Textbook

TEST EDITION

Mathematics 1

Based on Curriculum 2020
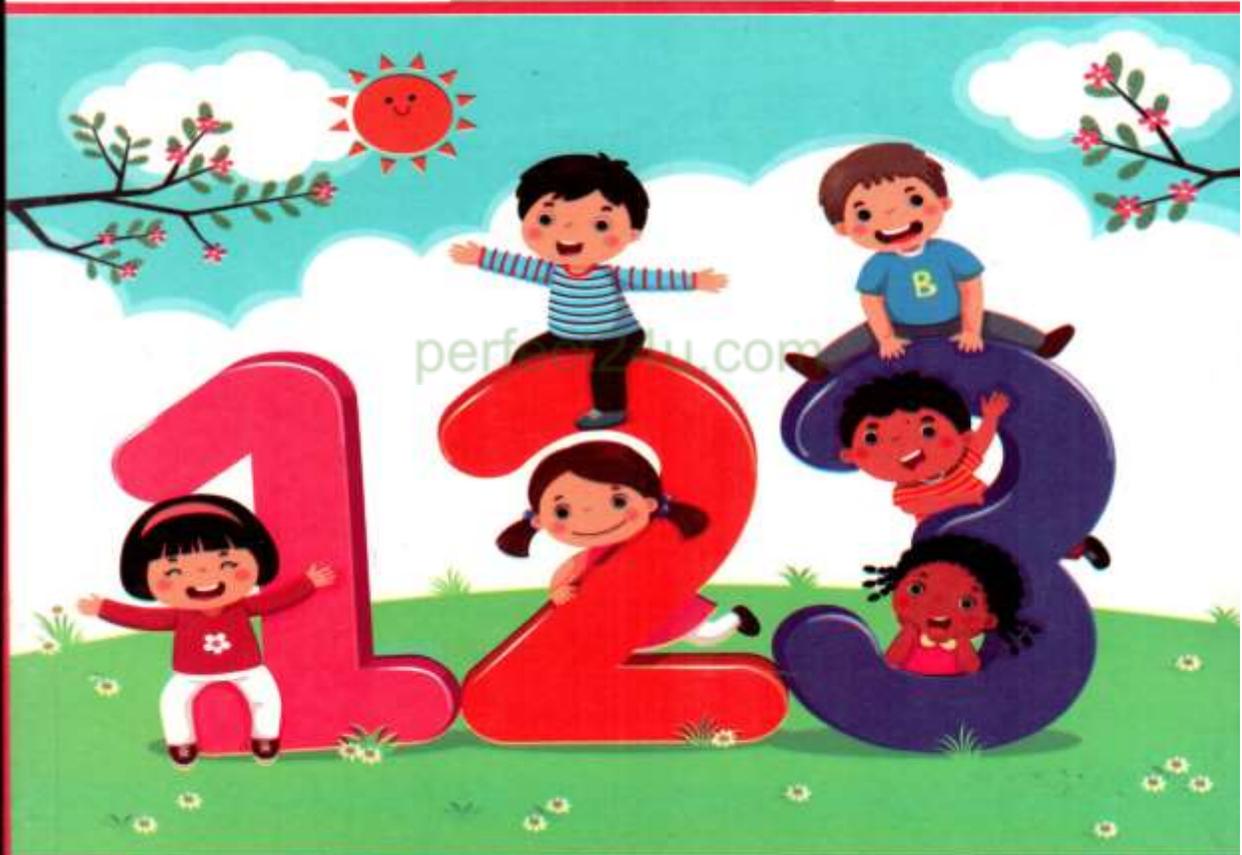
Khyber Pakhtunkhwa Textbook Board
Peshawar

Textbook

MATHEMATICS

1

Based on Curriculum 2020

perfect24u.com

Khyber Pakhtunkhwa Textbook Board Peshawar

Author:
- Sadia Jabeen

Review Supervision:
- Gohar Ali Khan
  Director, Curriculum & Teacher Education Khyber Pakhtunkhwa
  Abbottabad

Focal person:
- Zulfiqar Khan
  Additional Director, Curriculum & Textbook Review, DCTE Abbottabad

Reviewers:
- Nadeem Sultan, Principal GHS Pawa, Abbottabad
- Muhammad Amin, SS, GHS Baffa, Mansehra
- Shakil Ahmad, SPST GPS, Jhangi Khoja, Abbottabad
- Abbas Khan, SS DCTE, Abbottabad
- Shakeel Iqbal, SS (Maths) KP Textbook Board, Peshawar

perfect24u.com

Editor:
- Shakeel Iqbal, SS (Maths)
  Khyber Pakhtunkhwa Textbook Board Peshawar

Printing Supervision:
- Rashid Khan Paindakhel, Chairman
- Saeed-ur-Rehman, Member (E&P)
 Khyber Pakhtunkhwa Textbook Board, Peshawar

Academic Year 2021-22
Website: www.kptbb.gov.pk
Email: membertbb@yahoo.com
Phone: 091- 9217159-60

Contents
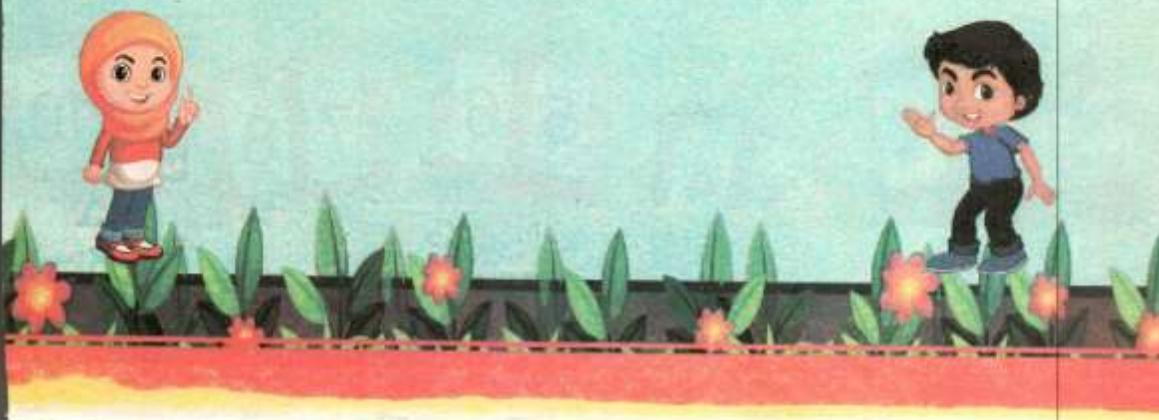
Unit 1

Whole Numbers

Learning Outcomes

By the end of this unit, you will be able to:

- identify numbers 1-9.
- identify 0 as a number.
- read numbers up to 9 in numerals and in words.
- write numbers up to 9 in numerals and in words.
- count objects up to 9 and represent in numbers.
- match numbers 0-9 with objects.
- count backwards from 9.
- arrange numbers in ascending and descending order (up to 9).
- identify which number (up to 9) comes:
  - before and after a given number.
  - between two given numbers.
- identify 10 as a 2 - digit number.
- compare and order the numbers 0-10.
- read numbers up to 99.
- write numbers up to 99.
- count forward and backward up to 99.
- recognize the place value of a specific digit in a 2 - digit numbers (tens and ones)
- identify the place value of the specific digit in a 2 - digit number
- decompose a number up to 99 to identify the value of a number in ten's and one's place.
- compare 1-digit and 2-digit numbers.
- order the set of numbers from 0 to 99 in ascending and descending order.
- identify which number (up to 99) comes:
  - before and after a given number.
  - between two given numbers.
- count in tens and recognize 100 as a 3 - digit numbers.
- identify and write missing numbers in a sequence from 1 to 100.
- count and write numbers of objects in a given set.
- identify the position of objects using ordinal numbers such as first, second, ..., tenth, including representations 1st, 2nd, ...,10th through pictures.
- compare two or more groups of objects in terms of numbers.
- match objects having one to one correspondence.
- identify the number of objects in two groups to show "more than" and "less than".

three four five

eight nine ten
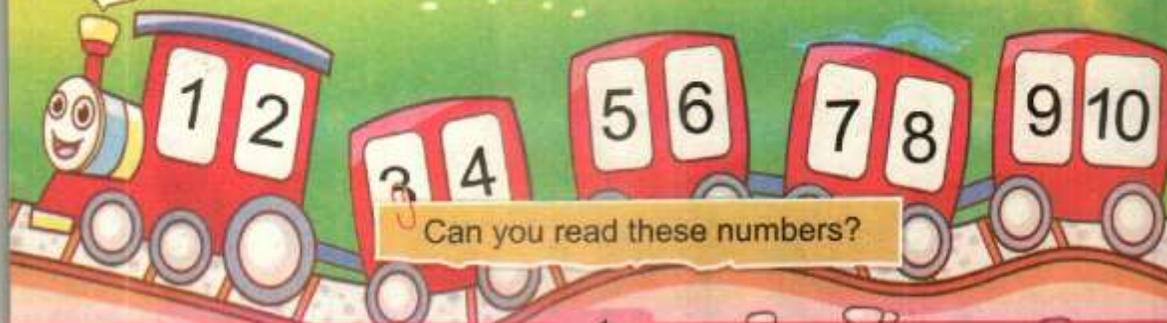
Can you read these numbers?

1

Counting 1 to 9

I have a lot of toys. Can you help me to count them?

Let's count and read.

✊☝	1	🧸
✌	2	✈✈
🖖	3	🟩🟩🟩
🖐	4	🚗🚗🚗🚗

	5	
	6	
	7	
	8	
	9	

Ask students to work in groups. Give each group 1 to 9 number cards. Show different number of objects. Ask each group to show the correct number card one by one. Repeat this activity several times with different numbers and objects.

Number Zero "0"

0

How many apples are there on the tree?
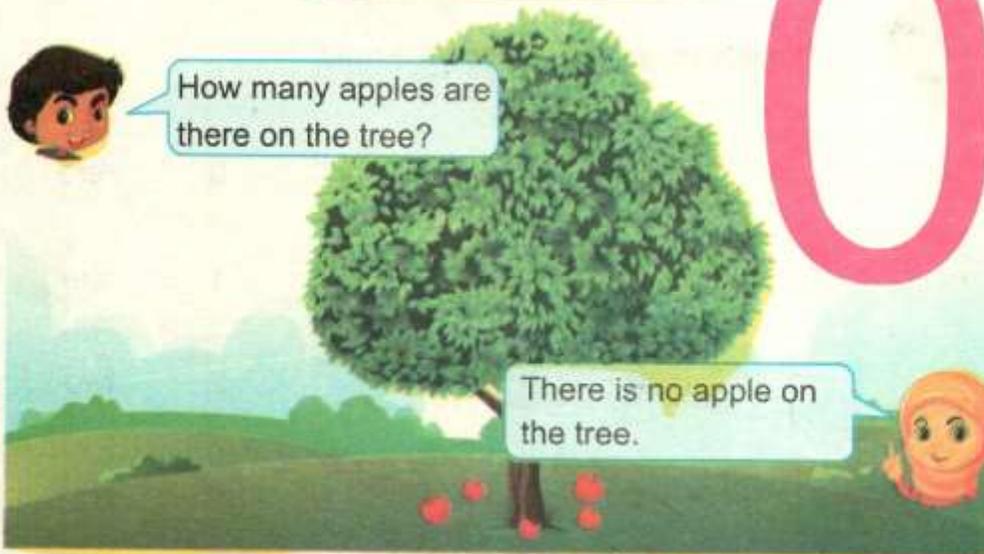
There is no apple on the tree.

There is no apple on the tree. It means there are zero "0" apples.

Key Fact

Only zero (0) means "nothing".

Try Yourself

How many legs does a fish have?

Count and read.

