 books?

Solution:



$$\square - \square = \square$$



$$\square - \square = \square$$



$$\square \div \square = \square, \text{ so number of student} = \square$$

5. Twelve mangoes are divided equally in the plates. How many plates are needed if each plate has 4 mangoes.

Solution:



$$\square - \square = \square$$



$$\square - \square = \square$$



$$\square - \square = \square$$



$$\square \div \square = \square, \text{ so number of plates} = \square$$

Unit

3

MONEY

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Identify Pakistani coins (Rs.1,2,5 and 10) and notes (Rs. 10, 20, 50, 100, and 500).
- ✓ Solve money problems involving addition and subtraction of Pakistani money.



Money

Identification of Pakistani coins and notes.

Pakistani Coins



1 rupee coin

Rs. 1



2 rupee coin

Rs. 2



5 rupee coin

Rs. 5



10 rupee coin

Rs. 10



Pakistani Notes



10 rupee note

Rs. 10



20 rupee note

Rs. 20



50 rupee note

Rs. 50



100 rupee note

Rs. 100



500 rupee note

Rs. 500



Exercise 1

1. Match the following.



Rs. 1



Rs. 2



Rs. 5



Rs. 10

2. Match the following.



Rs. 10



Rs. 20



Rs. 50



Rs. 100



Rs. 500

Solving money problems.



Activity

What is the total price of the following items.



$$\text{Rs. } 10 + \text{Rs. } 5 = \text{Rs. } 15$$

Rs. 25



Rs. 15



$$\text{Rs. } 25 + \text{Rs. } 15 = \text{Rs. } \boxed{}$$

Rs. 20



Rs. 50



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 15



Rs. 5

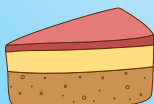


$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 30



Rs. 20



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$



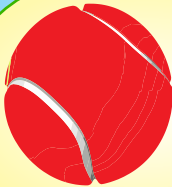
Activity

You have Rs. 99. How much money is left after the purchase of the given item?



Rs. 50

$$\text{Rs. } 99 - \text{Rs. } 50 = \text{Rs. } 49$$



Rs. 75

$$\text{Rs. } 99 - \text{Rs. } 75 = \text{Rs. } \boxed{}$$



Rs. 65

$$\text{Rs. } \boxed{} - \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$



Rs. 10

$$\text{Rs. } \boxed{} - \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$



Rs. 90

$$\text{Rs. } \boxed{} - \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Exercise 2

1. Find the total cost of the following items.

Rs. 5



Rs. 10



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 50



Rs. 20



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 15



Rs. 50



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 15



Rs. 20



$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Rs. 10




Rs. 20




$$\text{Rs. } \boxed{} + \text{Rs. } \boxed{} = \text{Rs. } \boxed{}$$

Unit 3: Money


2. Aafia has 95 rupees. How much amount is left if she purchases the following items.

 **Rs. 65**


Rs. - Rs. = Rs.

 **Rs. 30**


Rs. - Rs. = Rs.

 **Rs. 75**

Rs. - Rs. = Rs.

 **Rs. 55**

Rs. - Rs. = Rs.

 **Rs. 20**

Rs. - Rs. = Rs.

Unit

4

FRACTIONS

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Recognize, find, name and write fractions: half ($\frac{1}{2}$), quarter ($\frac{1}{4}$), two-quarters ($\frac{2}{4}$), three-quarters ($\frac{3}{4}$) of a length, shape, set of objects or quantity using pictorial representations.
- ✓ Add and subtract simple fractions.



$\frac{1}{2}$

Recognizing and writing fractions

In daily life, we see whole objects and their parts.

For example:



It is a whole apple.



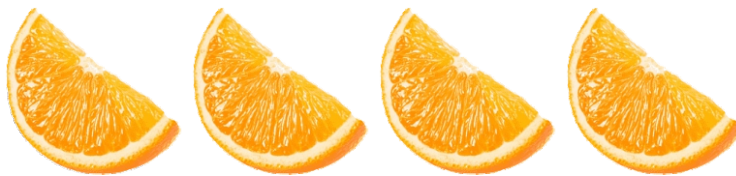
These are parts of the apple. Each part represents a fraction.

Fraction is a part of whole

Some whole objects and their fractions are shown below.

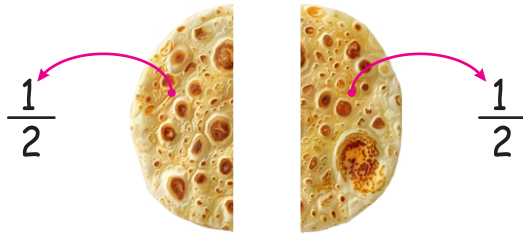
Whole

Fractions



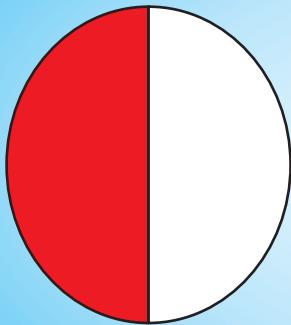
If we divide a whole in two equal parts or fractions, each part or fraction of the whole represents an HALF

A Half is written as $\frac{1}{2}$

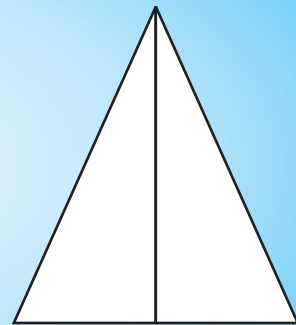
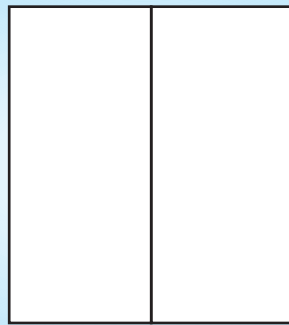


Activity

Colour one half and write it.



$\frac{1}{2}$

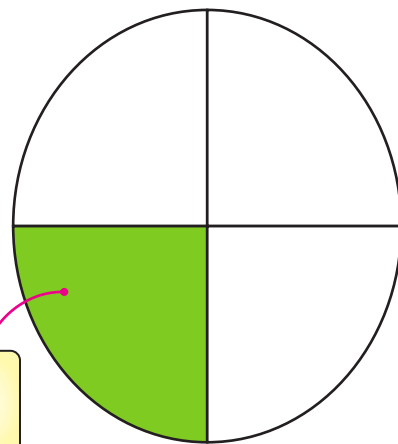


If we divide a whole in four equal parts. Each part or fraction represents quarter.

A quarter is written as $\frac{1}{4}$

Quarter

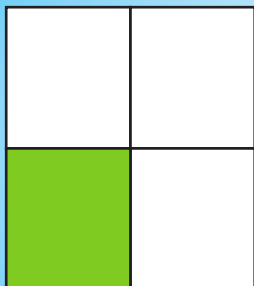
$\frac{1}{4}$



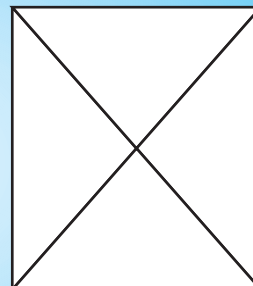
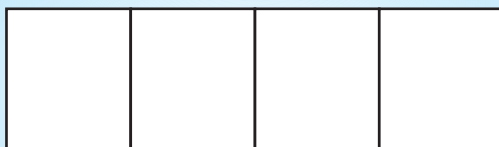


Activity

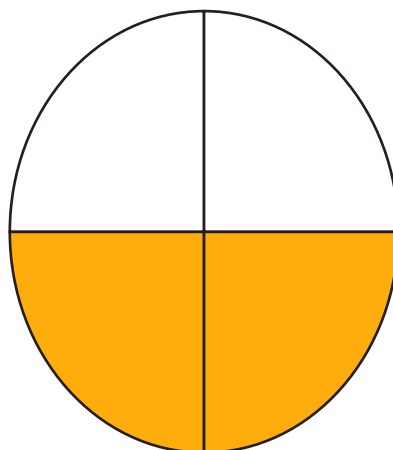
Colour a quarter and write it in the box.



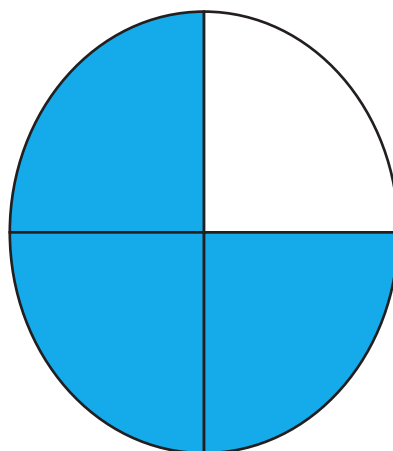
$\frac{1}{4}$



We write two quarters as $\frac{2}{4}$



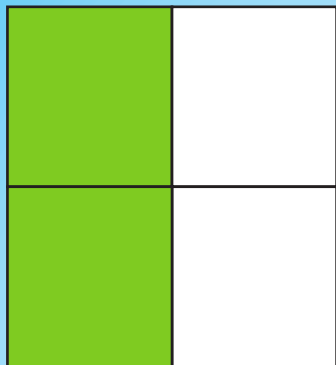
We write three quarters as $\frac{3}{4}$



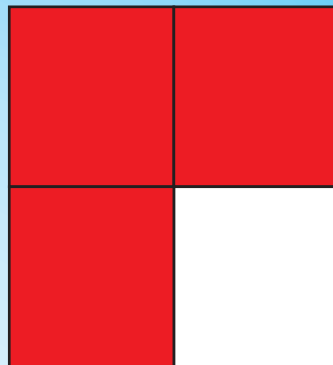
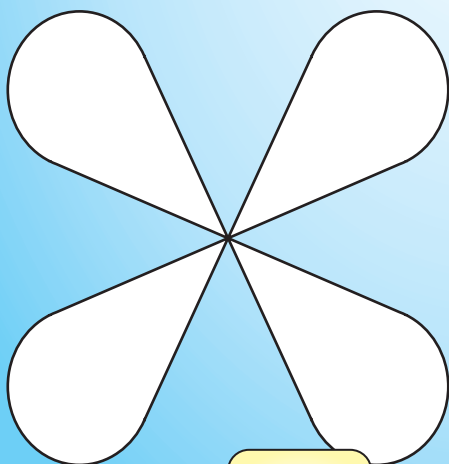
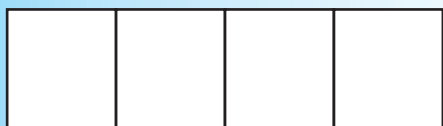


Activity

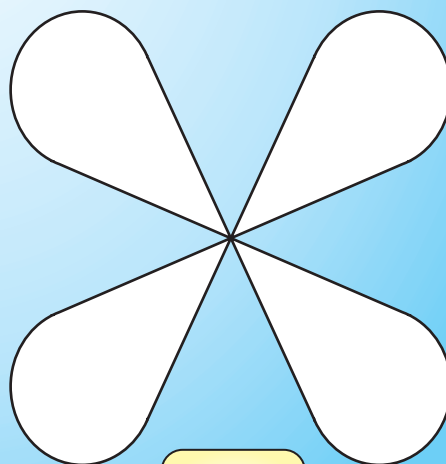
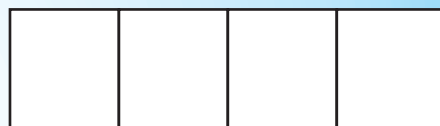
Colour two quarters and three quarters and write them.



$$\frac{2}{4}$$



$$\frac{3}{4}$$



Exercise 1

1. Tick the whole objects and cross the fractions.









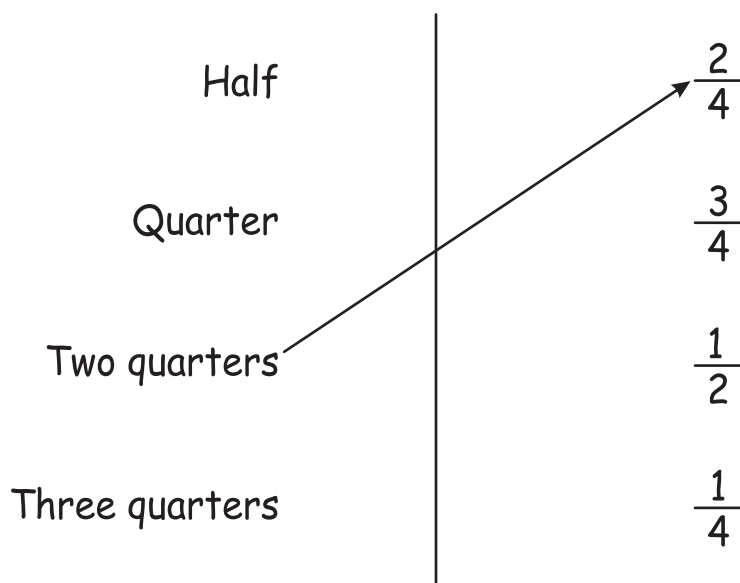





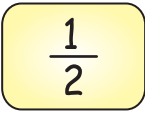








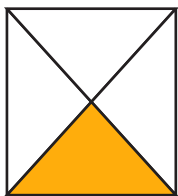
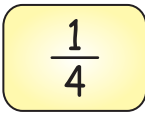
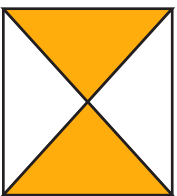
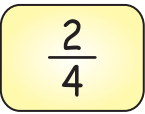
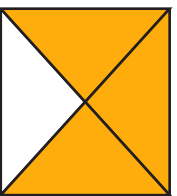
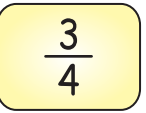
2. Match the following.