0	1	2
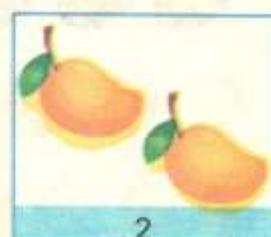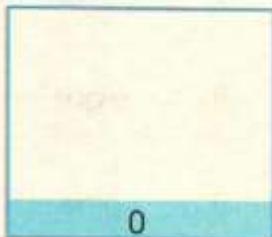
Place 5 baskets and 4 balls on the table. Then put a ball in each basket. Ask students how many baskets have balls and how many baskets are empty. Let them know that 4 baskets have balls and 1 is empty. The empty basket shows that there is no ball in it, it means there are zero "0" balls.

4

Counting

Let's count the objects and read.

	0	zero
	1	one
	2	two
	3	three
	4	four
	5	five
	6	six
	7	seven
	8	eight
	9	nine
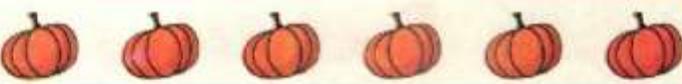
Paste a wall chart (zero to nine) on the wall. Then ask students to read aloud.

Count the objects and write.

|	0	zero
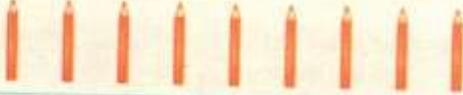
Forward Counting

Let's count the dots in the pictures below and read forward counting from 0 to 9.

0　1　2　3　4　5　6　7　8　9
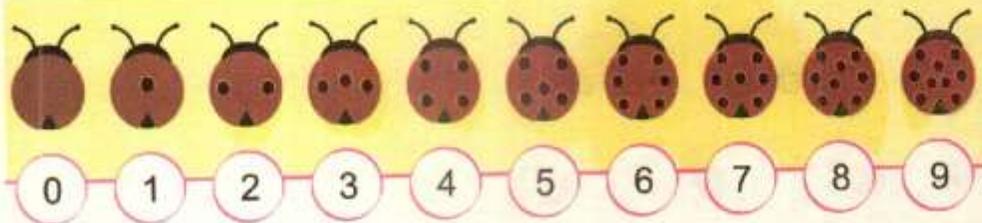
Backward Counting

Let's count the dots in the pictures below and read backward counting from 9 to 0.

9　8　7　6　5　4　3　2　1　0
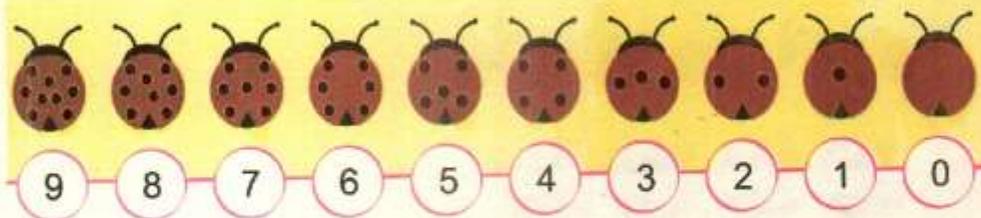
Place number cards (0 to 9) randomly on the table. Call a student and ask him/her to put the number cards in order on the table. Then ask him/her to count forward (0 to 9) and count backward (9 to 0).

Count the objects and write the correct number.
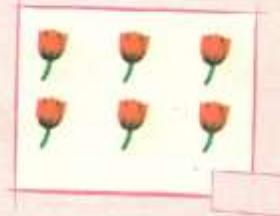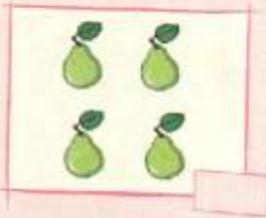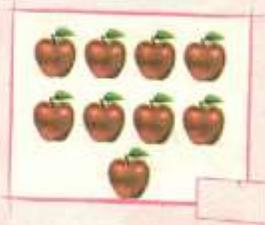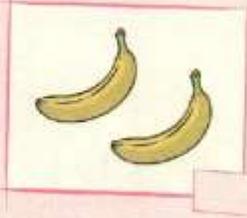
Count the objects and encircle the correct number.

	5	7	6
	8	0	9
	7	8	9
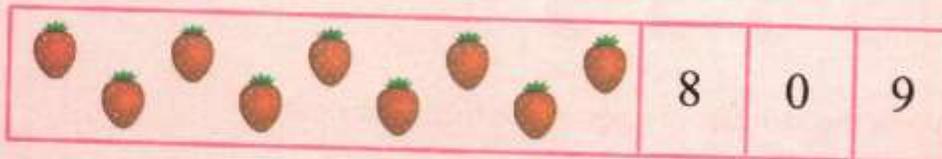
Count the objects and match with the correct number.
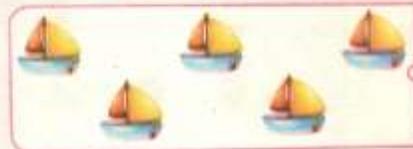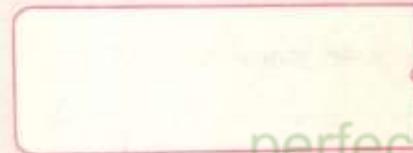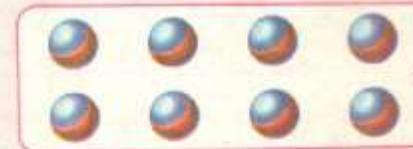
|	
(muffins)	4
(cars)	0
(boats)	8
(empty)	5
(balls)	7

Write the number of eggs in the following nests.

Count the objects and colour the correct number.

| 5 | 4 | 3 |

| 6 | 7 | 5 |

| 8 | 7 | 9 |
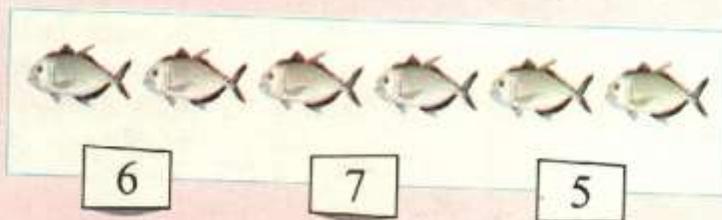
Count forward and write the missing numbers.

| 0 | | 2 | | | 5 | | | | 9 |

Count backward and write the missing numbers.

| 9 | | | 6 | | | | | | 0 |

Ordering Numbers

9
8
7
6
5
4
3
2
1
0

9
8
7
6
5
4
3
2
1
0
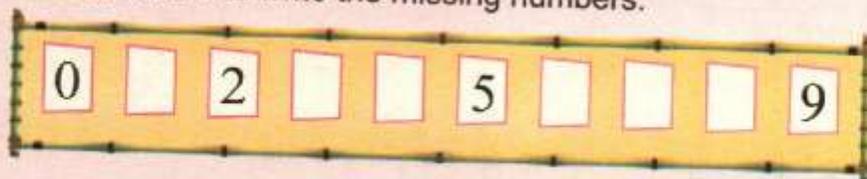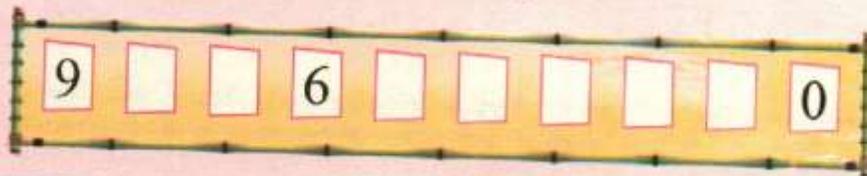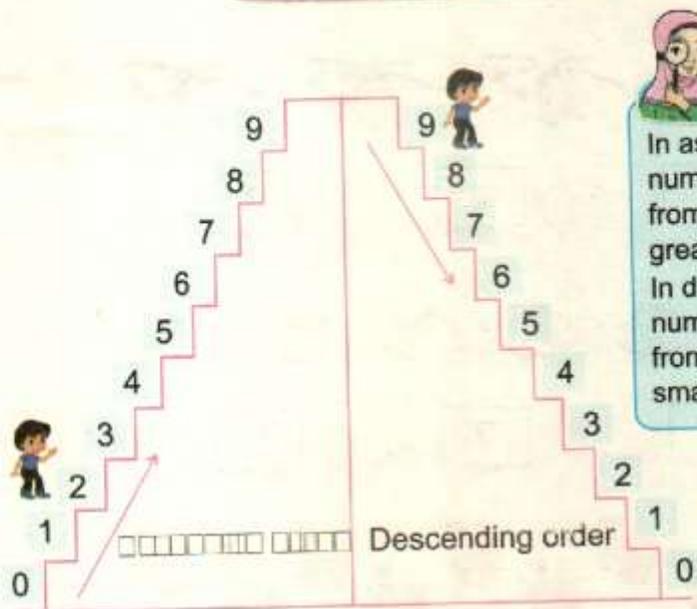
Descending order

Key Fact

In ascending order, number are arranged from smallest to the greatest.

In descending order, number are arranged from greatest to the smallest.

Write the following numbers in ascending order.

0	4	5

1	4	3

Write the following numbers in descending order.

4	7	3

7	9	8

Write more than two numbers on the board and ask students which number is the greatest or the smallest? Then ask them to arrange these numbers in ascending and descending order.

Before, after and Between

There are three number cards in the basket. Can you help me arrange these cards in ascending order?

1 comes before 2.

2 comes after 1.

2 comes before 3.

3 comes after 2.

2 comes between 1 and 3.

Therefore, we can arrange these cards in this way.

1 **2** **3**

Try Yourself

What number comes before and after 4?

Place some number cards upside down on the table. Call a random student to the front of the class and ask him/her to pick up any number card. Then ask which number comes before and after this number.

Write the number that comes before the given number.

	1
	4
	7
	9

Write the number that comes after the given number.

2	
5	
7	
8	

Write the number that comes between the given numbers.

0		2
3		5
6		8
7		9

Number Ten "10"

I have 9 candies when I add 1 more candy to the 9 candies, I have 10 candies.

9 candies

1 candy

10 candies

10
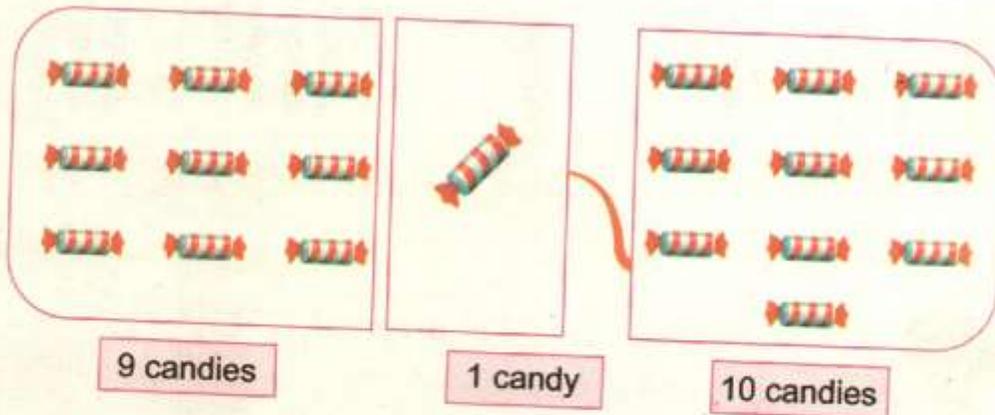
Key Fact

10 is the first 2-digit number.

Try Yourself

- What number comes after 9?
- What number comes before 10?

Show students a large-sized flash card with the number 10 written on it. Paste a number chart from 0 to 10 on the board and ask students to find the number 10 on it.

Place Value (Tens and Ones)

I have 9 pencils. If I add 1 more pencil. I have 10 pencils now.