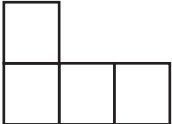

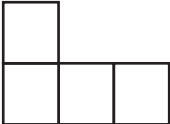

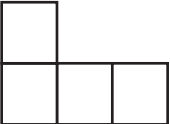









3. Colour half portion and write it in the box.

4. Colour one quarter, two quarters and three quarters. Also write it in the box.


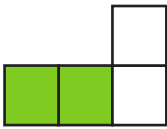
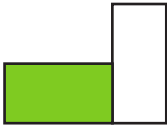
















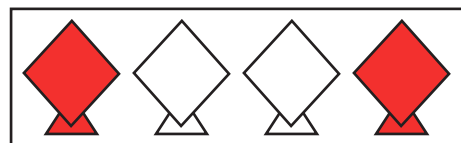
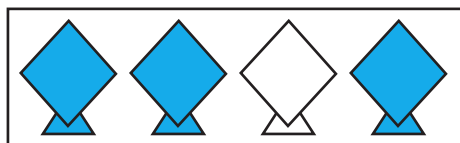
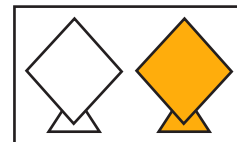
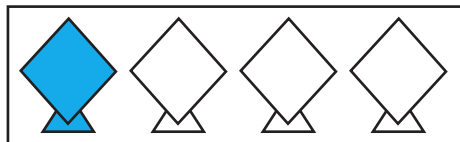
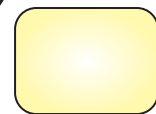
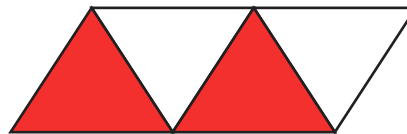
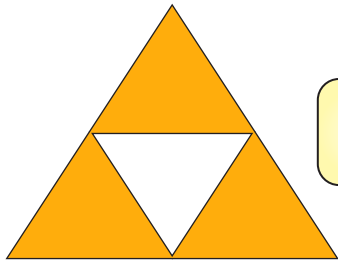
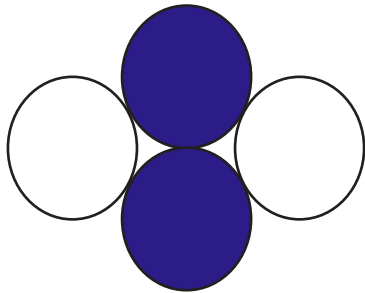
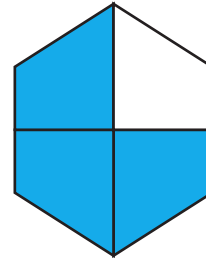
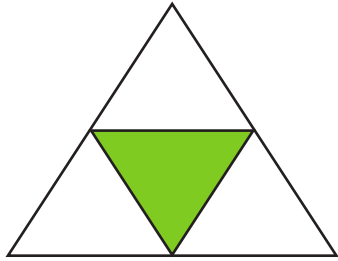
5. Match the following.

$\frac{1}{2}$
 $\frac{1}{4}$
 $\frac{2}{4}$
 $\frac{3}{4}$



6. Write the fractions for coloured parts in the given boxes.



Adding and subtracting simple fractions:

A simple fraction has two parts as shown below

$$\frac{3}{4}$$

Numerator
Denominator

Numerator:

It is the number at the top.

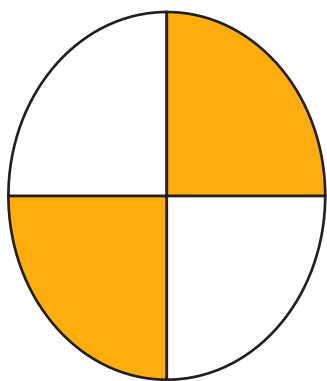
Numerator shows parts to be taken

Denominator:

It is the number at the bottom.

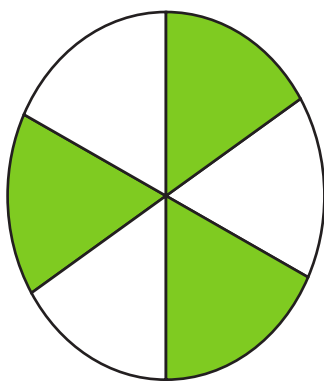
Denominator shows equal parts

Some simple fractions are given as under



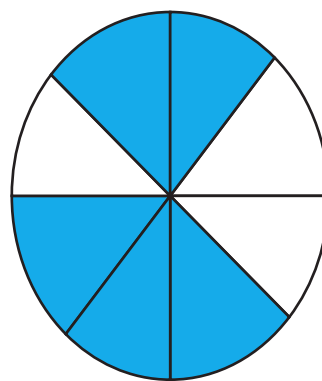
$$\frac{2}{4}$$

Numerator = 2
Denominator = 4



$$\frac{3}{6}$$

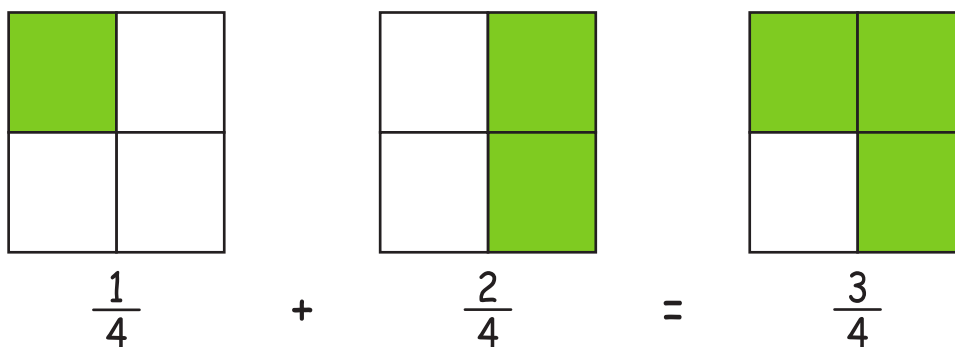
Numerator = 3
Denominator = 6



$$\frac{5}{8}$$

Numerator = 5
Denominator = 8

We can add simple fractions with same denominators as explained below.

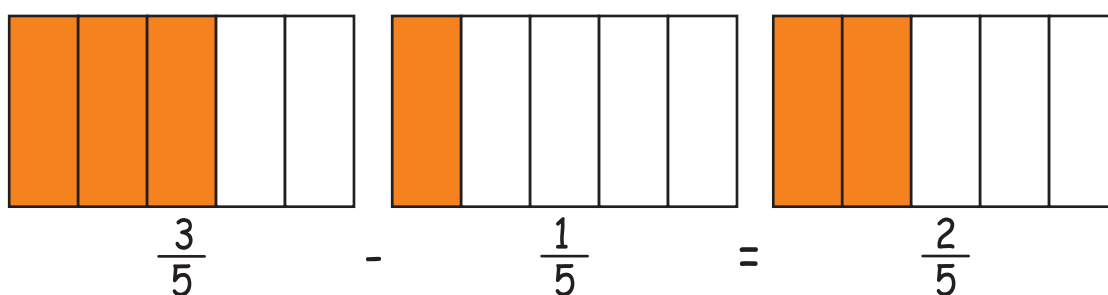


We only add **numerators** when denominators are same.

Similarly $\frac{2}{7} + \frac{3}{7} = \frac{5}{7}$

and $\frac{4}{8} + \frac{2}{8} = \frac{6}{8}$

We can subtract simple fractions when denominators are same as explained below



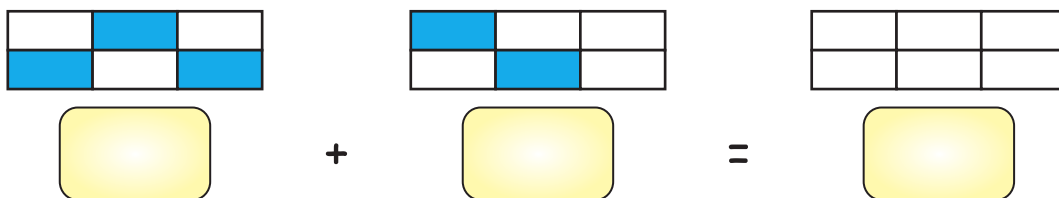
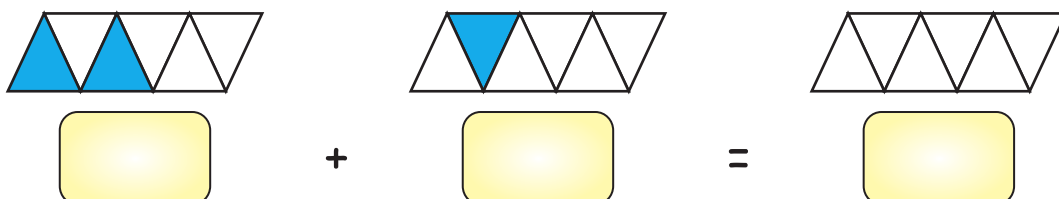
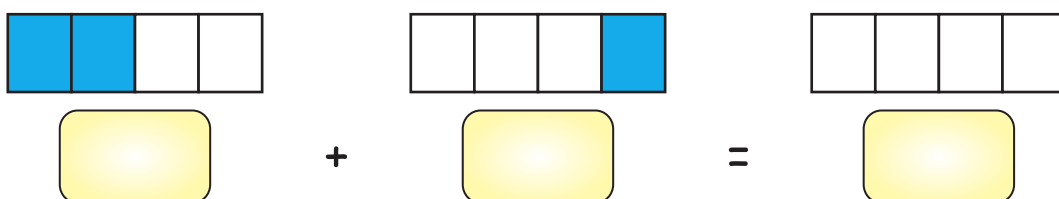
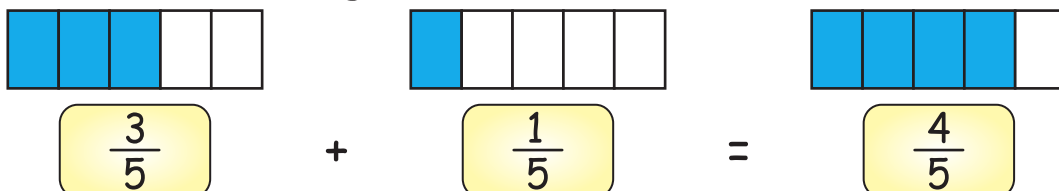
We only subtract **numerators** when denominators are same.

Similarly $\frac{4}{7} - \frac{3}{7} = \frac{1}{7}$

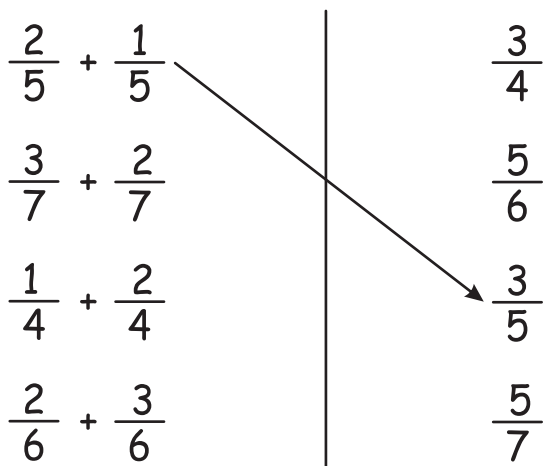
and $\frac{5}{8} - \frac{2}{8} = \frac{3}{8}$

Exercise 2

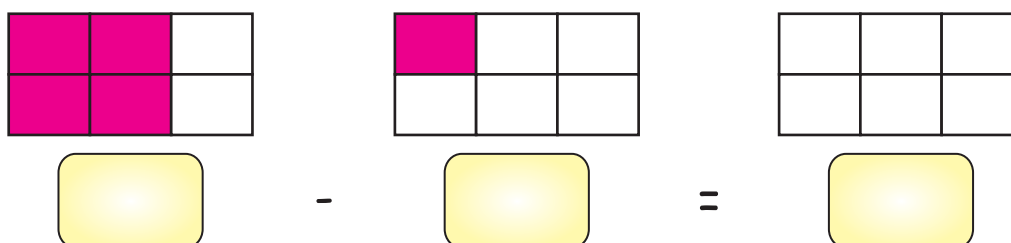
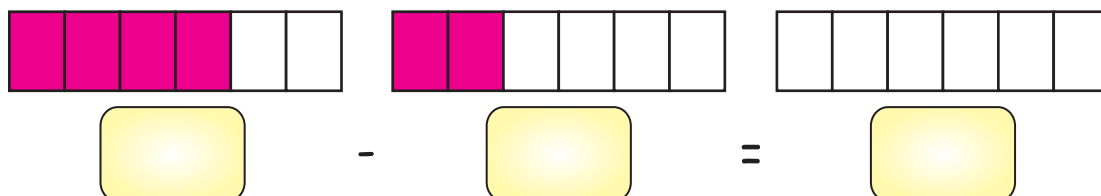
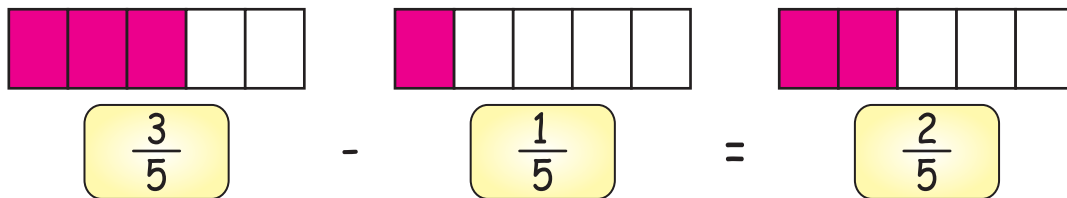
1. Add the following.



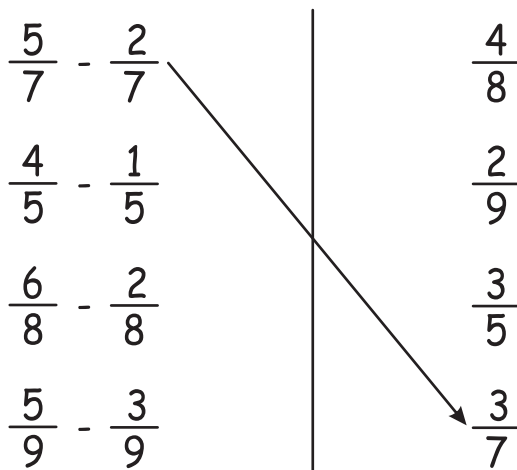
2. Match the following.



3. Subtract the following.



4. Match the following.



Unit

5

ALGEBRA

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Identify and explain repeating patterns with two core elements through pictorial and/ or visual representations e.g. $\Delta O \Delta O \Delta O$
- ✓ Identify and represent a repeating pattern using colour, size, shapes, and letters through pictorial illustration eg. $o \blacksquare o \blacksquare o \blacksquare$

BCBCBCBC



Identifying and explaining repeating pattern.

Pattern is a special arrangement of things or objects in a repeated order.

Example Look at the patterns below and tick the next object



Activity

Look at the patterns below and tick (✓) the next object in the box:

Exercise 1

1. Look at the pattern and tick next object.

Pattern: Purple circle with angry face, Green cube with happy face, Purple circle with angry face, Green cube with happy face, Purple circle with angry face, Green cube with happy face.

Options: Purple circle with angry face, Green cube with happy face.

Pattern: Soccer ball, Cricket bat, Soccer ball, Cricket bat, Soccer ball, Cricket bat.

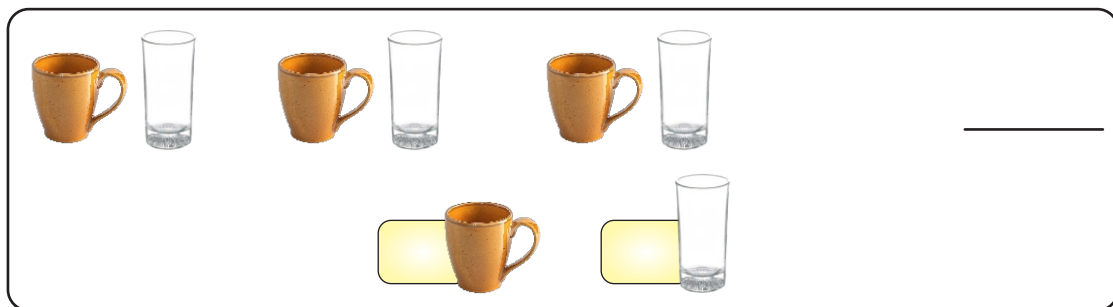
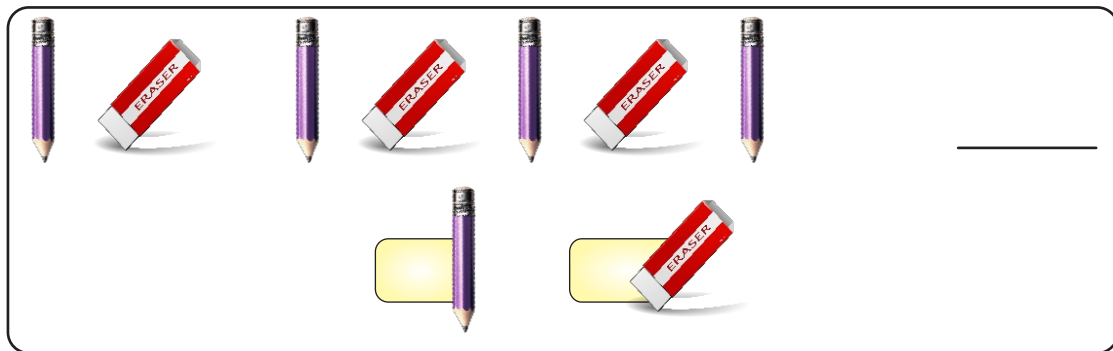
Options: Cricket bat, Soccer ball.

Pattern: Blue pyramid with angry face, Green cube with happy face, Blue pyramid with angry face, Green cube with happy face, Blue pyramid with angry face, Green cube with happy face, Blue pyramid with angry face.

Options: Blue pyramid with angry face, Green cube with happy face.

Pattern: Mango, Pomegranate, Mango, Pomegranate, Mango, Pomegranate, Mango.

Options: Mango, Pomegranate.

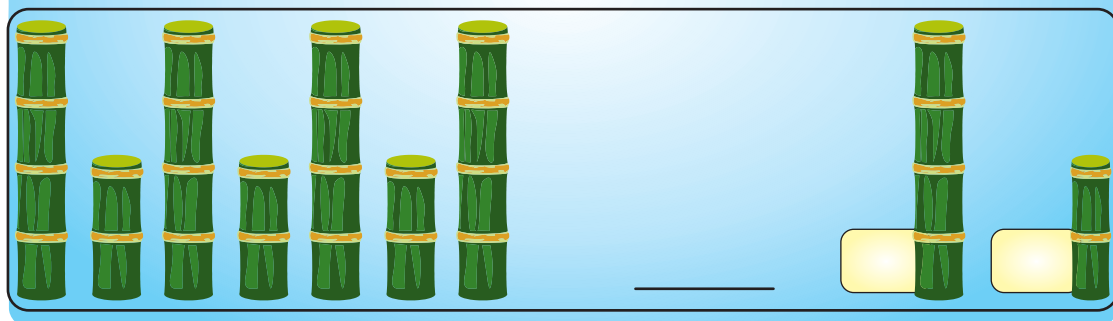
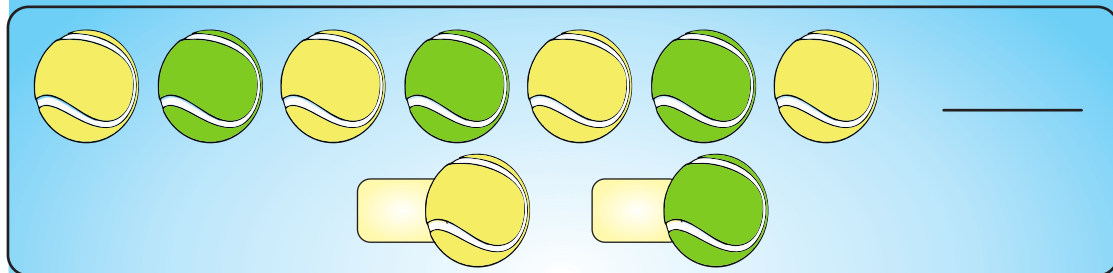


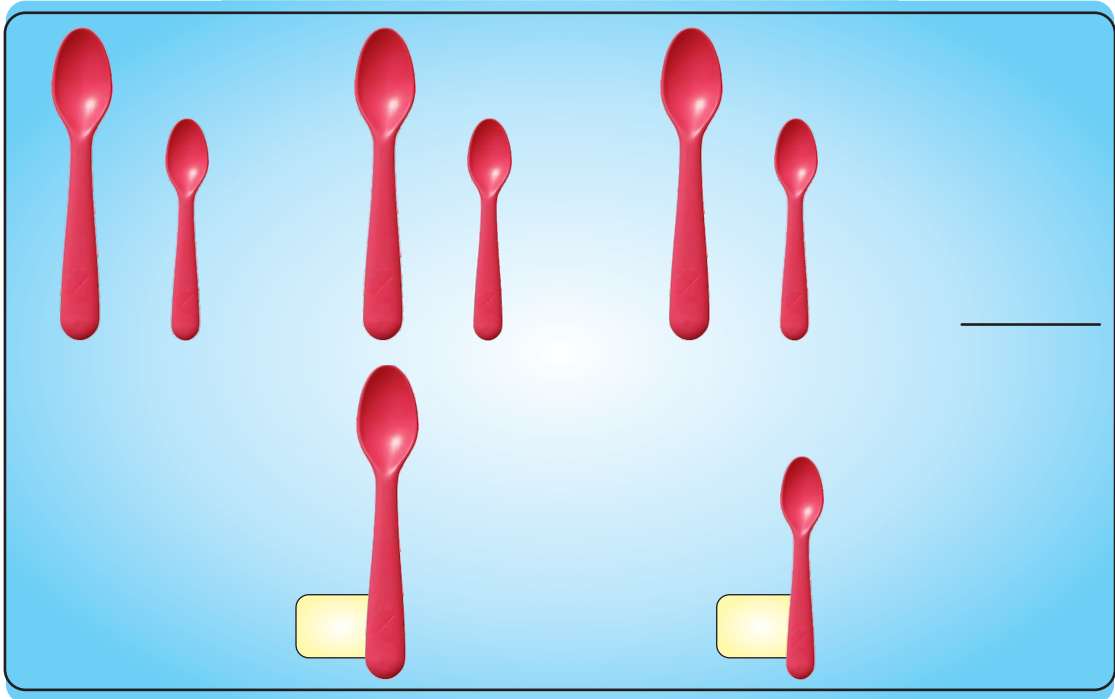
Identifying and representing repeating patterns using colours, size, shapes and letters.



Activity

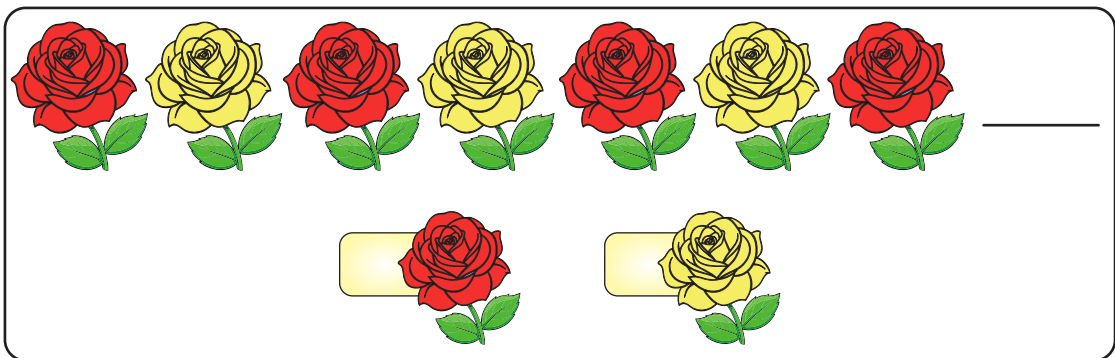
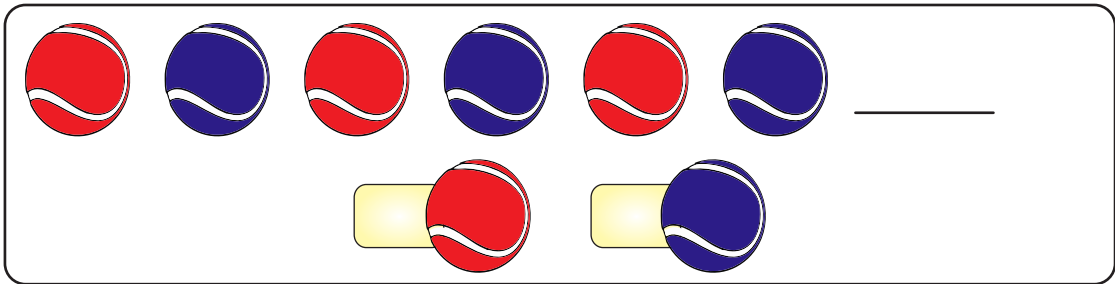
Follow the pattern and tick the next object.

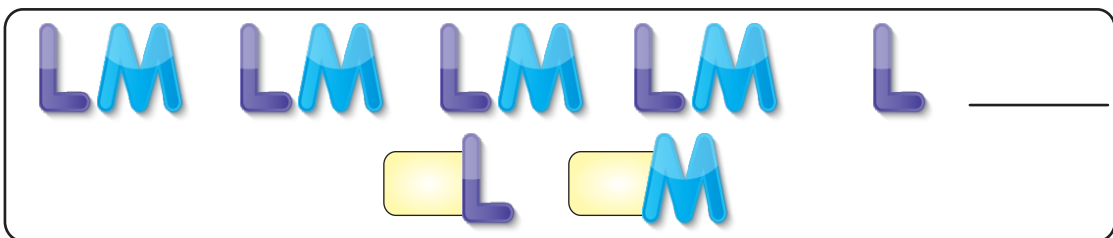
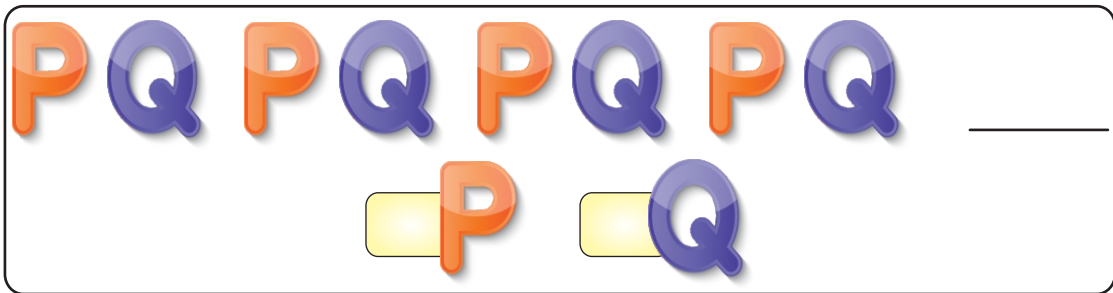
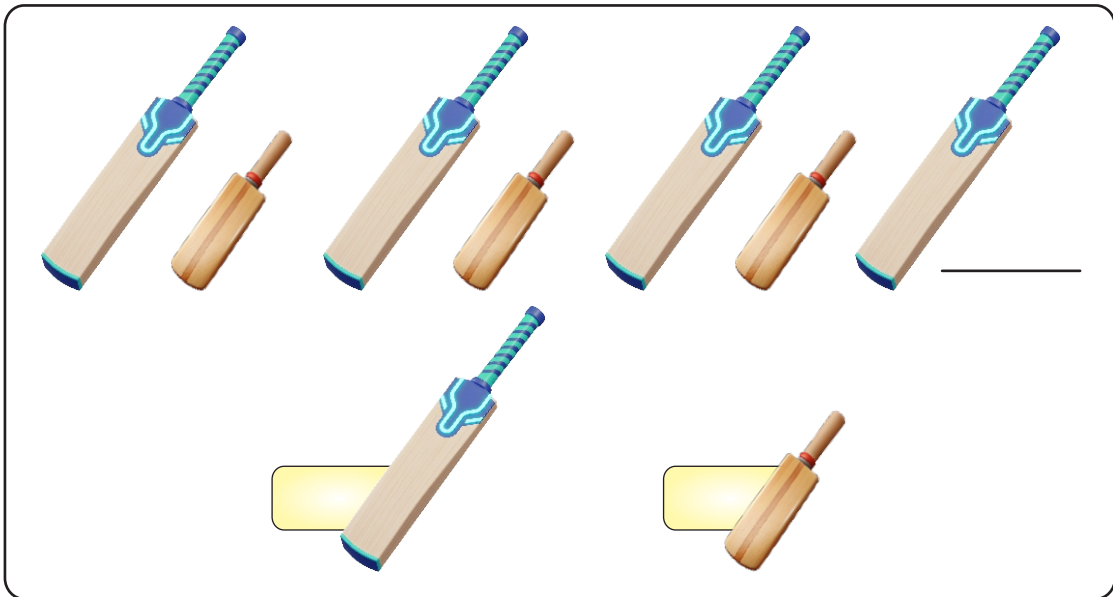




Exercise 2

Follow the pattern and tick the next object.





Unit

6

MEASUREMENTS

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Use mathematical language to compare the height/length of two or more objects.
- ✓ Measure and compare the length of objects using non-standard units.
- ✓ Use mathematical language to compare the mass of two or more objects.
- ✓ Measure and compare the mass of objects using non-standard units.
- ✓ Use mathematical language to compare the capacity of two or more objects.
- ✓ Measure and compare the capacity of objects using non-standard units.
- ✓ Relate temperature to experiences of the seasons.
- ✓ Read time in hours (o'clock).
- ✓ Show time in hours (o'clock).
- ✓ Name days of the week and month in a calendar.



Using mathematical language to compare height/length of two or more objects

We can use special words in mathematics to talk about the size of things. When we compare how tall or how long objects are, we use words like:

Taller

Sara is taller than Ali.



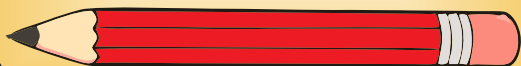
Shorter

Ali is shorter than Sara.



Longer

The red pencil is longer than the blue pencil.