9 ones   1 one   10 ones
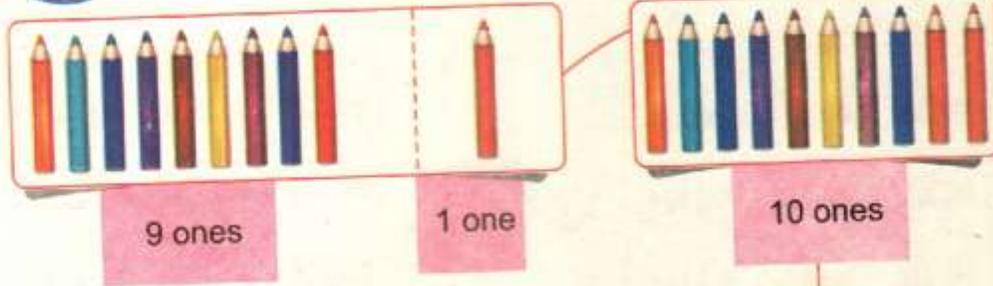
Now, I have 1 bundle of 10 pencil only. It means there is 1 ten and 0 ones.

1 ten

Key Fact

10 ones make 1 ten.
10 ones = 1 ten

1	0
1 ten	0 ones

1 ten and 0 ones = 10

Key Fact

A 2-digit number consists of ones and tens.
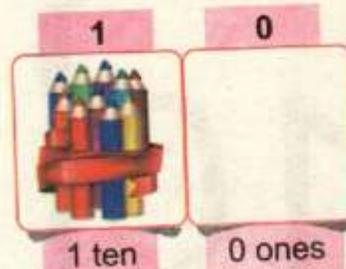
Place pencils or ice cream sticks on the table. Ask a random student to count 10 pencils or ice cream sticks. Then give him/her a rubber band and ask him/her to make a bundle of 10 pencils or ice cream sticks.

Numbers 0-10

Count and read.

Tens	Ones	
	0	
	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
1	0	

Key Fact
Numbers 0 to 9 are called ones.

Key Fact
9 is the greatest 1-digit number.

Key Fact
10 is the smallest. 2-digit number.

I have 14 balloons.

Let's circle 10 balloons to make a bundle.
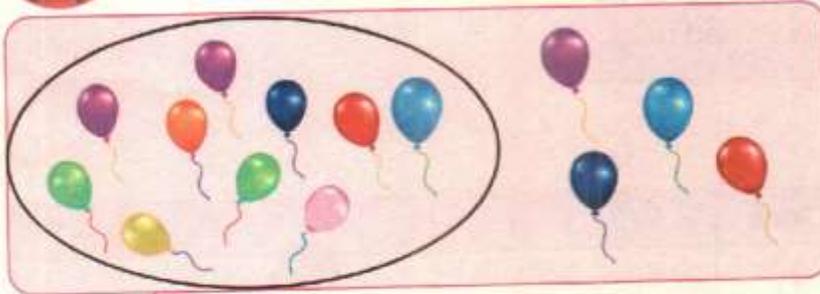
1 ten

4 ones

1 tens and 4 ones = 14

Now, I have 1 bundle of 10 balloons and 4 more balloons.

I have 2 bundles of 10 pencils each and 8 more pencils.

2

8

2 tens and 8 ones = 28

Place 25 beads and 2 glasses on the table. Ask students to make groups of tens using a glass. There are 2 glasses of tens and 5 beads separately. Explain to the students that 2 tens represent number 20 and each separate bead represents ones. So, 2 tens and 5 ones make 25. Repeat this activity for different numbers.

Numbers 11 - 20

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	1	1	11
	1	2	12
	1	3	13
	1	4	14
	1	5	15
	1	6	16
	1	7	17
	1	8	18
	1	9	19
	2	0	20
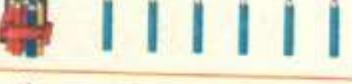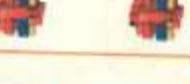
Numbers 21 - 30

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	2	1	21
	2	2	22
	2	3	23
	2	4	24
	2	5	25
	2	6	26
	2	7	27
	2	8	28
	2	9	29
	3	0	30

Numbers 31 - 40

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	3	1	31
	3	2	32
	3	3	33
	3	4	34
	3	5	35
	3	6	36
	3	7	37
	3	8	38
	3	9	39
	4	0	40

Numbers 41 - 50

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	4	1	41
	4	2	42
	4	3	43
	4	4	44
	4	5	45
	4	6	46
	4	7	47
	4	8	48
	4	9	49
	5	0	50

Fill in the boxes.

0			3		
	7				
			15		
		20		22	
	25		27		
		32			35
			39		
	43			46	
		50			

Write the numbers in ascending order.

18   15   14   17   16
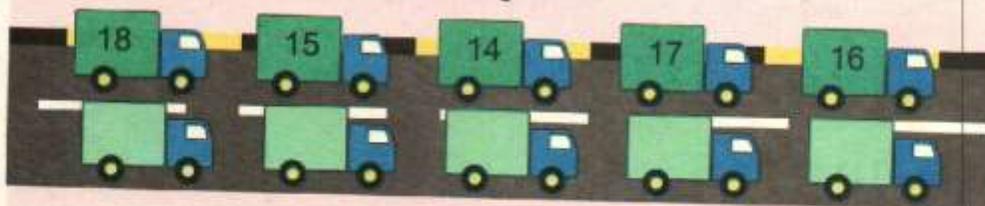
Write the numbers in descending order.

41   38   39   40   37
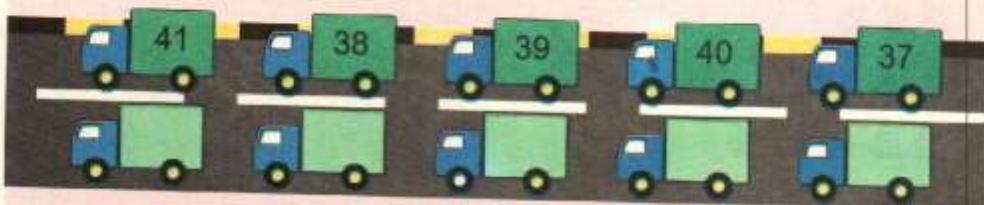
Write the number that comes between the given numbers.

| 13 | | 15 | 28 | | 30 |
| 39 | | 41 | 46 | | 48 |

Complete the picture by joining the dots and colour it.
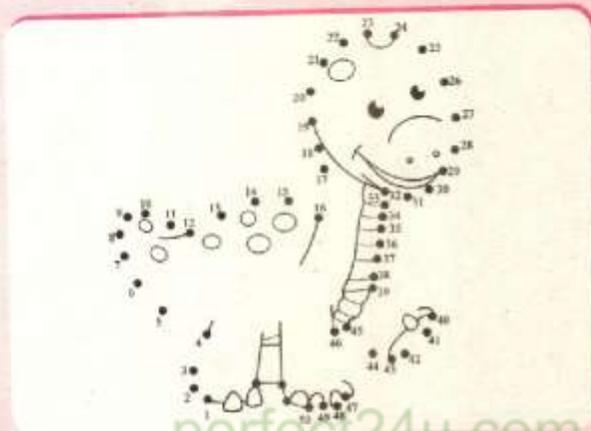
perfect24u.com

Write the numbers with the help of ones and tens.

	Tens	Ones	Numbers
🦋 ||||	1	4	14
🦋🦋 |||||||			
🦋🦋🦋			
🦋🦋🦋🦋 | | | | | | | |			
🦋🦋🦋🦋🦋			

Numbers 51 - 60

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	5	1	51
	5	2	52
	5	3	53
	5	4	54
	5	5	55
	5	6	56
	5	7	57
	5	8	58
	5	9	59
	6	0	60

Numbers 61 - 70

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
🚂🚂🚂🚂🚂🚂 ∣	6	1	61
🚂🚂🚂🚂🚂🚂 ∣∣	6	2	62
🚂🚂🚂🚂🚂🚂 ∣∣∣	6	3	63
🚂🚂🚂🚂🚂🚂 ∣∣∣∣	6	4	64
🚂🚂🚂🚂🚂🚂 ∣∣∣∣∣	6	5	65
🚂🚂🚂🚂🚂🚂 ∣∣∣∣∣∣	6	6	66
🚂🚂🚂🚂🚂🚂 ∣∣∣∣∣∣∣	6	7	67
🚂🚂🚂🚂🚂🚂 ∣∣∣∣∣∣∣∣	6	8	68
🚂🚂🚂🚂🚂🚂 ∣∣∣∣∣∣∣∣∣	6	9	69
🚂 🚂 🚂 🚂 🚂 🚂 🚂	7	0	70

Numbers 71 - 80

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	7	1	71
	7	2	72
	7	3	73
	7	4	74
	7	5	75
	7	6	76
	7	7	77
	7	8	78
	7	9	79
	8	0	80

Numbers 81 - 90

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
	8	1	81
	8	2	82
	8	3	83
	8	4	84
	8	5	85
	8	6	86
	8	7	87
	8	8	88
	8	9	89
	9	0	90

27

Numbers 91 - 99

Read numbers with the help of ones and tens.

	Tens	Ones	Numbers
🚂🚂🚂🚂🚂🚂🚂🚂🚂 i	9	1	91
🚂🚂🚂🚂🚂🚂🚂🚂🚂 ii	9	2	92
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iii	9	3	93
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiii	9	4	94
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiiii	9	5	95
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiiiii	9	6	96
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiiiiii	9	7	97
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiiiiiii	9	8	98
🚂🚂🚂🚂🚂🚂🚂🚂🚂 iiiiiiiii	9	9	99

Write the numbers with the help of ones and tens.

	Tens	Ones	Numbers
	5	9	59

Write the number that comes between the given numbers.

54 ◇ ◇ 56   66 ◇ ◇ 68

79 ◇ ◇ 81   95 ◇ ◇ 97

Write ones and tens for the following numbers.

Tens	Ones
57	

Tens	Ones
64	

Tens	Ones
75	

Tens	Ones
99	

Fill in the blanks.

5 tens and 0 ones _____   6 tens and 5 ones _____

9 tens and 8 ones _____   7 tens and 0 ones _____

9 tens and 9 ones _____   8 tens and 1 ones _____

Comparing Numbers

I have two different number cards. Can you help me to choose the greater number card?

10 **9**

Let's compare 9 and 10.

1 ten = 10 ones

9 ones = 9

Key Fact
A 2-digit number is greater than a 1-digit number.

9 is the 1-digit number.

10 is the 2-digit number.

So, 10 is greater than 9.

9 is smaller number than 10.

Let's compare 24 and 26.

2 tens and 4 ones = 24

2 tens and 6 ones = 26

In 24 and 26, both digits in tens place are the same. Therefore, we compare the digits in the ones places.

6 is greater than 4.

So, 26 is greater than 24.

Provide different number of objects to students. Ask them to compare them and tell which objects are more in numbers and which number is greater?

Write "more than" or "less than" in the blanks.

5 is _____ 6.

21 is _____ 18.

29 is _____ 34.

80 is _____ 70.

92 is _____ 88.

Compare and colour the box with greater number.

| 9 | 4 | | 19 | 21 | | 43 | 33 |

| 57 | 69 | | 88 | 79 | | 99 | 90 |

Compare and colour the box with smaller number.

| 17 | 23 | | 35 | 46 | | 53 | 51 |

| 68 | 70 | | 89 | 86 | | 97 | 91 |

Ordering Numbers

Let's arrange the numbers 47, 33, 54 in ascending and descending order.

	Tens	Ones
4 tens and 7 ones =	4	7
3 tens and 3 ones =	3	3
5 tens and 4 ones =	5	4

3 tens are smaller than 4 tens and 5 tens.

So, 33 is the smallest number.

Similarly,

5 tens are greater than 3 tens and 4 tens.