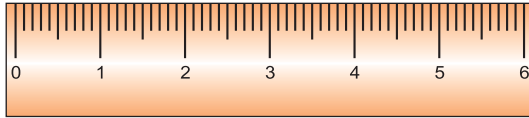
Shorter

The blue pencil is shorter than the red pencil.

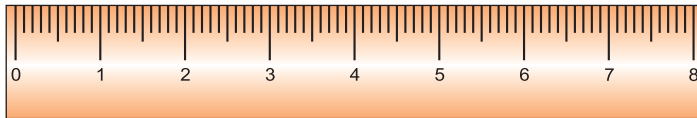


We can compare height / length of more than two objects using the following words.

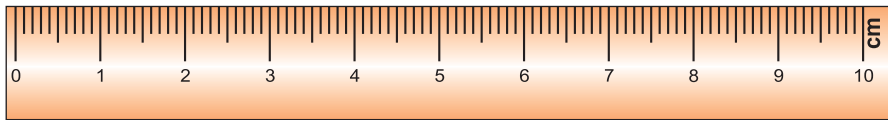
For comparing length



Long



Longer



Longest

For comparing height



Doctor

Short



Boy

shorter



Child

Shortest

Similarly



Tall



Taller



Tallest

Measuring and comparing the length of objects using non-standard units

We measure the length of a book and pencil by paper clips.

The book is 5 paper clips long.



The pencil is 4 paper clips long.

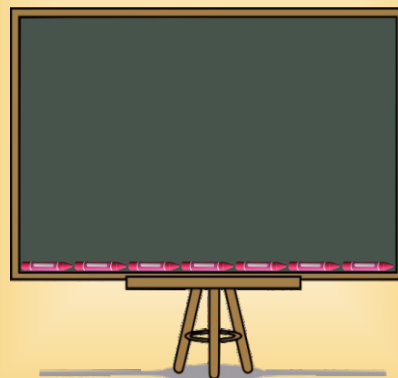


Book is longer than pencil

The desk is 5 crayons long









The blackboard is 7 crayons long



The desk is shorter than blackboard

Exercise 1

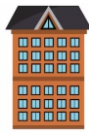
1: Tick the taller and cross the shorter objects.

 <input checked="" type="checkbox"/>	 <input checked="" type="checkbox"/>
 <input type="checkbox"/>	 <input type="checkbox"/>
 <input type="checkbox"/>	 <input type="checkbox"/>

2: Match the following.



Taller



Tall

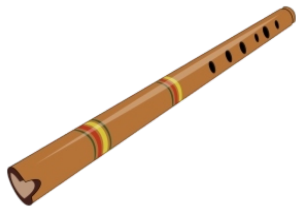


Tallest

3: Match the following.



Longest



Longer



Long

Using mathematical language to compare the mass of two or more objects

We can use special words in mathematics to compare mass of two or more objects as given below.

Heavier

The Watermelon is heavier than the apple.



Lighter

The apple is lighter than the watermelon.



We can also compare the mass of more than two objects using following words.



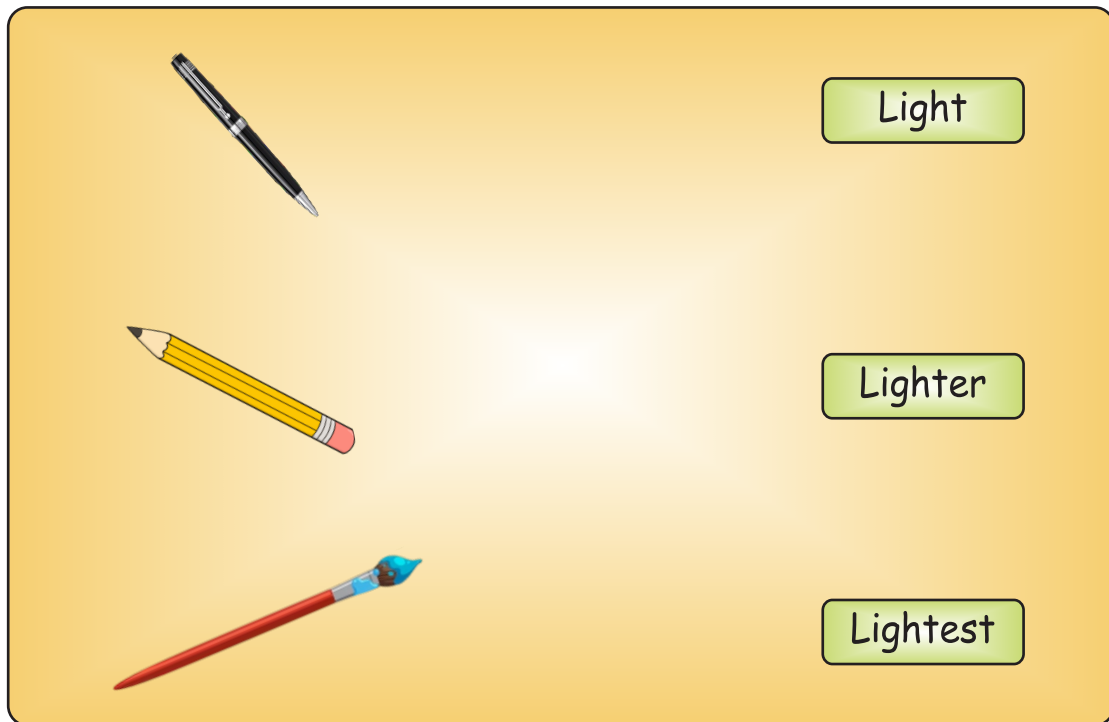
Heavy



Heavier



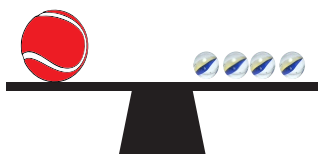
Heaviest



Measuring and comparing the mass of objects using non-Standard units



Weight of marker = 2 marbles

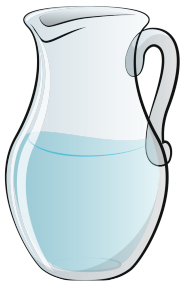
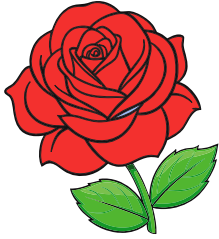


Weight of ball = 4 marbles

So marker is lighter than the ball and the ball is heavier than marker.

Exercise 2

1. Tick the heavier object and cross the lighter object.



2. Match the following.

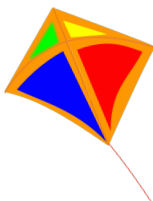


Heaviest

Heavier

Heavy

3. Match the following.



Light

Lighter

Lightest

Using mathematical language to compare the capacity of two or more objects

Some objects have more capacity and some have less capacity, for example.



A bucket has more capacity to hold water.



A glass has less capacity to hold water.

We can also say that a bucket is larger and glass is shorter.

In order to compare capacity of more than two objects, we use words as given below.



Large



Larger



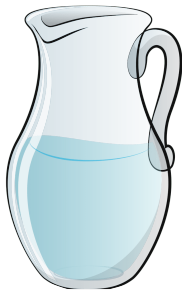
Largest

Measuring and comparing the capacity of objects using non-standard units

We can measure capacity of different objects by non-standard units like glass cup etc as explained below.



Capacity of bottle = 4 glasses



Capacity of jug = 5 glasses

Capacity of jug is more than the capacity of the bottle.

Exercise 3

1. Tick the object which has more capacity and cross the object which has less capacity.






X



✓



2. Match the following.

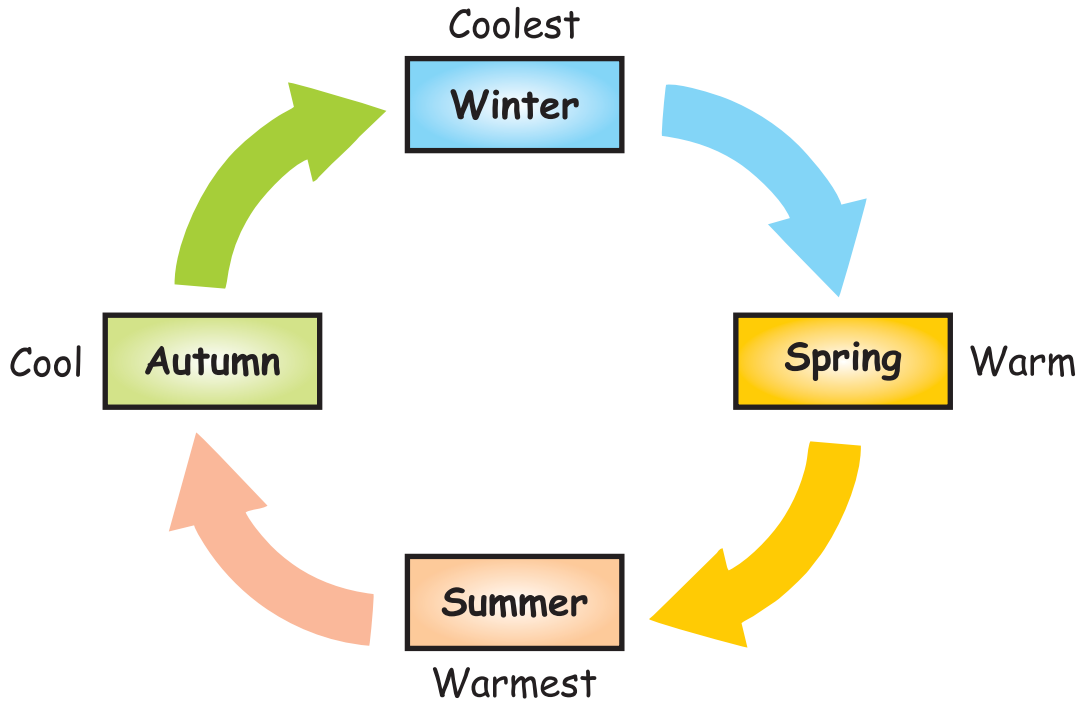
	Largest
	Large
	Larger

Relating temperature to the experience of the season

We know that there are four seasons in a year.

Spring	Weather gets warmer, new leaves and flowers on trees.	
Summer	The warmest and sunniest weather.	
Autumn	Weather gets cooler. Leaves change colour and fall off.	
Winter	The coldest weather.	

Cycle of Season



Exercise 4

1. Tick the warmer season and cross the cooler.

Spring	<input checked="" type="checkbox"/>	Summer	<input type="checkbox"/>
Autumn	<input type="checkbox"/>	Winter	<input type="checkbox"/>
Winter	<input type="checkbox"/>	Spring	<input type="checkbox"/>
Summer	<input type="checkbox"/>	Autumn	<input type="checkbox"/>

2. Match the following.

Spring

Winter

Summer

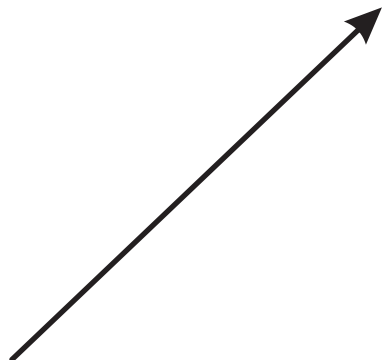
Autumn

Cool

Warm

Coolest

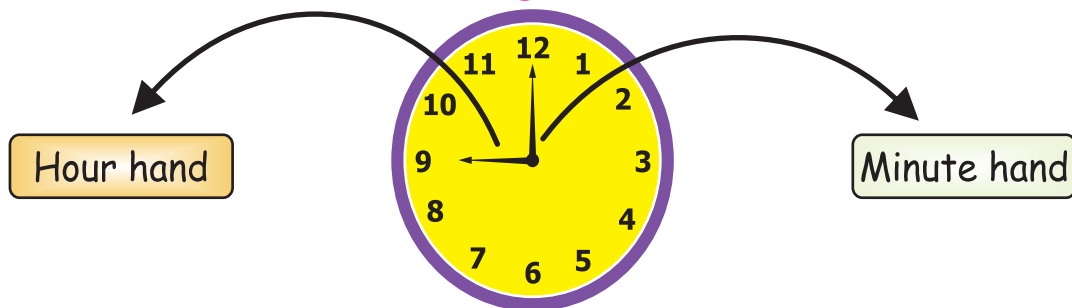
Warmest



Reading time in hours (o' clock)

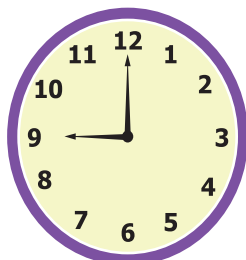
Reading time from an analog clock

Analog clock

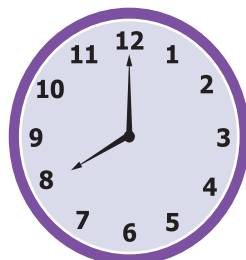


The long hand shows us minutes.
The short hand shows us hours.

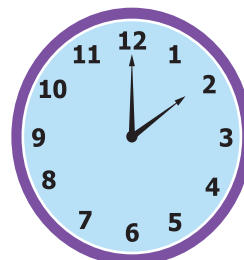
Example: Read time in hours.



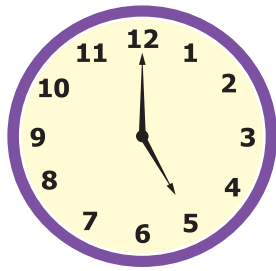
9 o' clock



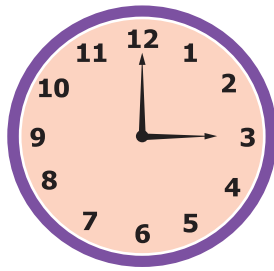
8 o' clock



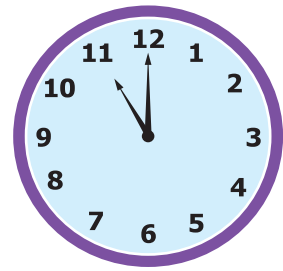
2 o' clock



5 o' clock



3 o' clock



11 o' clock

Reading time from digital clock

Digital Clock

05 : 00

Hours

Minutes

Example: Read time in hours.

06 : 00

6 o' clock

02 : 00

2 o' clock

10 : 00

10 o' clock

07 : 00

7 o' clock

03 : 00

3 o' clock

04 : 00

4 o' clock

Showing time in hour (o'clock)



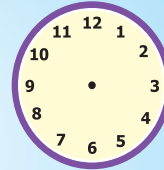
Activity

Show time in hours.

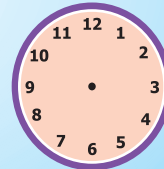
4 o'clock



10 o'clock



7 o'clock



5 o'clock



Activity

Show time in hours.

6 o'clock

06 : 00

9 o'clock

:

11 o'clock

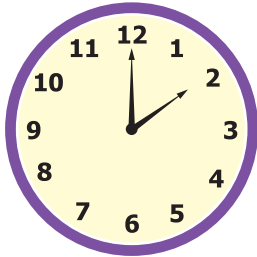
:

8 o'clock

:

Exercise 5

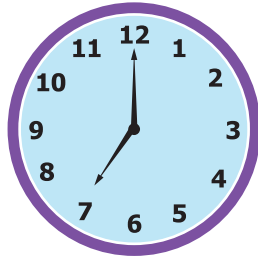
1. Read and write the time in hours



o' clock

05 : 00

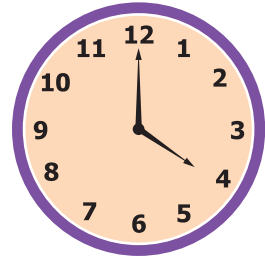
o' clock



o' clock

10 : 00

o' clock



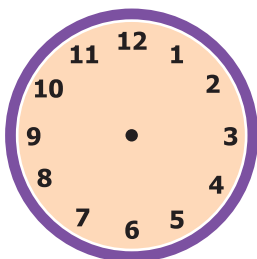
o' clock

09 : 00

o' clock

2. Show time in hours

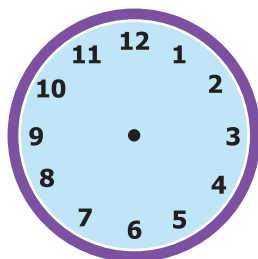
2 o' clock



6 o' clock

:

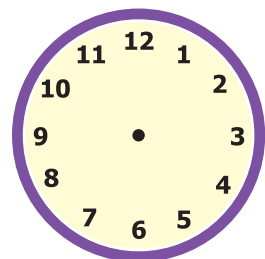
5 o' clock



4 o' clock

:

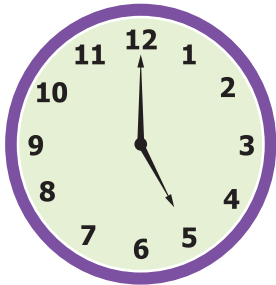
1 o' clock



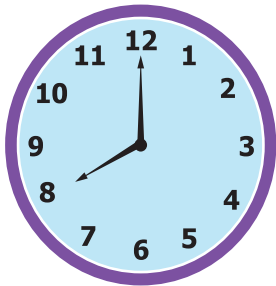
11 o' clock

:

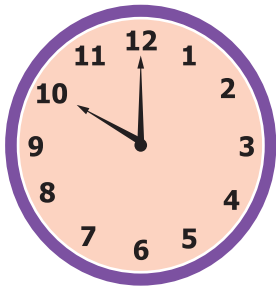
3. Match the following



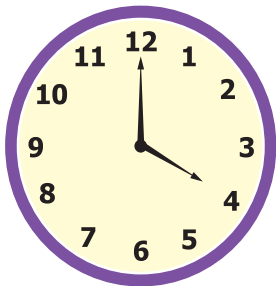
10 : 00



04 : 00



05 : 00



08 : 00

Name of the days in a week and month in a calendar.

Days in a week.

There are 7 days in a week, namely as under:



1st day

Monday



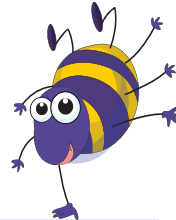
2nd day

Tuesday



3rd day

Wednesday



4th day

Thursday



5th day

Friday



6th day

Saturday



7th day

Sunday



Activity

Which day comes before

Wednesday



Thursday



Friday



Sunday

Which day comes after

Monday



Tuesday

Friday



Saturday



Months in a calendar year.

There are 12 months in a calendar year, which are:





Activity

Which month comes before.

March	←	April
	←	December
	←	May

Which month comes after.

January	→	February
August	→	
October	→	

Exercise 6

1. Match days in their positions.

Monday

Saturday

Friday

Tuesday

Wednesday

Thursday

Sunday

5th

1st

6th

7th

4th

3rd

2nd

The image shows a matching exercise. On the left, there are seven days of the week, each in a colored arrow-shaped box pointing right: Monday (orange), Saturday (purple), Friday (green), Tuesday (yellow), Wednesday (red), Thursday (blue), and Sunday (pink). On the right, there are seven ordinal numbers, each in a light blue circle with a colored border: 5th (orange), 1st (purple), 6th (green), 7th (yellow), 4th (red), 3rd (blue), and 2nd (pink). A black arrow points from the 'Friday' box to the '5th' circle.

2. Write the missing days.

Before	Between	After
Monday		Wednesday
	Sunday	Monday
Wednesday	Thursday	
	Friday	

3. Match the months with their positions

January		8th
July		10th
August		3rd
October	→	2nd
February		1st
March		7th

Unit

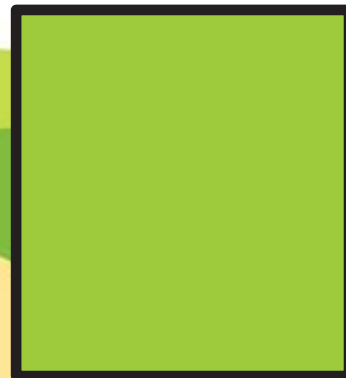
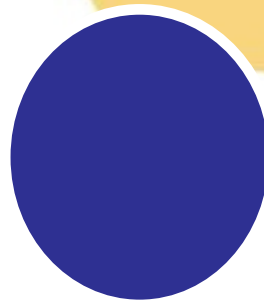
7

GEOMETRY

Student Learning Outcomes:





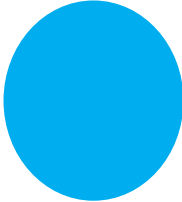

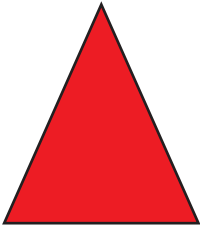

At the end of the unit, Students will be able to:

- ✓ Recognise and identify 2-D shapes (Rectangle, square, circle and triangle) with respect to their characteristics.
- ✓ Recognise and identify 3-D shapes (Cube, cuboid, cone, cylinder and sphere) with respect to their characteristics.
- ✓ Describe the position, movement and direction of an object including moving in a straight line using positional language (for instance: inside, outside, above, below, over, under, far, near, straight, backward, right and left).




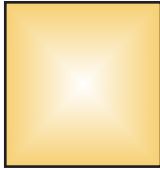
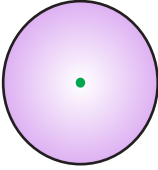
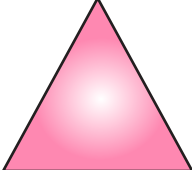
Recognizing and identifying 2-D shapes (Rectangle, square, circle and triangle) with respect to their characteristics.

2-D Shapes

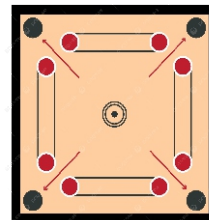
Shape	Object	Attributes
 <p>My name is Rectangle</p>		<p>I have 4 sides 4 corners (Opposite sides equal)</p>
 <p>My name is Square</p>		<p>I have 4 sides 4 corners (All sides equal)</p>
 <p>My name is Circle</p>		<p>I have no sides no corners (Round shape)</p>
 <p>My name is Triangle</p>		<p>I have 3 sides 3 corners</p>

Exercise 1

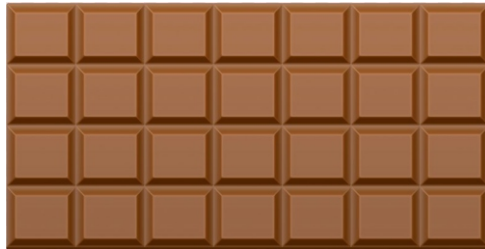
1. Look at the figures carefully and write the names.

 <p>Rectangle</p> <p>Sides: <u>4</u> Corners: <u>4</u></p>	 <p>Sides: _____ Corners: _____</p>
 <p>Sides: _____ Corners: _____</p>	 <p>Sides: _____ Corners: _____</p>

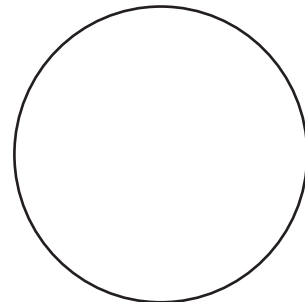
2. Identify and name 2D shape in real life.



3. Match the given objects with 2D shapes.



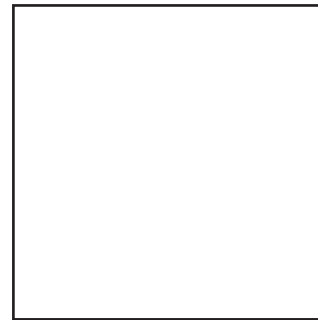
Chocolate



Circle



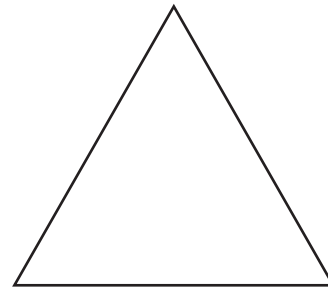
Tile



Square



CD



Triangle

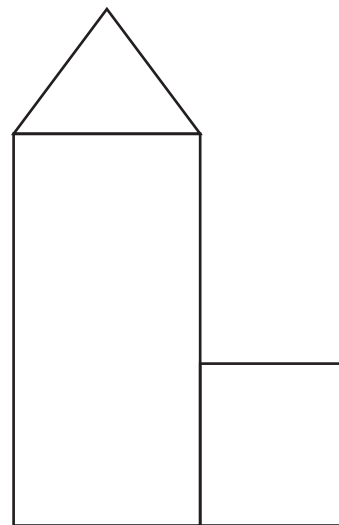
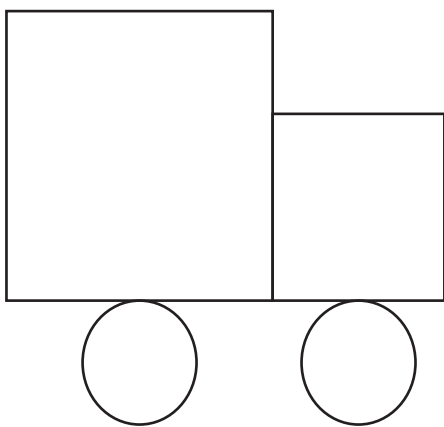
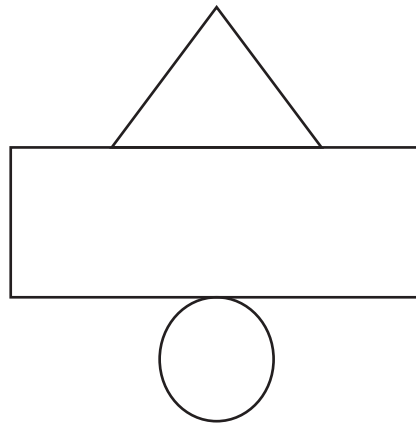
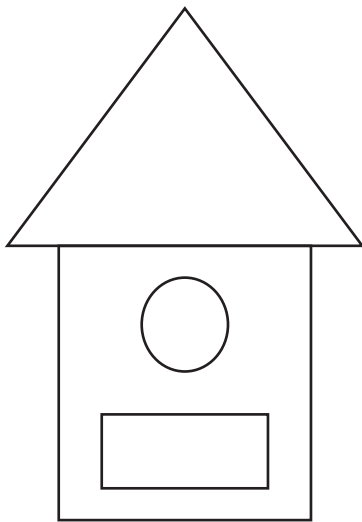
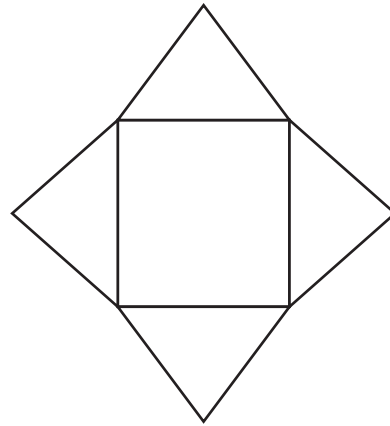
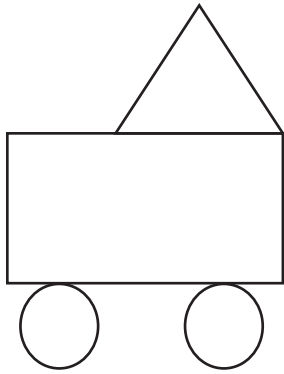


White board



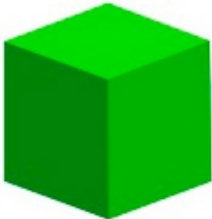


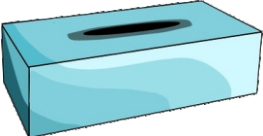


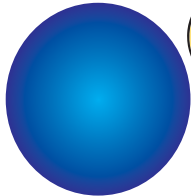



Rectangle

4. Colour the rectangle in red, square in blue, circle in green and triangle in yellow.



Recognizing and identifying 3-D shapes (Cube, Cuboid, Cone, and sphere) with respect to their characteristics.

3-D shapes

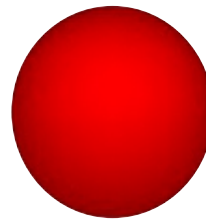
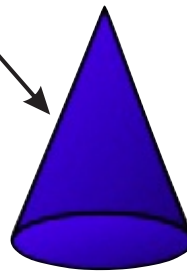
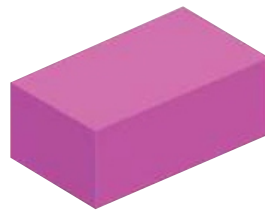
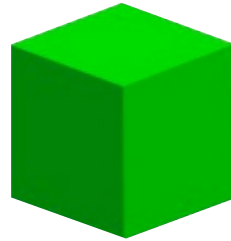
Shape	Object	Attributes
 <p>My name is cube</p>		<p>I have 6 faces 8 corners</p>
 <p>My name is cuboid</p>		<p>I have 6 faces 8 corners</p>
 <p>My name is cone</p>		<p>I have 1 Circular face 1 corner</p>
 <p>My name is sphere</p>		<p>I have No faces no corners</p>
 <p>My name is cylinder</p>		<p>I have 2 Circular faces no corners</p>

Exercise 2

1. Identify and name 3D shape in real life.



2. Match the real life objects with 3D shapes.



Describing position, movement and direction of objects.

We use different words to describe position, movement and direction of objects as mentioned below.