So, 54 is the greatest number.

Ascending Order: 33, 47, 54   Descending Order: 54, 47, 33

Write these numbers in descending order.

6	7	8	5
18	16	17	15
24	26	27	25
71	74	73	72

Give different number cards to students and ask them to work in groups. Ask them to compare the numbers and arrange them in ascending and descending order.

Hundred "100"

When we add 1 more to 99, what do we get?

99 and 1 make 100.
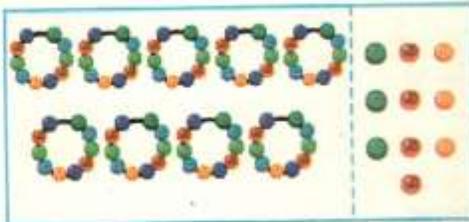
9 tens and 10 ones =100
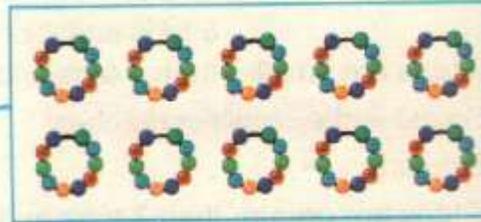
10 tens = 100

One hundred = 100

perfect24u.com

91 → 92 → 93 → 94 → 95 → 96 → 97 → 98 → 99 → 100
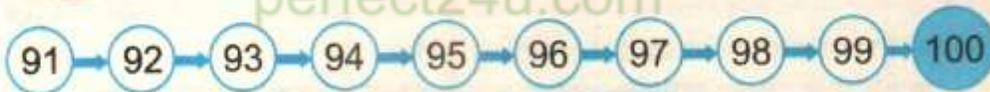
100 comes after 99.

Try Yourself

What number comes before 100?

Key Fact

- 99 is the greatest 2-digit number.
- 100 is the smallest 3-digit number.
- First 3-digit number is 100.

Give beads in different colour to the students and instruct them to make ten groups of ten beads. Ask them how many tens are in one hundred?

Count in Tens

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

Write the missing numbers in the given boxes.

	2			5		7		9	
11					16		18		20
	22			25			28		
	32				36				40
41	42			45		47	48		
	52				56		58		60
61				65				69	
	72			75			78	79	
	82		84			87			90
91					96		98		

Count the objects and write the correct numbers.
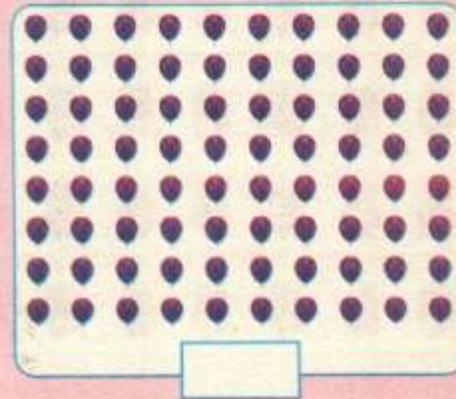
Ordinal Numbers

In this picture, children are running in the race. With the help of ordinal numbers we can tell the position of each child.

tenth 10th
ninth 9th
eighth 8th
seventh 7th
sixth 6th
fifth 5th
fourth 4th
third 3rd
second 2nd
first 1st
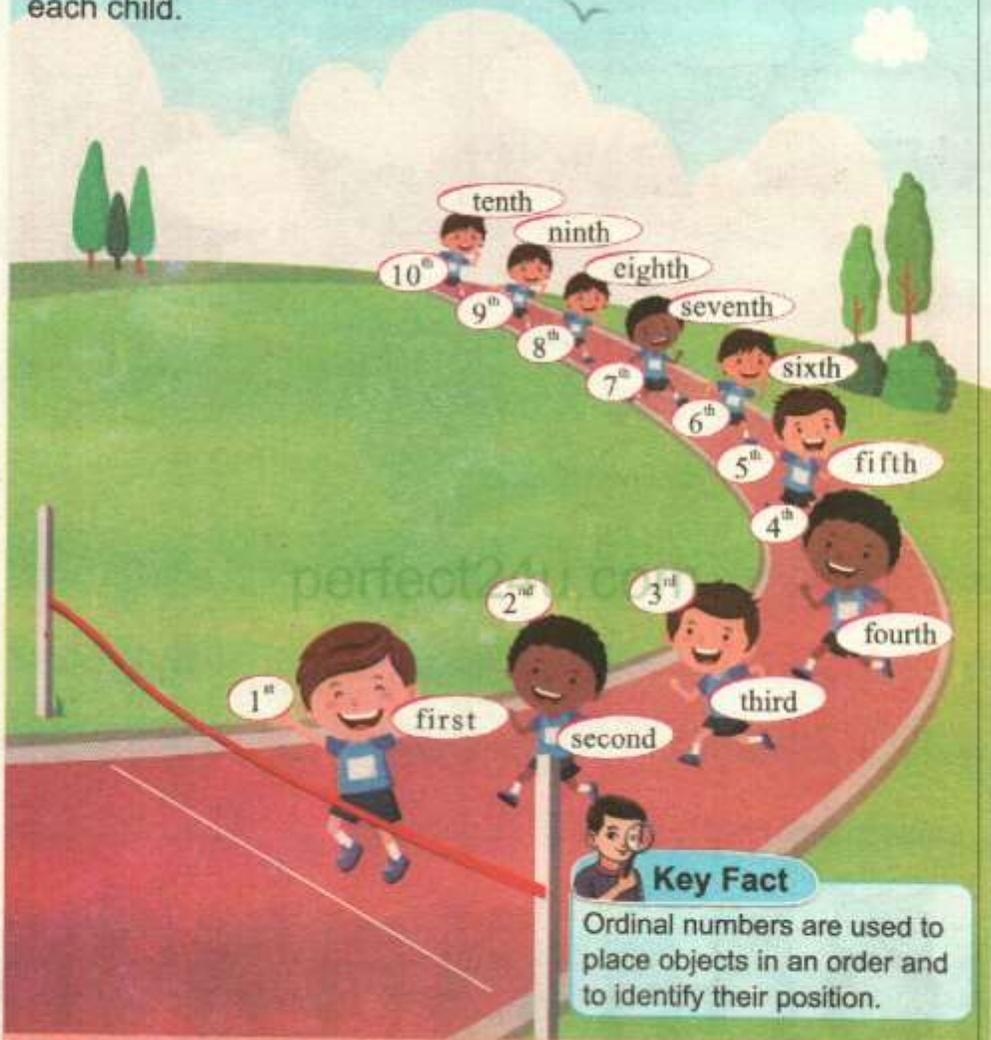
Key Fact

Ordinal numbers are used to place objects in an order and to identify their position.

Place ten toys (with ordinal number tags) on the table. Ask students to arrange the toys on the table from right to left.

Write the ordinal number for each frog.
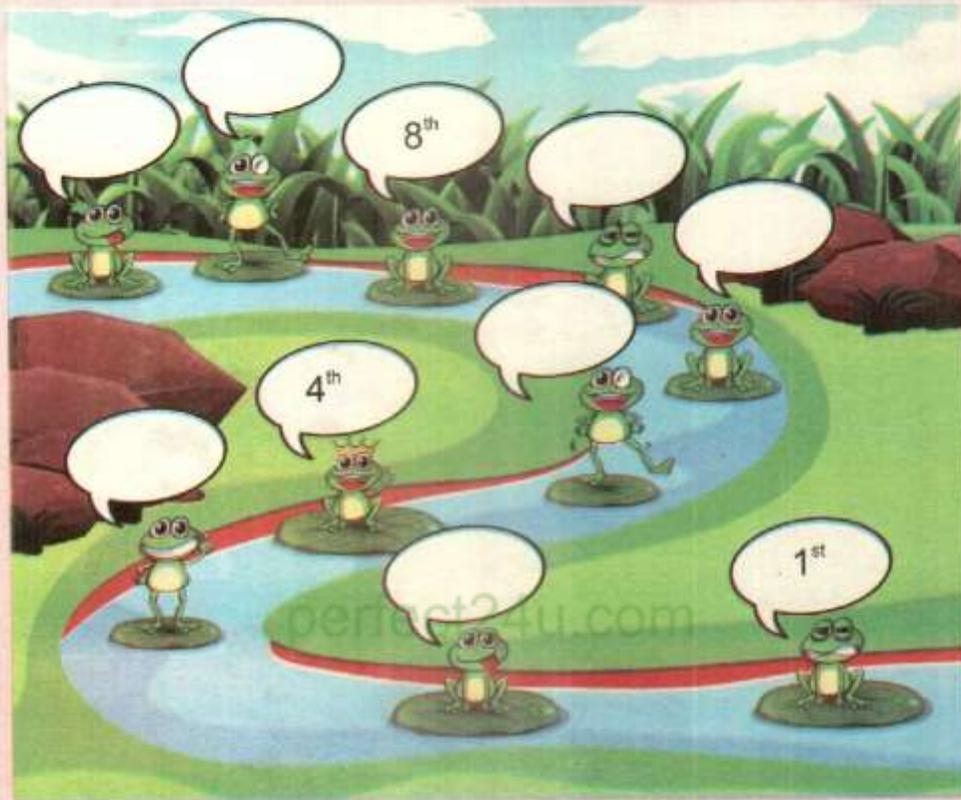
Circle the bird at 2nd, 6th and 8th position (right to left).
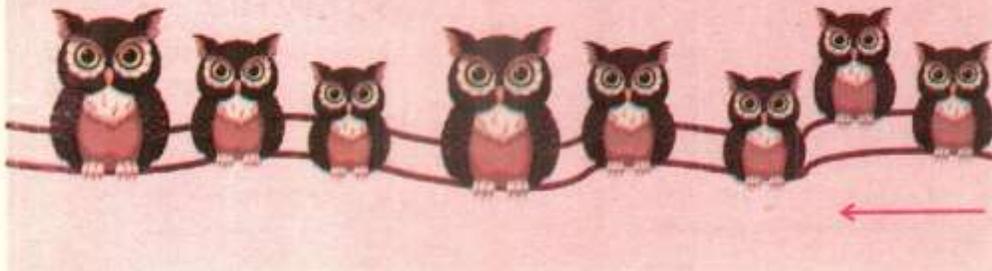
One-to-One Correspondence

What is more in number, cups or plates?

Let's match cups and plates below.
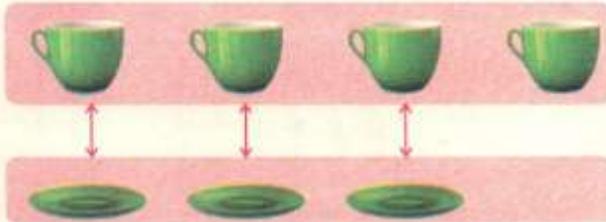
There are 4 cups
and 3 plates.
4 is more than 3.
3 is less than 4.

So, there are more cups and less plates.

Match the objects having one-to-one correspondence and write less or more in the empty boxes.

Comparing Objects

I have 4 pencils.

I have 6 pencils.

We can compare the number of pencils by counting them.

6

4

6 pencils are more than 4 pencils.

So, 6 is 2 more than 4 .

Tick (✓) the box which has more objects and fill in the blanks.
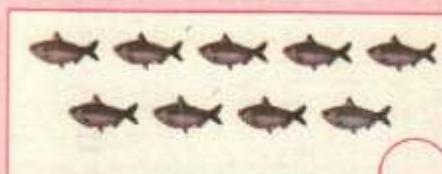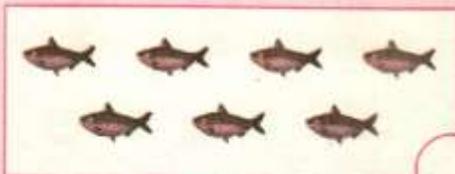
So, 9 is _____ more than 7.