Inside



Cat is **inside** the box

Outside



Cat is **outside** the box

Above



Pigeon is **above** the car

Below



Pigeon is **below** the clouds

Over



Mouse is **over** the table

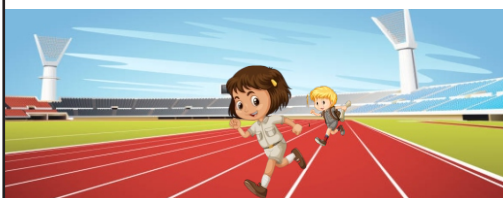
Under



Mouse is **under** the table

Far

Near

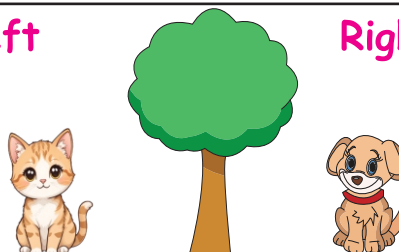


Girl is **near**

Boy is **far**

Left

Right

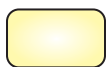
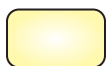
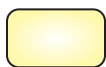


Cat is on **left**

Dog is on **right**

Exercise 3

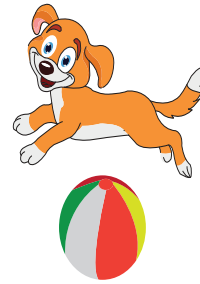
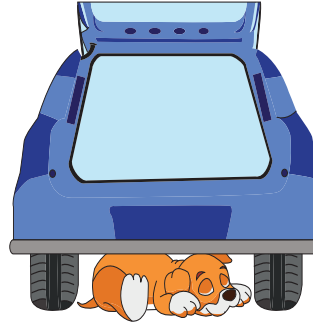
1. Tick (✓) the object inside and cross (✗) the object outside.



2. Observe the position of parrot in each picture. If the parrot is above, tick (✓) and if parrot is below, place a cross (×).

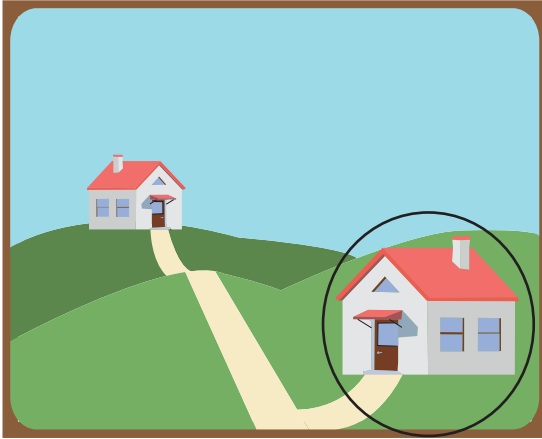


3. Observe the position of dog in each picture. If the dog is over, tick (✓) and if dog is under, place a cross (x).

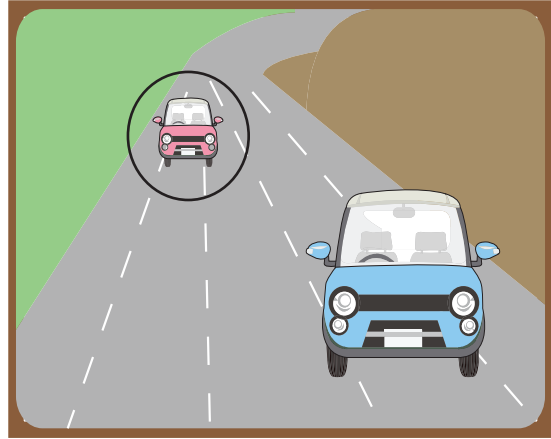


4. Do the following.

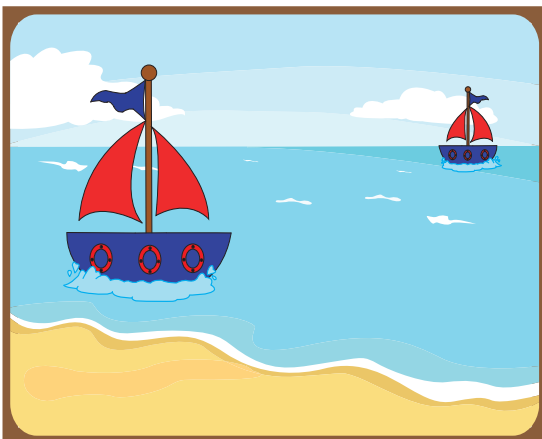
Circle the house that is near



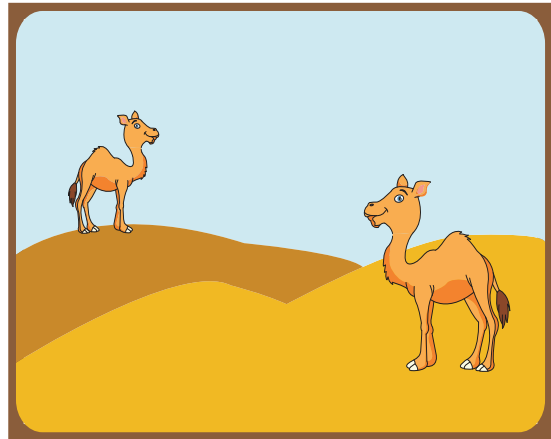
Circle the car that is far.



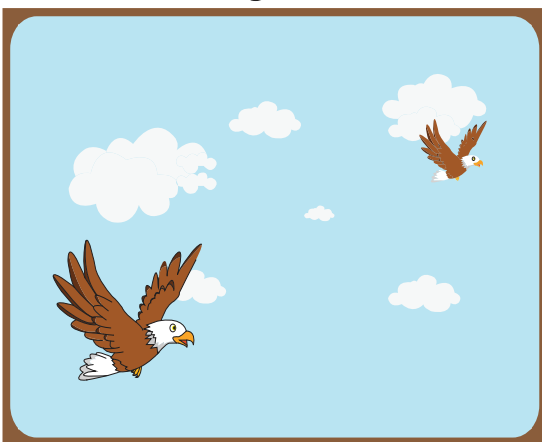
Circle the boat that is far.



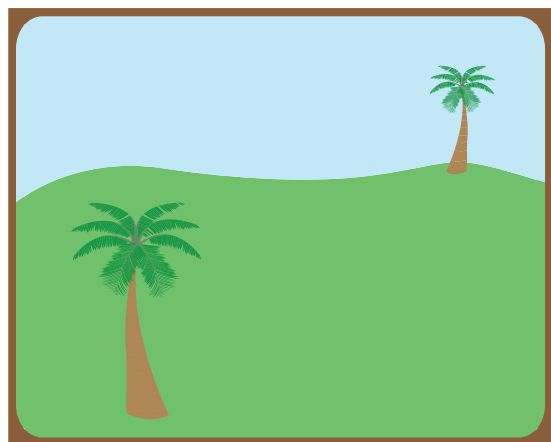
Circle the camel that is near.



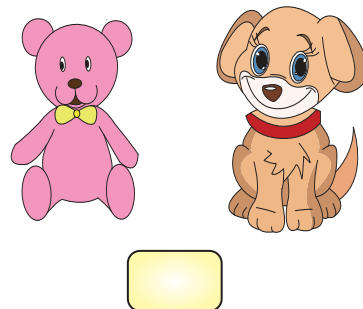
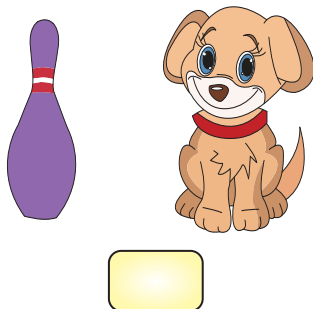
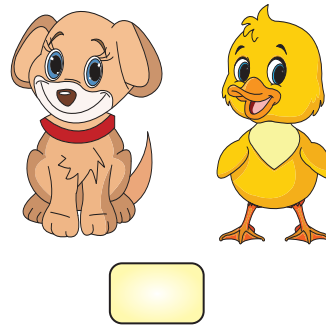
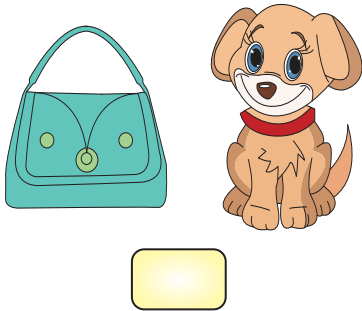
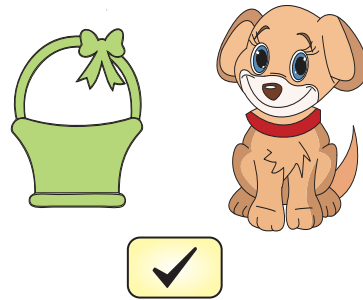
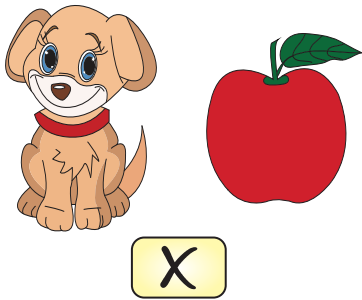
Circle the eagle that is near.



Circle the tree that is far.



5. Observe the position of puppy in each picture. If the puppy is right, tick (✓) and if puppy is left, place a cross (x).



Unit










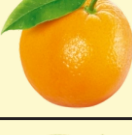


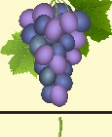
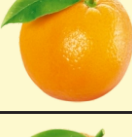









8

STATISTICS AND PROBABILITY

Student Learning Outcomes:

At the end of the unit, Students will be able to:

- ✓ Read the data using pictographs (including real life problem).
- ✓ Describe the likelihood that every day events will occur, using mathematical language (less, likely and more likely).

10					
9					
8					
7					
6					
5					
4					
3					
2					
1					
	Apples	Bananas	Grapes	Oranges	Mango

Reading the data using pictographs.

Pictograph:

A pictograph is a special kind of picture that helps us to show information.

We use pictographs because they are easy to understand. They help us to see how many or how few of something are.

To read a pictograph, we can follow these steps:

Look at the title. What is the picture about?











Look at the pictures. How many are there?

What does each picture mean? Does it mean 1, 2 or 5 things.

That's it! By looking at the title, pictures and what they mean, we can understand what the pictograph is telling.

Example:

Favorite fruit

Fruit	Students	Number
		3 students like mango
		2 students like apple
		5 students like banana
		4 students like grapes
		1 student like guava









This pictograph is showing the favourite fruits of a group of students. The pictures represents the number of students who like fruits.

From this pictograph, we can see that:
Banana is the most popular fruit among the students,
whereas guava is the least popular.



Activity

Mode of transport

Mode of transport	Students
	
	
	
	

Tick the mode of transport which is used by the most students?



Tick the mode of transport which is used by the fewest students?













How many students come to school by bus, car, cycle and motor cycle?

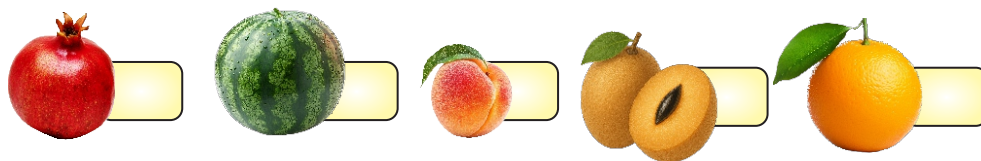


Exercise 1

1. This pictograph shows the number of students who like the given fruit.

Fruit	Students
	
	
	
	
	

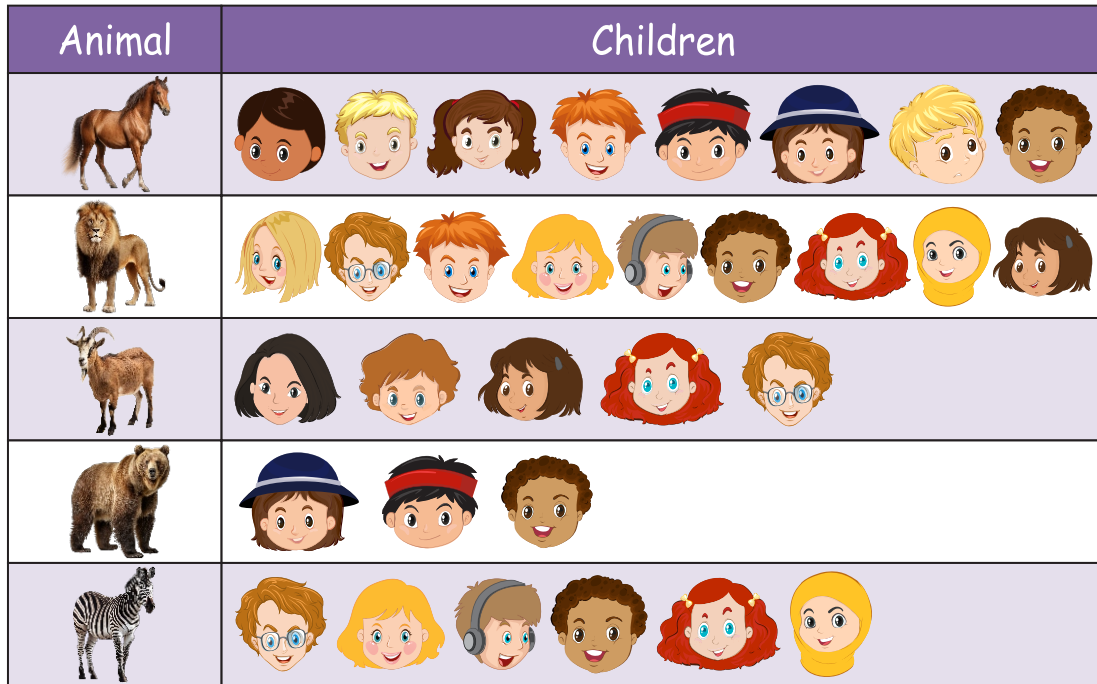
Tick the most favourite and cross the least favourite fruit.



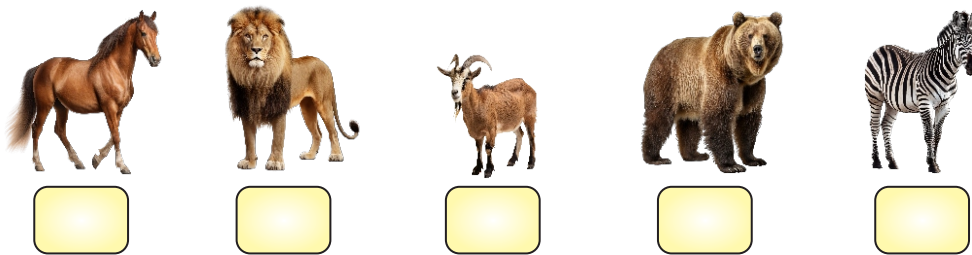
Write the number of students who like the following fruit.

Fruit					
Number of students					






2. The pictograph represents the number of children who like the given animals.



Tick the animal which is the most popular and cross the least popular animal.