So, 5 is _____ less than 8.

I Have Learnt

- reading and writing numbers up to 9 in numerals and words.
- reading and writing numbers in numerals up to 100.
- counting forward and backward from 0 to 99.
- identifying the numbers before / after and between the given numbers from 0 to 99.
- comparing numbers from 0 to 99 and arrange them in ascending and descending order.
- identifying the place value of a specific digit in 2-digit numbers.
- counting in Tens and recognize 100 as a 3-digit number.
- identifying the position of objects using ordinal numbers.
- identifying more or less by comparing the number of objects in two groups.

Vocabulary

zero
forward counting
backward counting
place value
ones
tens
digit
ascending order
descending order
ordinal numbers

Review Exercise

Write the correct missing numbers.

56 ◯ ◯ ◯ 60 ◯ ◯ ◯

86 87 ◯ ◯ ◯ 91 ◯

92 ◯ ◯ 96 ◯ ◯ 99

Write the numbers that comes before and after the given number.

☐ 14 ☐   ☐ 61 ☐

73   97

Write the number that comes between the following numbers.

| 23 | | 25 | | 43 | | 45 | | 36 | | 38 | | 98 | | 100 |

Count backward and write the correct number.

88

96
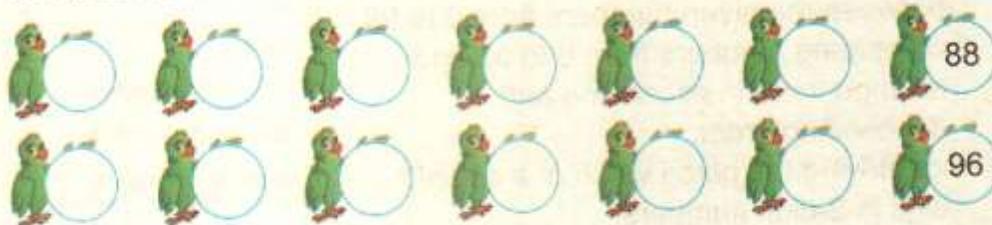
Write the ordinal number for each animal, (right to left).

Write 'more than' or 'less than' in the blanks.

12 is _____ 18.	70 is _____ 60.
99 is _____ 90.	23 is _____ 3.
40 is _____ 41.	61 is _____ 62.

Write the following numbers in ascending order.

| 21 | 24 | 23 | 25 | 22 |

| 45 | 47 | 49 | 46 | 48 |

Write the following numbers in descending order.

| 63 | 65 | 62 | 66 | 64 |

| 85 | 83 | 87 | 86 | 84 |

Count the objects, write the correct numbers and fill in the blanks.

So, 20 is _____ less than 24.
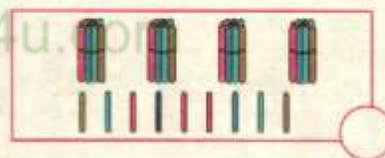
So, 49 is _____ more than 40.

Read the instructions and write the correct number.

I am the greatest 2-digit number.

I have 9 ones and 9 tens.

100 comes after me.

Tell me, who am I?

I am the smallest 2-digit number.

I have 0 ones and 1 ten.

Tell me, who am I?

Unit 2

Number Operations
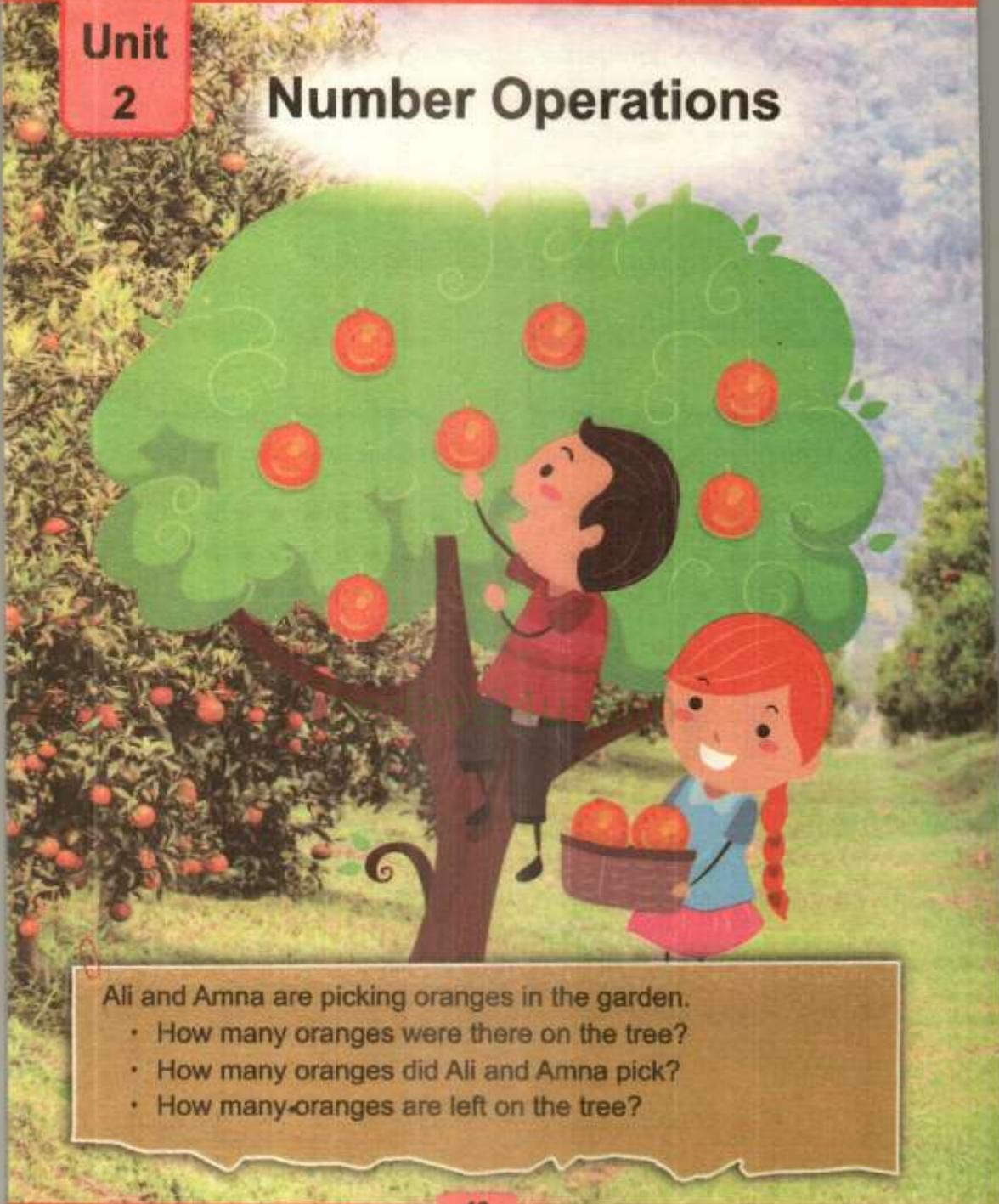
Ali and Amna are picking oranges in the garden.
- How many oranges were there on the tree?
- How many oranges did Ali and Amna pick?
- How many oranges are left on the tree?

Addition

Learning Outcomes

By the end of this unit, you will be able to:

- compare numbers from 1 to 20 to identify "how much more" one is from another.
- recognize and use symbols of addition "+" and equality" ="
- add two 1-digit numbers sum up to 9.
- add a 2-digit number to a one-digit number.
- add a 2-digit number to 10s.
- add two, 2-digit numbers.
- recognize the use of symbol to represent an unknown such as □+7 =□+ 4 ,3+4=□,4+□=7 (include questions that sum up to 20).
- add numbers (up to 20) using mental strategies by using real life examples.
- construct addition sentence from given number stories.

Harris and Hareem are playing with toys.
They want to know how many toys they have in total.
Will you help them?

How Much More

I have two different number cards. Tell! Which number is how much greater than the other?

17   13

Let's count forward from 13 to 17.

| 13 | 14 | 15 | 16 | 17 |

1   1   1   1
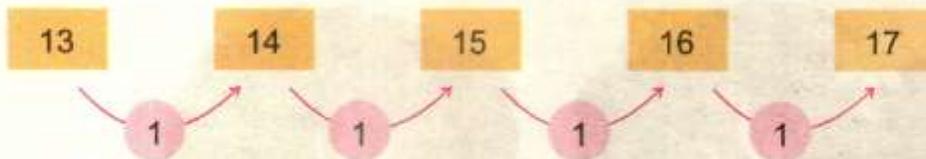
17 is 4 steps forward from 13.

So, 17 is 4 more than 13.

Compare the numbers and write how much more a number is than the other.

| 9 | | | | | 14 |

1   1   1   1   1

So, 14 is _____ more than _____.

| 12 | | | | | 18 |
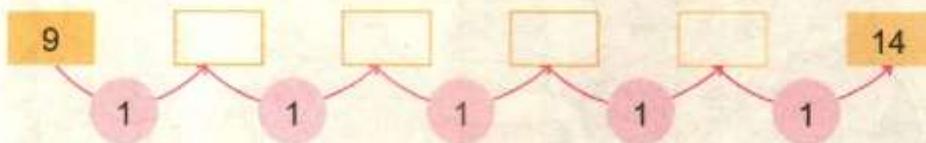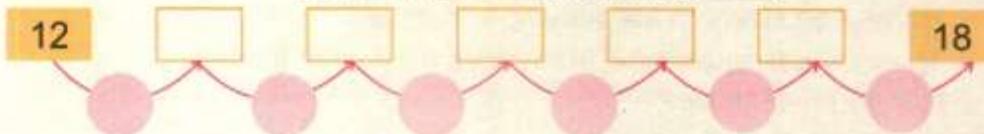
So, 18 is _____ more than _____.

Addition of 1-digit Numbers

I have 2 cars in my hand and 3 cars on the table.

2   and   3   equals   5

We can also write it with the symbols of "+" (plus) and "=" (equal).

2   +   3   =   5

Let's count and add.

and   equals

3   and   4   equals   7

3   +   4   =   7

We can also write it as:

3 🍎🍎🍎

+ 4 🍎🍎🍎🍎

7 🍎🍎🍎🍎🍎🍎🍎

⚽⚽ / ⚽⚽ and ⚽⚽ equals ⚽⚽⚽ / ⚽⚽⚽

4 and 2 equals 6

4 + 2 = 6

5 🧁🧁🧁🧁🧁

+ 3 🧁🧁🧁

8 🧁🧁🧁🧁🧁🧁🧁🧁

6

+ 2

8

4 🌻🌻🌻🌻

+ 0

4 🌻🌻🌻🌻

🎓 Ask students to add 1- digit numbers using number card and symbols (+, =).

Count and add.

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

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

Count and add. Then use the symbol '+' and '=' and write the correct answer.

Count and add.

$$\square \quad + \quad \square$$

$$\square \quad + \quad \square$$

$\square$ + $\square$ 🍓🍓🍓🍓🍓
$\overline{\square}$

$\square$ + $\square$ 🍓🍓🍓🍓
$\overline{\square}$
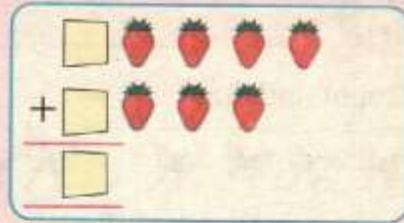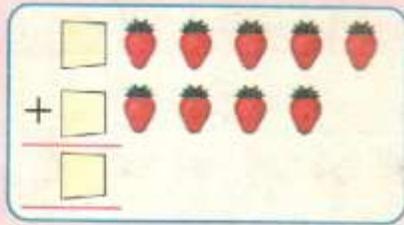
Look at the picture and fill in the blanks.