Write the number of children who like the given animals.

Animal					
Number of children					

Describing the likelihood of occurrence of everyday events

If an event has more chance of the happening it is more likely.

If an event has less chance of the happening it is less likely.

Example:

Tick where rain is more likely and cross where rain is less likely.



Exercise 2

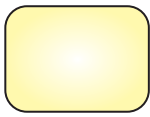
1. Tick where getting late is more likely and cross where getting late is less likely.



2. Tick where getting sick is more likely and cross where getting sick is less likely.



3. Tick where **getting weak eyesight** is more likely and cross where **getting weak eyesight** is less likely.



Hands-On STEAM Activities

Topic: Concept of Numbers

Objective: Understanding counting, sequencing, and comparing numbers.

1. 🧮 Counting Jar Game - Put small items (buttons, beads, beans) in jars. Students count and label each jar with the correct number card.
2. 🏠 Number Line Walk - Make a number line on the classroom floor with tape (0-20). Call out a number and let students jump to it.
3. ✂️ Number Collage - Give students magazines/newspapers to find and cut out numbers, then paste them in order on chart paper.

Topic 2: Number Operations

Objective: Learning addition and subtraction through real objects.

1. 🍏 Fruit Shop Role-Play - Students act as shopkeepers and buyers using paper fruits and price tags (e.g., " $2 + 3 = 5$ apples").
2. 🧱 Building Blocks Addition - Use LEGO or cubes. Add two towers together to see how the number increases.
3. 🎳 Bowling Subtraction - Set up 10 paper cups as pins; each time they knock down pins, count how many remain ($10 - =$).

Topic 3: Measurement of Length and Mass

Objective: Understanding size, weight, and comparison.

1. 📏 Measure with Straws or Hands - Students measure pencils, books, or tables using non-standard units (hand spans, straws).
2. ⚖️ Homemade Balance Scale - Make a balance with a hanger, string, and two paper cups; compare which side is heavier.
3. 📦 "Which Fits?" Challenge - Give different boxes or containers; children test what object fits in which — great for spatial reasoning.

Topic 4: Money

Objective: Recognize coins, count values, and use simple transactions.

1. 💰 **Mini Market Corner** - Create a small market with price tags (1 Rs, 2 Rs, 5 Rs). Children "buy" things using fake coins.
2. 🎨 **Coin Printing Art** - Students place a coin under paper and rub crayons to make coin impressions. Label with value.
3. 📄 **Receipt Maker** - Give slips of paper as "receipts"; after buying, students write the total (simple addition practice).

Topic 5: Time and Date

Objective: Reading time, days, and understanding daily routine.

1. 🕒 **Paper Clock Craft** - Make clocks using paper plates, split pins, and two arrows. Move hands to show given times.
2. 📅 **Weekly Routine Chart** - Draw 7 boxes (Mon-Sun). Children paste or draw one picture of what they do each day.
3. 🕒 **Time Hunt Game** - Hide clock cards around class. Call "Find 3 o'clock!" and students search for that clock.

Topic 6: Geometry

Objective: Recognizing shapes, patterns, and spatial relations.

1. 📦 **Shape Sorting Box** - Give cut-outs of shapes and boxes labeled "Circle," "Triangle," etc. Students drop each in the right box.
2. 📄 **Shape Builders** - Use straws, sticks, or clay to make squares, rectangles, and triangles.
3. 🎨 **Pattern Bracelet** - Make a paper-bead bracelet following a color or shape pattern (red-blue-red-blue).

Teacher's Note: Teacher should help students to perform the above mentioned STEAM activities. He should also develop other STEAM activities by involving students.

AI-Based Puzzle/Game Activities

✦ Topic 1: Numbers 1-20

1. 📺 AI Counting Game

Tool: Teachable Machine / Google Lens

Activity: Students show fingers or objects to AI camera to count automatically.

2. 🎨 Digital Color Count

Use Paint/AI Drawing Tool to color 10 stars — AI checks color count correctly.

📺 Topic 2: Addition & Subtraction (0-10)

1. 📺 AI Math Story Game

Tool: ChatGPT Kids Mode / Mathbot

Activity: Solve riddles like "If you have 3 apples and AI gives you 2 more, how many now?"

2. 🍎 Digital Domino Addition

Setup: Online or printed dominoes showing dots — AI checks sum.

Example: Dot side 4 + dot side 2 = AI says "Correct! 6!"

📺 Topic 3: Shapes and Patterns

1. 📺 AI Shape Detector Game

Tool: AI Camera App (like Google Lens)

Activity: Students point the camera at classroom items; AI names shape — "Circle!"

2. 📺 Shape Pattern Puzzle

Arrange paper cutouts or screen icons: ●●●● → continue pattern.

AI checks if the next shape is correct.

3. 🎮 Coding Mini-Game (Scratch Jr)

Draw and move shapes to create patterns; AI tracks repetition.

Topic 4: Measurement

1. AI Balance Game

Activity: Use AI to compare weights of objects — app guesses which is heavier.

Example: "Is apple heavier than pencil?"

2. Time Match Puzzle

Use AI clock app showing times; match it with activity cards (e.g., "8:00 - Wake up").

3. Build a Ruler Challenge

Design a paper ruler with 10 cm marking; AI image check for accuracy.

Topic 5: Money

1. AI Cash Register Game

Tool: Online AI cash register simulator

Activity: Drag and drop coins/notes to make Rs. 20, Rs. 50.

AI checks total.

2. Class Shop Role Play

One student is "shopkeeper," AI tablet app calculates total bills.

3. Coin Matching Puzzle

Match Rs. coins and notes with price tags.

Topic 6: Interactive quizzes and games

Tool: Kahoot for interactive learning

(www.kahoot.com) , (www.kahoot.it)

Teacher's Note: Teacher should help students to perform the above mentioned AI-Based Puzzle/Game Activities using suggested AI tools or any other suitable AI tools.

Some mathematical websites / links

<https://www.khanacademy.org/math/cc-1st-grade-math>

<https://www.ixl.com/math/grade-1>

<https://www.superteacherworksheets.com/first-grade-math-worksheets-1st.html>

<https://superstarworksheets.com/math-worksheets/1st-grade-worksheets/>

<https://www.education.com/resources/grade-1/worksheets/>

<https://www.mathworksheets.com/1st-grade/free-math-worksheets.htm>

<https://www.k5learning.com/free-math-worksheets/first-grade-1>

https://www.mathplayground.com/grade_1_games.html

<https://toytheater.com/category/math-games/first-grade-math-games/>

<https://www.mathlearningcenter.org/>

Source: NRICH <https://share.google/OnFfyoSRbhNvHHEld>

<https://www.splashlearn.com/math-games-for-1st-graders>

<https://www.education.com/resources/grade-1/games/math/>

<https://www.mathgames.com/grade1>

<https://www.iknowit.com/first-grade.html>

<https://www.mathgametime.com/grade/1st-grade>

<https://www.abcya.com/grades/1>



MATHEMATICS WORKBOOK

GRADE 1



Things to Bring



Pencil



Eraser



Color Pencil



Pen case



Textbook



Notebook



Slate



Water bottle



School Bag

About Mathematics Workbook

Mathematics workbook is designed for students to solve short exercises on daily basis for enhancing their basic mathematical skills. It is 15 minutes activity during morning assembly time. It is recommended to conduct these activities from the start of the academic year so that student can come to school regularly, the students work on one page per day. If the students finish 4 days exercise, they will take 1 assessment which is cycle of this activity. Teachers are recommended to give homework to the students for every exercise. It is also recommended that teachers provide additional support to the students who struggle to understand the solution, ensuring that all learners can acquire basic math skills. **Scan the QR code for more information..**



How to use workbook

Ex: 1 Addition of two 1-digit numbers
Date _____

Example Add the numbers and write in

$1 + 4 = 5$
● ●●● ●●●●

Exercise Add the numbers and write in

① $2 + 4 =$

② $3 + 4 =$

③ $4 + 4 =$

④ $7 + 0 =$

Check

Step 1.

Teacher needs to write the example box on the board and explain how to think and solve the problem with student.

Step 2.

After the explanation, the teacher lets the students solve the exercise. The teacher instructs the students to solve it independently. The teacher needs to observe how they approach the exercise. If the students do not understand the question, the teacher provides individual support.

Step 3.

After almost all the students finish the exercise, the teacher needs to check the answer to the first question with the students. By reviewing the solution immediately, students can learn more effectively how to solve the problem.

Step 5.

The student needs to do homework and show the book to their family and obtain their sign.

Step 4.

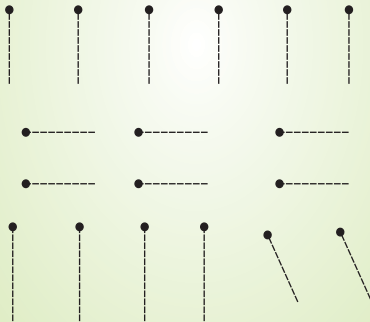
The teacher marks the students' answers during the break time and writes the scores in the boxes and the summary

Ex: 1 Draw a line and the shapes Date _____

Example Trace the dots and draw a line.



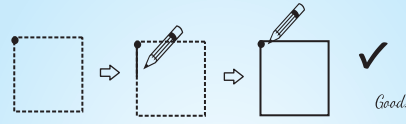
Exercise Trace the dots and draw a line.



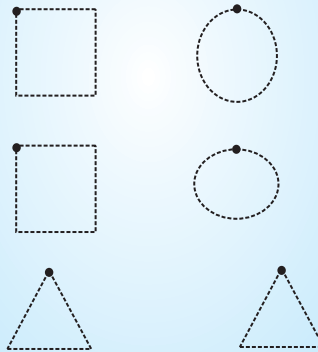
18

Ex: 2 Date _____

Example Trace the dots and a shape.



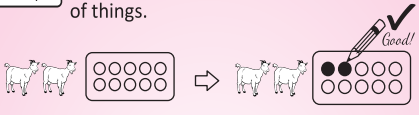
Exercise Trace the dots and draw a shape.



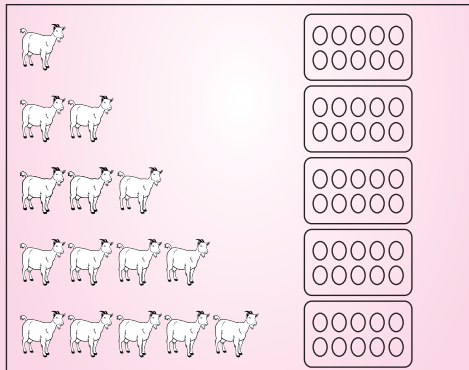
6

Ex: 3 Number concept within 100 Date _____

Example Colour ○ according to the number of things.



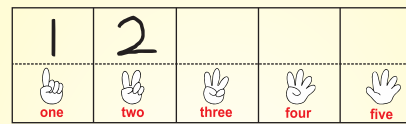
Exercise Colour ○ according to the number of things.



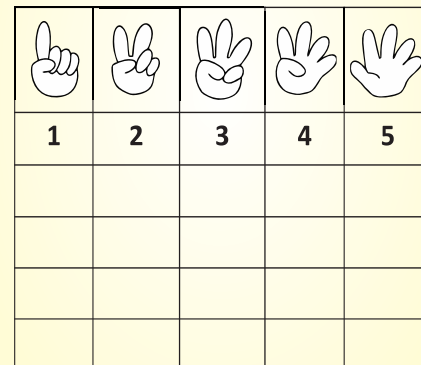
5

Ex: 4 Date _____

Example Count the fingers and write the numbers.



Exercise Count and Write.



Let's move on to Assessment 1

5

Assessment 1 <Ex.1-4>



Date _____

Count and write the numbers.

one	two	three	four	five



Check

Ex: 5

Date _____

Example Count and write the numbers.

6	7			
six	seven	eight	nine	ten

Exercise Write the numbers.

6	7	8	9	10



Check

Ex: 6

Date _____

Example Count and write the number.

1 2 3 4 5 6 7

Good!

Exercise Count and write the number in the

①

②

③

④



Check

Ex: 7

Date _____

Example Count and write the numbers.

Goat Good!

Banana

Exercise Count and write the numbers.

① Ant

② Chili

③ Pigeon

④ Coconuts



Check

Ex: 8

Date _____

Example Write the number in the

9 8 7 6 5 4 3 2 1

Descending order (from the largest to the smallest)

Exercise Write the number in the

9 8 6 4 3

① ② ③ ④

Check



Assessment 2 <Ex.5-8>



Date _____

Count and write the numbers.

①	②	③	④	⑤
six	seven	eight	nine	ten

Exercise Write the number in

Chair

Shirt



Ex: 9

Date _____

Example Write the number in the

5 4 3 2 1 0

zero We read "0" as "zero".

Exercise Trace the numbers and letters and copy them in the

	0	0	0	0	0		
zero	zero	zero					

	0	0	0	0	0		
zero	zero	zero					



Ex: 10

Date _____

Example Write the correct number in

Exercise Write the correct number in

5	3	1
①	②	

5	2	
③	④	⑤

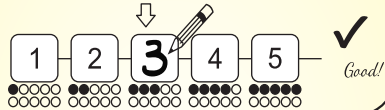
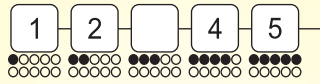
5	3	
⑦	⑧	



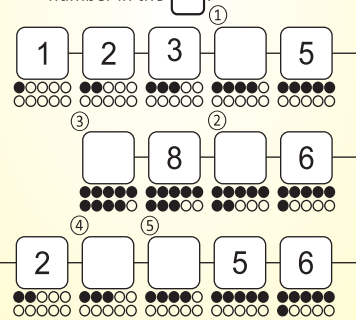
Ex: 11

Date _____

Example Read the numbers and write the missing number in the .



Exercise Read the numbers and write the missing number in the .



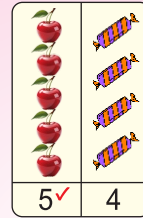
Check

/ 5

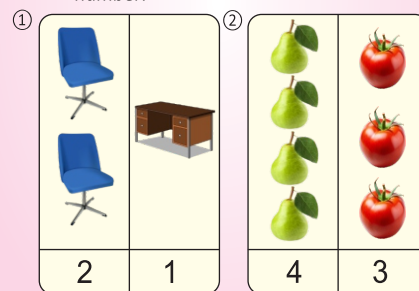
Ex: 12

Date _____

Example Count the objects and tick (✓) the bigger number.



Exercise Count the objects and tick (✓) the bigger number.



Check

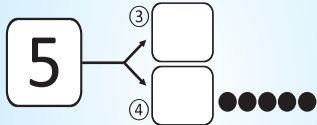
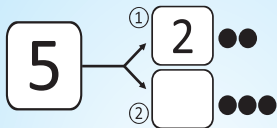
/ 2

Assessment 3 <Ex.9-12>

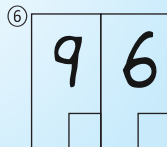
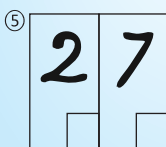


Date _____

Example Write the number in the .