_____ ducks are in the water
and _____ ducks are out of
the water.

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

There are _____ ducks
altogether.

Write the number in the boxes.

| 5 | 🍎🍎🍎🍎🍎 | + | 🍎🍎🍎🍎 | = | |

| | 🍎🍎🍎🍎🍎 | + | 🍎🍎🍎 | 3 | = | |

| 1 | 🍎 | + | 🍎🍎🍎🍎🍎 | 5 | = | |

Add the following.

🐌 1 + 🐌 4 = 🐌 ⃝

🐌 3 + 🐌 5 = 🐌 ⃝

🐌 6 + 🐌 0 = 🐌 ⃝

Add and then colour the picture using the colour key given below.

1
2
3
4
5
6
7

$1 + 1$
$2 + 1$
$2 + 2$
$4 + 3$
$3 + 3$
$2 + 2$
$5 + 1$
$4 + 2$
$2 + 2$
$3 + 1$
$4 + 1$
$1 + 0$
$1 + 3$
$2 + 2$
$3 + 3$
$4 + 2$
$5 + 1$
$3 + 2$
$4 + 3$
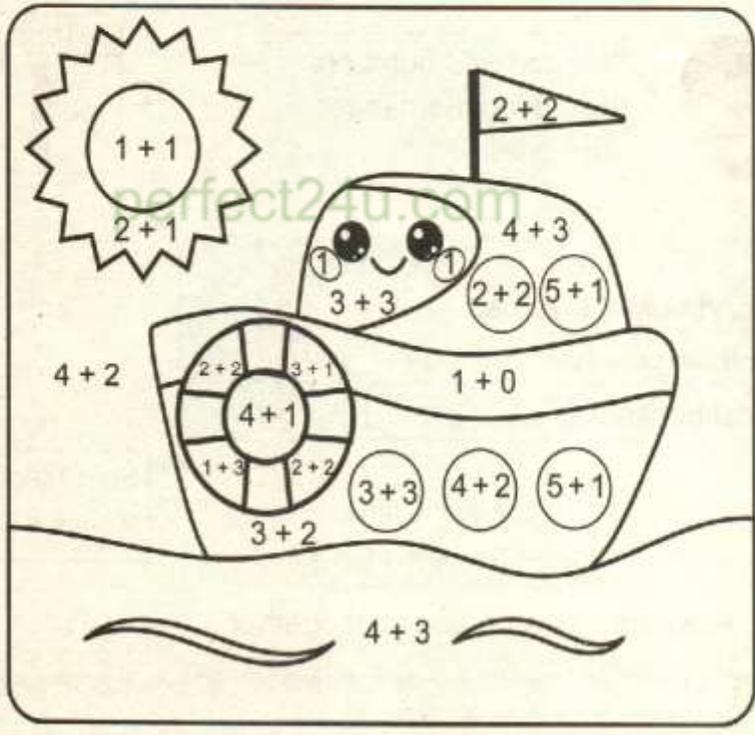
Addition of 2-digit Numbers and 1-digit Numbers

Attiya had 12 storybooks.
Her mother gave her 3 more books.
How many storybooks does she have altogether?
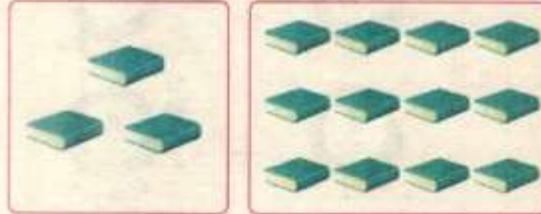
To find the total number of books, we need to add 12 and 3. Let's count forward 3 steps from 12.

12 → 13 → 14 → 15
1   1   1
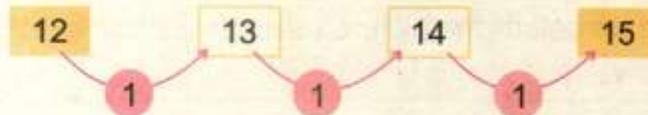
We can add numbers by writing them in tens and ones.

	Tens	Ones
12	|	■ ■
+ 3		■ ■ ■
	1	5

	T	O
Storybooks Attiya had =	1	2
Mother gave her = +		3
Total books =	1	5

Step 2: Add the tens.
1 ten + 0 tens = 1 ten

Step 1: Add the ones.
2 ones + 3 ones = 5 ones

So, Attiya has 15 storybooks altogether.

Draw a place value chart on the board and write different 1-digit numbers on it. Now ask students to add these numbers.

Solve the following.

Tens	Ones
2	1
+	6

Tens	Ones
3	3
+	2

Tens	Ones
5	5
+	4

Tens	Ones
7	1
+	4

Tens	Ones
7	5
+	3

Tens	Ones
6	4
+	5

Tens	Ones
8	1
+	2

Tens	Ones
9	2
+	6

Zara has 22 red beads and 7 blue beads. How many beads does she have in total now?

	T	O
Red Beads =		
Blue Beads = +		
Total Beads =		

There were 61 almonds in a jar. Ali put 8 more almonds in the jar. How many almonds are there in the jar altogether?

	T	O
Almonds in the jar =		
More Almonds = +		
Total Almonds =		

Addition of 2-digit Numbers

Amna had 24 pencils. She bought 30 more pencils. How many pencils does Amna have now?

		T	O
Pencils Amna had	=	2	4
Pencils she bought	= +	3	0
Total pencils	=	5	4

	Tens	Ones
24		
+		
30		
	5	4

Step 2: Add the tens.
2 tens + 3 tens = 5 tens

Step 1: Add the ones.
4 ones + 0 ones = 4 ones

So, Amna has 54 pencils altogether.

Sadia made 37 biscuits and her sister made 42 biscuits. How many biscuits did both of them make altogether?

perfect24u.com
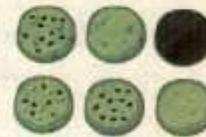
		T	O
Sadia's biscuits	=	3	7
Her sisters biscuits	= +	4	2
Total biscuits made	=	7	9

	Tens	Ones
37		
+		
42		
	7	9

Step 2: Add the tens.
3 tens + 4 tens = 7 tens

Step 1: Add the ones.
7 ones + 2 ones = 9 ones

So, Sadia and her sister have made 54 biscuits altogether.

Draw a place value chart on the board and write different tens and 2-digit numbes on it. Now ask students to add these numbers.

Solve the following.

Tens	Ones
4	6
+ 3	0

Tens	Ones
2	1
+ 2	8

Tens	Ones
2	9
+ 5	0

Tens	Ones
6	2
+ 3	5

Tens	Ones
1	5
+ 6	3

Tens	Ones
4	7
+ 2	0

Tens	Ones
3	6
+ 6	2

Tens	Ones
7	5
+ 2	3

Irtaza got Rs 40 on Eid and Mustafa got Rs 50. How much Eidi did both of them get altogether?

	T	O
Irtaza's Eidi =		
Mustafa's Eidi = +		
Total Eidi =		

Key Fact

Always add ones in ones and tens in tens.

There were 65 green balls in a basket. The shopkeeper put 14 red balls in the basket. How many balls are there in the basket altogether?

	T	O
Green Balls =		
Red Balls = +		
Total Balls =		

Try Yourself

Add 23 and 45.

Finding Unknown Numbers

Let's count and add.

| 13 | + | 5 | = | 18 |

Let's add.

| 4 | + | 3 | = | 7 | | 11 | + | 6 | = | 17 | | 10 | + | 6 | = | 16 |

| 7 | + | 5 | = | 12 | | 2 | + | 13 | = | 15 | | 9 | + | 10 | = | 19 |

Write the unknown number and fill in the boxes.

9 + ___ = 12

___ + 5 = 17

| | + | 5 | = | 15 | | 7 | + | | = | 13 | | | + | 8 | = | 16 |

| 10 | + | 8 | = | | | 1 | + | | = | 5 | | 5 | + | 7 | = | |

Addition using Mental Strategies

Ahmed had Rs 13. His father gave him Rs 6 more. What amount does he has altogether?

We can also find the total amount using mental strategy.

Step 1:
Separate tens and ones.

$$13 = 10 + 3$$

$$13 + 6 = 19$$
$$10 \quad 3$$

Step2:
Add the ones.

$$3 + 6 = 9$$
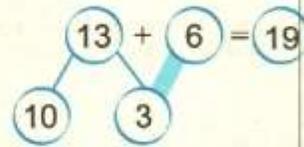
Step 3:
Now add tens in the result that is obtained in step2.

$$10 + 9 = 19$$

So, Ahmed has Rs 19 altogether.

Add the following numbers using mental strategies.

$2 + 14 = \boxed{}$	$13 + 6 = \boxed{}$	$15 + 3 = \boxed{}$
$2 + 17 = \boxed{}$	$8 + 10 = \boxed{}$	$14 + 4 = \boxed{}$

$$11 + 2 = \bigcirc$$

$$12 + 5 = \bigcirc$$

Subtraction

Musa had 5 balloons. He gave 2 balloons to his sister.
How many balloons are left with Musa?

How much Less

I have two different number cards. Find! Which number is how much smaller than the other?

Let's count backward from 14 to 9.

14	13	12	11	10	9

1   1   1   1   1
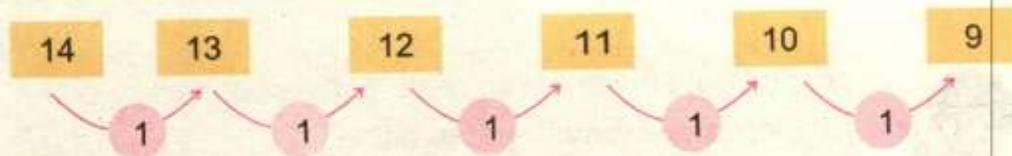
9 is 5 steps backward from 14.

So, 9 is 5 less than 14.

Compare the following numbers and write how much less a number is from the other.

13					8

1   1   1   1   1

So, 8 is _____ less than _____.

19						13
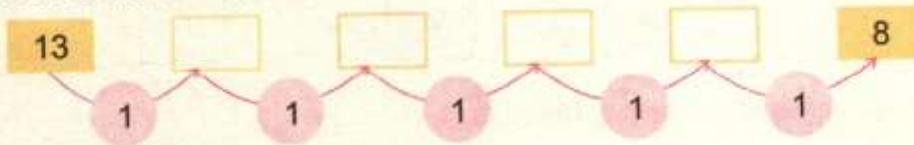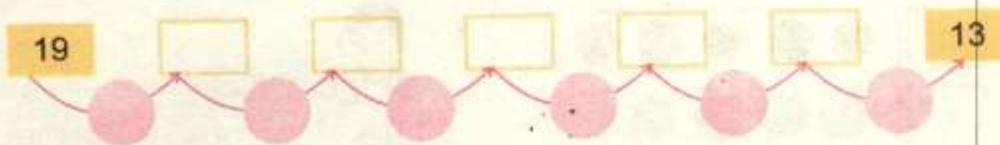
So, 13 is _____ less than _____.

Subtraction of 1-digit Numbers

Haleema made 9 biscuits. I took 4 biscuits. How many biscuits are left with Haleema?

To find out the remaining biscuits, take out 4 biscuits and count the remaining biscuits.

| 9 | minus | 4 | equals | 5 |

| 9 | − | 4 | = | 5 |

So, Haleema is left with 5 biscuits.

We can also write it as:

| 9 |
| − 4 |
| 5 |

Key Fact

The "−" symbol is used for the subtraction process.

Let's count and subtract.

| 7 | minus | 4 | equals | 3 |

| 7 | − | 4 | = | 3 |

6	
− 4	
2	

8	
− 5	
3	

Take away 2

How many are left? | 2

Take away 5

How many are left? | 3

When "0" is subtracted from any other number, the result is the number itself.

3	
− 0	
3	

Count and subtract. Then use the symbol '–' and '=' and write the correct answer.

5 [ ] [ ] = [ ]

4 – 4 = [ ]

7 [ ] [ ] = [ ]

[ ] – [ ] [ ] 2

Subtract.

9
– 7
_____
[ ]

6
1
_____
[ ]

Ask students to subtract 1-digit numbers using number and symbol cards.

NOT FOR SALE

61

5		7	
− 4		− 7	

Look at the picture and fill in the blanks.

_____ birds were sitting on the tree.

_____ birds flew away.

_____ birds are left on the tree.

☐ − ☐ = ☐

Write the number in the boxes.

Take away 3	Take away 2
How many are left? ☐	How many are left? ☐

Solve the following.

Ones	Ones	Ones	Ones
3	5	6	7
− 1	− 0	− 3	− 2

Ones	Ones	Ones	Ones
8	9	4	5
− 5	− 1	− 2	− 5

Subtraction of 1-digit Numbers from 2-digit Numbers

Hooria had 16 blocks.

She gave 5 blocks to her brother.

How many blocks are left with Hooria?
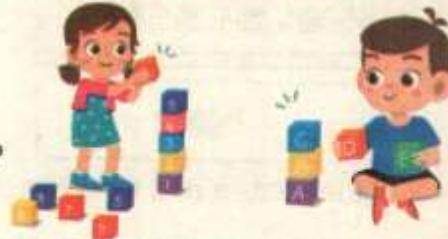
To find the remaining blocks, we need to subtract 5 from 16. Let's count back 5 steps from 16.

| 16 | 15 | 14 | 13 | 12 | 11 |

1   1   1   1   1
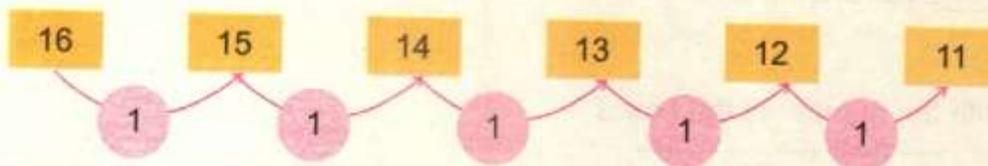
We can subtract numbers by writing them in tens and ones.

	Tens	Ones
	1	1

	T	O
Total Blocks	= 1	6
Blocks given	= −	5
Blocks left	= 1	1

Step 2: Subtract tens from tens.
1 tens – 0 tens = 1 tens

Step 1: Subtract ones from ones.
6 ones – 5 ones = 1 ones

Now, Hooria has 11 blocks.

Draw a place value chart on the board and write different 1-digit and 2-digit numbers on it. Now ask students to find the difference between them.

Solve the following.

Tens	Ones
2	6
−	4

Tens	Ones
5	8
−	6

Tens	Ones
6	7
−	2

Tens	Ones
7	5
−	4

Tens	Ones
8	8
−	7

Tens	Ones
4	5
−	0

Tens	Ones
9	9
−	9

Tens	Ones
6	8
−	6

There were 15 eggs in a tray. Hareem's mother used 5 eggs to bake a cake. How many eggs were left in the tray?

	T	O
Total Eggs =		
Eggs used = −		
Eggs left =		

Umer had 18 strawberries. He ate 6 strawberries. How many strawberries are left?

	T	O
Total Strawberries =		
Strawberry eaten = −		
Strawberries left =		

Subtraction of 2-digit Numbers from 2-digit Numbers

One shepherd had 48 sheep.
30 sheep were sold.
How many sheep were left?

Tens	Ones
XXX I	(8 ones)
1	8

		T	O
Total Sheep	=	4	8
Sheep sold	= −	3	0
Sheep left	=	1	8

Step 2: Subtract tens from tens.
4 tens − 3 tens = 1 tens

Step 1: Subtract ones from ones.
8 ones − 0 ones = 8 ones

Now, the shepherd has 18 sheep left.

Draw a place value chart on the board and write different tens and 2-digit numbers on it. Now ask students to subtract these numbers.

Zara had 85 candies. She distributed 64 candies among her friends. How many candies are left?

Tens	Ones
///////	⬚ ⬚ ⬚
	⬚ ⬚
2	1

	T	O
Total Candies =	8	5
Candies distributed = −	6	4
Candies left =	2	1

Step 2: Subtract tens from tens.
8 tens − 6 tens = 2 tens

Step 1: Subtract ones from ones.
5 ones − 4 ones = 1 one

Now, Zara has 21 candies left.

Solve the following.

Tens	Ones
5	7
− 4	0

Tens	Ones
6	8
− 4	6

Tens	Ones
4	9
− 4	2

Tens	Ones
7	1
− 6	0

Draw a place value chart on the board and write different 2-digit numbers on it. Now ask students to subtract these numbers.

Tens	Ones
8	4
− 7	4

Tens	Ones
6	2
− 2	2

Tens	Ones
7	9
− 4	5

Tens	Ones
8	8
− 5	6

Tens	Ones
9	1
− 7	0

Tens	Ones
7	2
− 6	2

Tens	Ones
9	6
− 3	0

Tens	Ones
9	9
− 8	2

Hamza had 72 seashells. He gave 32 seashells to his sister Hina. How many seashells are left?

		T	O
Total Seashells	=		
Seashells given	= −		
Seashells left	=		

There are 66 pages in a storybook. Sara has read 34 pages. How many pages are left?

		T	O
Total Pages	=		
Pages read	= −		
Pages left	=		

Ahmed had Rs 70. He gave Rs 60 to his brother Fahad. How many rupees are left?

		T	O
Total Rupees	=		
Rupees given	= −		
Rupees left	=		

Finding Unknown Numbers

Let's count and subtract.

16 − 3 = 13
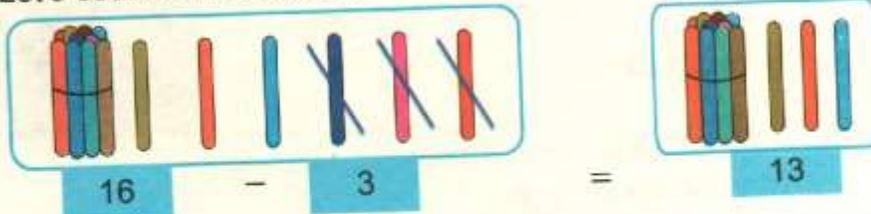
Let's subtract.

5 − 4 = 1

11 − 5 = 6

8 − 3 = 5

17 − 5 = 12

18 − 14 = 4

19 − 10 = 9

Write the unknown number and fill in the boxes.

9 − 4 =

15 − = 12

6 − = 5

8 − 6 =

− 5 = 3

14 − = 10

10 − 7 =

− 8 = 11

Use number line to find unknown numbers and explain the concept with different examples on the board.

NOT FOR SALE

Subtraction using Mental Strategies

Arham had 15 chocolates. He ate 3 chocolates.

How many chocolates are left?

We can also find remaining chocolates by mental strategy.

Step 1:
Separate tens and ones. $15 = 10 + 5$

Step2:
Subtract the ones. $5 - 3 = 2$
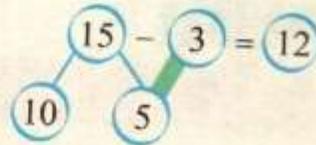
Step 3:
Now add 2 tens in the result that is obtained in step 2. $10 + 2 = 12$

$$15 - 3 = 12$$
$$10 \quad 5$$

Now, Arham has 12 chocolates.

Subtract the following numbers using mental strategies.

$15 - 13 = \boxed{}$ $17 - 2 = \boxed{}$ $18 - 4 = \boxed{}$

$16 - 6 = \boxed{}$ $19 - 7 = \boxed{}$ $12 - 2 = \boxed{}$

$$13 - 2 = \bigcirc$$

$$14 - 4 = \bigcirc$$
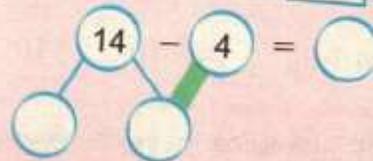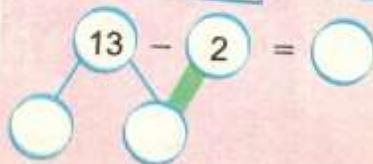
I Have Learnt

- comparing numbers from 1-20 and find how much more or "how many less" one number is than the other.
- adding and subtracting 1-digit numbers.
- adding and subtracting 2-digit numbers.
- subtracting tens from 2-digit Number.
- rcecognizing the symbol to find an unknown number.
- adding and subtracting numbers (up to 20) using mental strategies.

Vocabulary

addition
sum
equal
total
subtraction
left
difference
take away

Review Exercise

Compare the following numbers and fill in the blanks.

perfect24u.com

| 5 | | | 8 |

1   1   1

So, 8 is _____ more than _____.

| 11 | | | | | 16 |

1   1   1   1   1

So, 16 is _____ more than _____.

11				8

1   1   1

So, **8** is _____ less than _____.

20					15

1   1   1   1   1
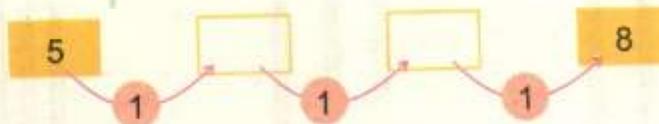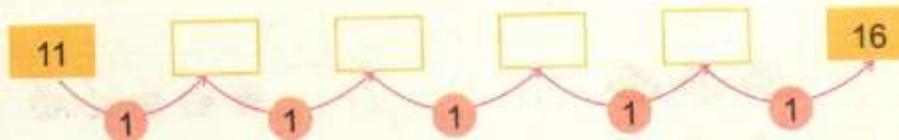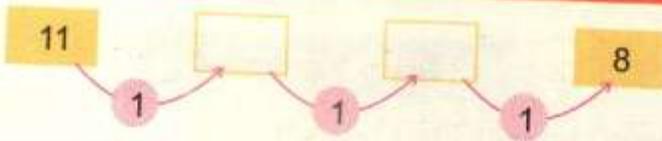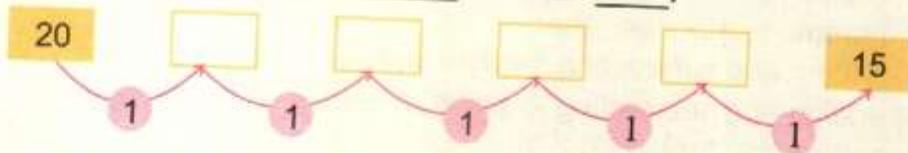
So, **15** is _____ less than _____.

Count, add and fill in the boxes.

[ ] + [ ] = [ ]

[ ] + [ ] = [ ]

[ ]
+ [ ]
[ ]

[ ]
+ [ ]
[ ]

Count and subtract. Then use the symbols "−" and "=" and write the correct answer.

Subtract.

8	
− 6	

9	
− 9	

Look at the pictures and fill in the blanks.

There are _____ red apples and _____ green apples in the basket.

[ ] + [ ] = [ ]

There are _____ apples altogether in the basket.

_____ Butterflies were sitting on the plant.

_____ Butterflies flew away.

[ ] − [ ] = [ ]

_____ Butterflies were left on the plant.

Write the unknown number and fill in the boxes.

[ ] + [6] = [9]

[7] − [2] =

Find the unknown number.

1 + [ ] = 8

[ ] + 6 = 11

13 − [ ] = 11

9 − 6 = [ ]

Solve the following.

Tens	Ones
2	6
+	1

Tens	Ones
7	7
+	2

Tens	Ones
3	1
+ 4	6

Tens	Ones
6	9
+ 1	0

Tens	Ones
3	6
−	6

Tens	Ones
5	8
−	5

Tens	Ones
7	7
− 4	4

Tens	Ones
8	3
− 1	1

Tens	Ones		Tens	Ones		Tens	Ones		Tens	Ones
8	9		9	3		7	0		6	4
− 6	0		− 8	1		− 5	0		− 5	2

Iram saw 15 parrots and 3 pigeons in the zoo. How many birds did she see in the zoo?