Exercise Tick (✓) the bigger number.



Check

/ 6

Ex: 13

Date _____

Example

If one more is included to 9 stars we get ten stars.

We write ten as 10.



Exercise Trace the numbers and letters and copy them



Check

/ 4

Ex: 14

Date _____

Example Write the correct number in the

Exercise Write the correct number in the



Ex: 15

Date _____

Example Write the correct number in the

Exercise Write the correct number in the



Ex: 16

Date _____

Example Write the number of blocks in the box

Exercise Write the number of blocks in the box



Assessment 4 <Ex. 13-16>



Date _____

Write the numbers in the



Ex: 17

Date _____

Example Write the correct number in

Exercise Write the correct number in the



Check

/ 4

Ex: 18

Date _____

Example Write the correct number in the

Exercise Write the correct number in the



Check

/ 4

Ex: 19

Date _____

Example Write the number in

Exercise Write the number in



Check

/ 3

Ex: 20

Date _____

Example Write the number of blocks in the

Exercise Write the number of blocks in the

①

②



Check

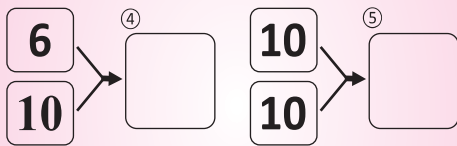
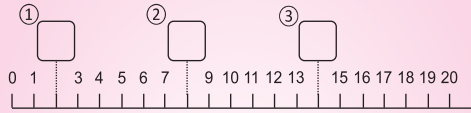
/ 2

Assessment 5 <Ex.17-20>

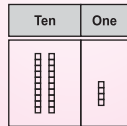


Date _____

Write the missing numbers in the



Write the number of blocks in the



⑥

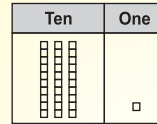


/ 6

Ex: 21

Date _____

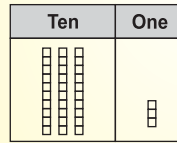
Example Write the number of blocks in the



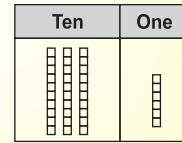
Good!

31

Exercise Write the number of blocks in the



①



②

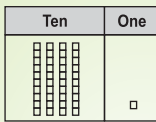


/ 2

Ex: 22

Date _____

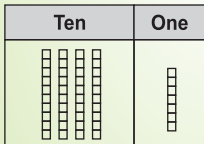
Example Write the number of blocks in the



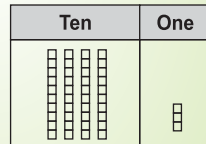
Good!

41

Exercise Write the number of blocks in the



①



②

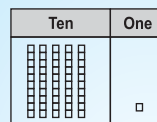


/ 2

Ex: 23

Date _____

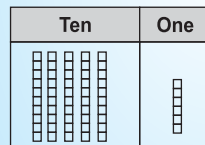
Example Write the number of blocks in the



Good!

51

Exercise Write the number of blocks in the



①



②

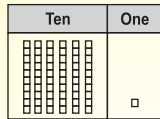


/ 2

Ex: 24

Date _____

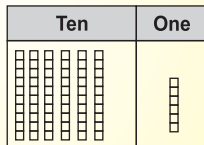
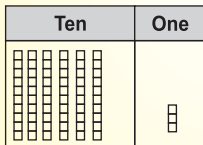
Example Write the number of blocks in the



✓
Good!

61

Exercise Write the number of blocks in the



①

②



Check

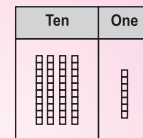
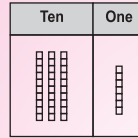
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Assessment 6 <Ex.21-24>



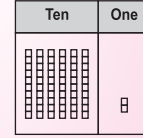
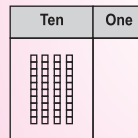
Date _____

Write the number of blocks in the



①

②



③

④



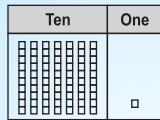
Check

/

Ex: 25

Date _____

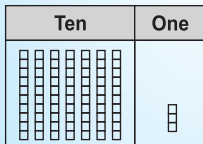
Example Write the number of blocks in the



✓
Good!

71

Exercise Write the number of blocks in the



①

②



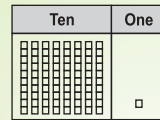
Check

/

Ex: 26

Date _____

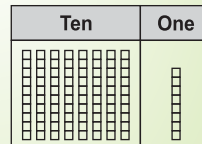
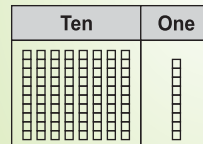
Example Write the number of blocks in the



✓
Good!

81

Exercise Write the number of blocks in the



①

②



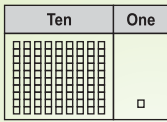
Check

/

Ex: 27

Date _____

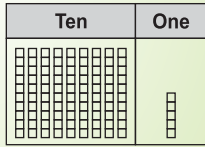
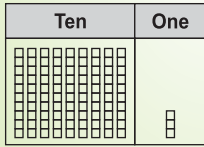
Example Write the number of blocks in the



✓
Good!

91

Exercise Write the number of blocks in the



①

②



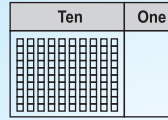
Check

/ 2

Ex: 28

Date _____

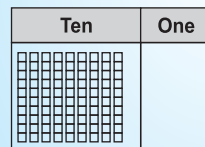
Example Write the number of blocks in the



✓
Good!

100

Exercise Write the number of blocks in the



①

②



Check

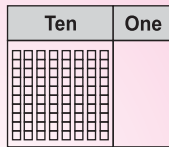
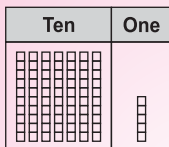
/ 2

Assessment 7 <Ex.25-28>



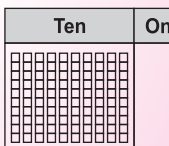
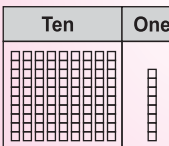
Date _____

Write the number of blocks in the



①

②



③

④



Check

/ 4

Ex: 29 Addition of two 1-digit numbers

Date _____

Example Add the numbers and write in

$$1 + 1 = 2$$



Exercise Add numbers and write in

① $2 + 1 = \square$

② $3 + 1 = \square$

③ $4 + 1 = \square$

④ $1 + 2 = \square$



Check

/ 4

Ex: 30

Date _____

Example Add the numbers and write in

$$1 + 4 = 5$$

● ●●●● ●●●●●

Exercise Add numbers and write in

① $2 + 4 = \square$

② $3 + 4 = \square$

③ $4 + 4 = \square$

④ $1 + 5 = \square$



Check



Ex: 31

Date _____

Example Add.

$$6 + 0 = 6$$

★★★★★★ ✓ Good!

Exercise Add.

① $7 + 0 = \square$

② $5 + 0 = \square$

③ $8 + 0 = \square$

④ $6 + 0 = \square$



Check



Ex: 32

Date _____

Example Add the numbers and write in

$$\begin{array}{r} 2 \\ + 5 \\ \hline 7 \end{array}$$

✓ Good!

Exercise Add the numbers and write in

① $\begin{array}{r} 3 \\ + 5 \\ \hline \square \end{array}$

② $\begin{array}{r} 1 \\ + 8 \\ \hline \square \end{array}$

③ $\begin{array}{r} 2 \\ + 6 \\ \hline \square \end{array}$

④ $\begin{array}{r} 4 \\ + 0 \\ \hline \square \end{array}$



Check



Assessment 8 <Ex.29-32>



Date _____

① $1 + 2 = \square$

② $5 + 0 = \square$

③ $3 + 3 = \square$

④ $6 + 2 = \square$

⑤ $2 + 7 = \square$



Check



Ex: 33 Subtraction of two 1-digit numbers Date _____

Example Subtract the numbers and write in the box

$$\begin{array}{r} 5 \\ - 1 \\ \hline 4 \end{array}$$

★★★★~~★~~ ✓ Good!

Exercise Subtract the numbers and write in the

① $3 - 2 = \square$

② $6 - 3 = \square$

③ $5 - 2 = \square$

④ $6 - 4 = \square$



Check



Ex: 34 Date _____

Grade _____ Name _____ Number _____

Example Subtract the numbers and write in the

$$\begin{array}{r} 8 \\ - 3 \\ \hline 5 \end{array}$$

★★★★~~★~~ ✓ Good!

Exercise Subtract.

① $7 - 4 = \square$

② $8 - 6 = \square$

③ $9 - 8 = \square$

④ $7 - 5 = \square$



Check



Ex: 35 Date _____

Example Subtract the numbers and write in the

$$\begin{array}{r} 5 \\ - 0 \\ \hline 5 \end{array}$$

★★★★★ ✓ Good!

Exercise Subtract the numbers and write in the

① $1 - 0 = \square$

② $3 - 0 = \square$

③ $7 - 0 = \square$

④ $0 - 0 = \square$



Check



Ex: 36 Date _____

Example Subtract the numbers and write in the

$$\begin{array}{r} 5 \\ - 2 \\ \hline 3 \end{array}$$

✓ Good!

Exercise Subtract the numbers and write in the

① $\begin{array}{r} 5 \\ - 3 \\ \hline \square \end{array}$

② $\begin{array}{r} 8 \\ - 1 \\ \hline \square \end{array}$

③ $\begin{array}{r} 6 \\ - 2 \\ \hline \square \end{array}$

④ $\begin{array}{r} 4 \\ - 4 \\ \hline \square \end{array}$



Check



Assessment 9 <Ex.33-36>



Date _____

① $5 - 1 = \square$

② $6 - 5 = \square$

③ $2 - 0 = \square$

④ $9 - 9 = \square$

⑤ $8 - 1 = \square$



Check

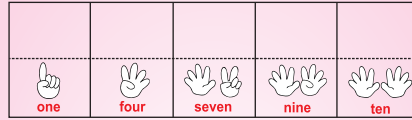
$\frac{\quad}{5}$

G1Assessment 1

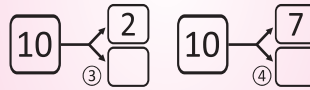
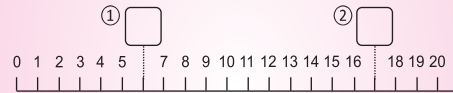


Date _____

Count and write the numbers.



Write the missing numbers in the



Exercise Tick () the bigger number.



Check

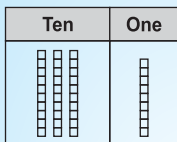
$\frac{\quad}{5}$

G1 Assessment 2

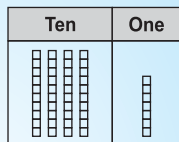


Date _____

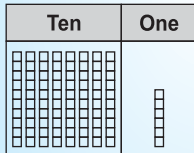
Write the number of blocks in the



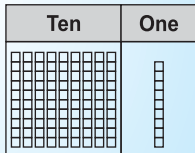
①



②



③



④



Check

$\frac{\quad}{4}$

G1 Assessment 3



Date _____

① $2 + 4 = \square$ ⑥ $4 - 3 = \square$

② $7 + 0 = \square$ ⑦ $5 - 2 = \square$

③ $5 + 3 = \square$ ⑧ $7 - 0 = \square$

④ $8 + 1 = \square$ ⑨ $8 - 6 = \square$

⑤ $3 + 6 = \square$ ⑩ $9 - 7 = \square$



Check

$\frac{\quad}{10}$

Morning Math exercise answers (G1)

Number concept within 100

Assessment 1:

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

Ex6: (1) 3, (2) 4, (3) 2, (4) 3

Ex7: (1) 3, (2) 5, (3) 6, (4) 4

Ex8: (1) 7, (2) 5, (3) 2, (4) 1

Assessment 2:

(1) 6, (2) 7, (3) 8, (4) 9, (5) 10,
(6) 3, (7) 8

Ex10: (1) 2, (2) 4, (3) 3, (4) 1

(5) 4, (6) 3, (7) 2, (8) 2, (9) 3

Ex11: (1) 4, (2) 7, (3) 9, (4) 3
(5) 4

Ex12: (1) 2, (2) 4

Assessment 3:

(1) 2, (2) 3, (3) 0, (4) 5, (5) 7,
(6) 9

Ex14: (1) 4, (2) 2, (3) 9, (4) 8

Ex15: (1) 6, (2) 7, (3) 2, (4) 1

Ex16: (1) 11, (2) 13, (3) 19, (4) 15

Assessment 4:

(1) 2, (2) 1, (3) 3, (4) 4

Ex17: (1) 12, (2) 13, (3) 10, (4) 19

Ex18: (1) 3, (2) 2, (3) 4, (4) 0

Ex19: (1) 4, (2) 11, (3) 16

Ex20: (1) 22, (2) 23

Assessment 5:

(1) 2, (2) 8, (3) 14, (4) 16

(5) 20, (6) 24

Ex21: (1) 33, (2) 36

Ex22: (1) 47, (2) 43

Ex23: (1) 56, (2) 54

Ex24: (1) 63, (2) 66

Assessment 6:

(1) 37, (2) 47, (3) 40, (4) 62

Ex25: (1) 73, (2) 77

Ex26: (1) 89, (2) 88

Ex27: (1) 93, (2) 95

Ex28: (1) 90, (2) 100

Assessment 7:

(1) 75, (2) 80, (3) 98, (4) 100

Addition of two 1-digit numbers

Ex29: (1) 3, (2) 4, (3) 5, (4) 3

Ex30: (1) 6, (2) 7, (3) 8, (4) 6

Ex31: (1) 7, (2) 5, (3) 8, (4) 6

Ex32: (1) 8, (2) 9, (3) 8, (4) 4

Assessment 8:

(1) 3, (2) 5, (3) 6, (4) 8, (5) 9

Substruction of two 1-digit numbers

Ex33: (1) 1, (2) 3, (3) 3, (4) 2

Ex34: (1) 3, (2) 2, (3) 1, (4) 2

Ex35: (1) 1, (2) 3, (3) 7, (4) 0

Ex36: (1) 2, (2) 7, (3) 4, (4) 0

Assessment 9:

(1) 4, (2) 1, (3) 2, (4) 0, (5) 7

G1 Assessment 1:

(1) 6, (2) 17, (3) 8, (4) 3, (5) 7

G1 Assessment 2:

(1) 39, (2) 47, (3) 86, (4) 99

G1 Assessment 3:

(1) 6, (2) 7, (3) 8, (4) 9, (5) 9

(6) 1, (7) 3, (8) 7, (9) 2, (10) 2

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