		T	O
Numbers of parrots	=		
Number of pigeons	= +		
Total birds	=		
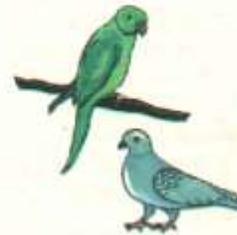
Sara has two books. One book has 56 pages and the other has 42 pages. If Sara reads both books, how many pages did she read altogether?

		T	O
Pages of one book	=		
Pages of other book	= +		
Total pages	=		

There are 45 students in Zara's class. If 23 of them are boys, how many girls are there?

		T	O
Total students	=		
Number of boys	= −		
Number of girls	=		

74
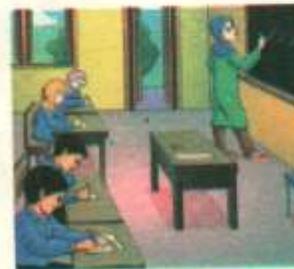
Unit 3

Measurement

Learning Outcomes

By the end of this unit, you will be able to:

- compare the heights/lengths of two or more objects using the following terms
  - long, longer, longest
  - short, shorter, shortest
  - tall, taller, tallest
  - high, higher, highest
- compare the masses of two or more objects using the terms:
  - heavy, heavier, heaviest
  - light, lighter, lightest

Heavy

Tall

Short

Light

Short

Long

75
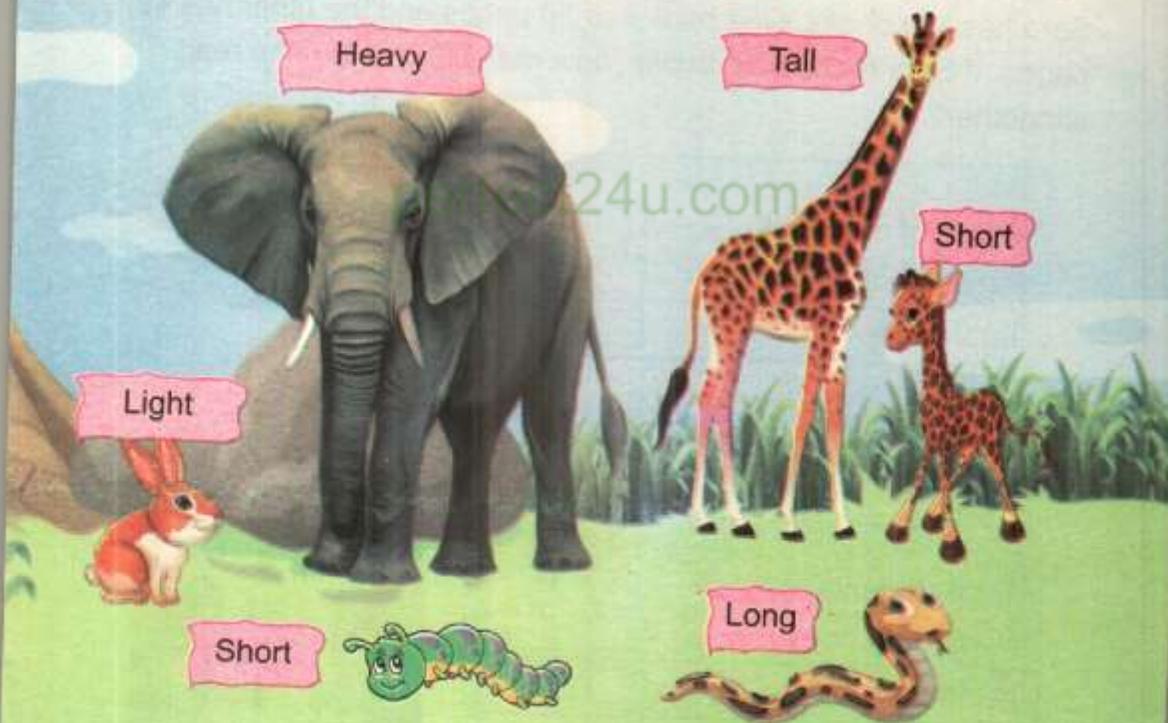
Long, Longer, Longest

There are a few things in my bag. Let's look at them and compare their lengths.

Long

Longer

Longest

Short, Shorter, Shortest

Short

Shorter

Shortest

Try Yourself

Which one is longer, your book or your eraser?

Use ribbons, rope or wooden sticks to explain the above concept. Ask students use the terms long, longer, longest and short, shorter, shortest to compare their lengths.

Tick (✓) the shortest object and cross (×) the longest object.

Tick (✓) the longest object and cross (×) the shortest object.

Colour the long object blue, longer object yellow and the longest object red.
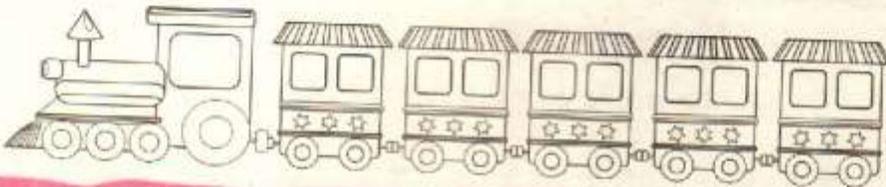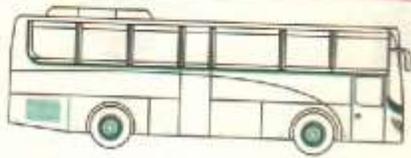
Tall, Taller, Tallest

Nida wants to know which tree is the tallest? Let's help her.

Tall

Taller

Tallest

Short, Shorter, Shortest

Shortest

Shorter

Short

Try Yourself

Who is the tallest student in your class?

Paste a chart paper with 2 columns on the board. Label the first column as 'the shortest' and the second column as 'the tallest'. Distribute picture cards of some short and tall objects among the students. Ask them to paste these pictures cards in correct order.

Tick (✓) the shortest plant.

Colour the tallest giraffe.

High, Higher, Highest

Ahmed wants to know which National flag is the highest? Let's help him.

High	Higher	Highest

perfect24u.com

High	Higher	Highest

Take students for a walk outside the classroom. Show them some poles, pillars, building with different heights and have them use the terms high, higher and highest by comparing their heights.

Write 1 for high, 2 for higher and 3 for highest.

Colour the highest building.
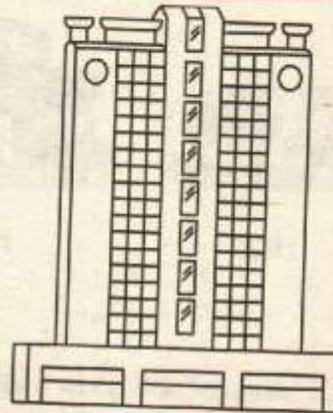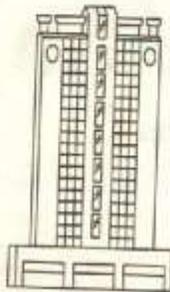
Heavy, Heavier, Heaviest

I have some fruits and vegetables in my basket. Let's look at them and compare their masses.

Heavy   Heavier   Heaviest

Light, Lighter, Lighest

Light   Lighter   Lightest

Try Yourself

Which one is heavier, a jug or glass?

Place some items of different masses (pencils, erasers and copies, water bottles, bags, etc.) on the table. Ask students to feel them by holding each item in hands and tell which is lighter and which is heavier?

Tick (✓) the heaviest object and cross (×) the lightest object.

Tick (✓) the lightest object.

perfect24u.com

Draw something lighter than the book and colour it.
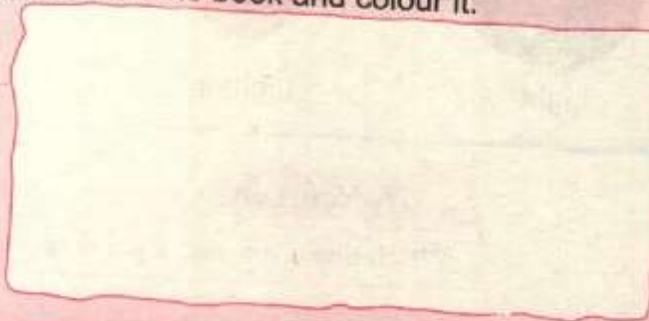
Explain the term "weight" is used to find the mass of objects in daily routine.

I Have Learnt

- comparing the heights/lengths of two or more objects using the following terms
  - long, longer, longest
  - short, shorter, shortest
  - tall, taller, tallest
  - high, higher, highest
- comparing the mass of two or more objects using the terms:
  - heavy, heavier, heaviest
  - light, lighter, lightest

Vocabulary

long, longer, longest

short, shorter, shortest

tall, taller, tallest

high, higher, highest

heavy, heavier, heaviest

light, lighter, lightest

Review Exercise

Tick (✓) the longest object.

Draw something shorter than the bat and colour it.
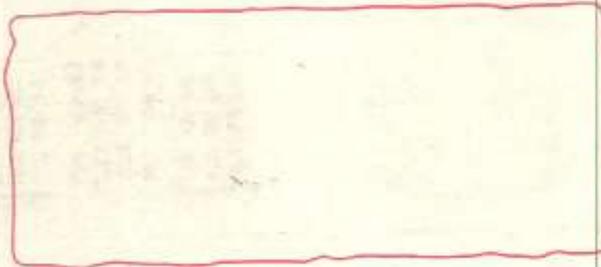
Colour the shortest flower pot.

Draw trees in the given boxes and colour these.

Tall
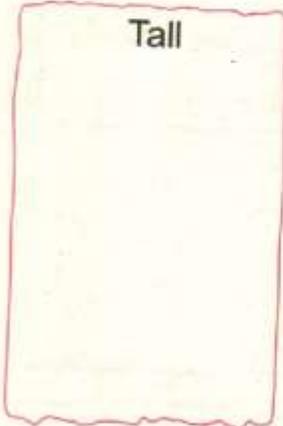
Taller
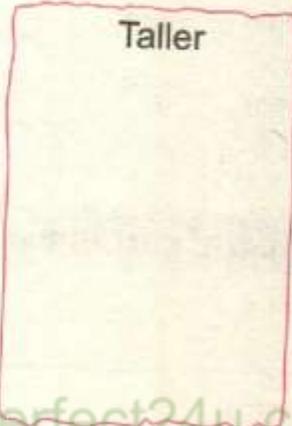
Tallest

Write 1 for high, 2 for higher and 3 for highest.

85
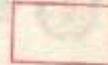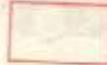
Compare the objects and write 1 for light, 2 for lighter and 3 for lightest.
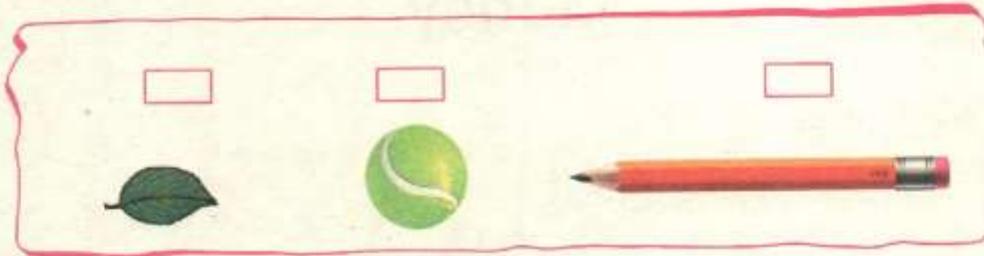
Tick (✓) for the heaviest object.
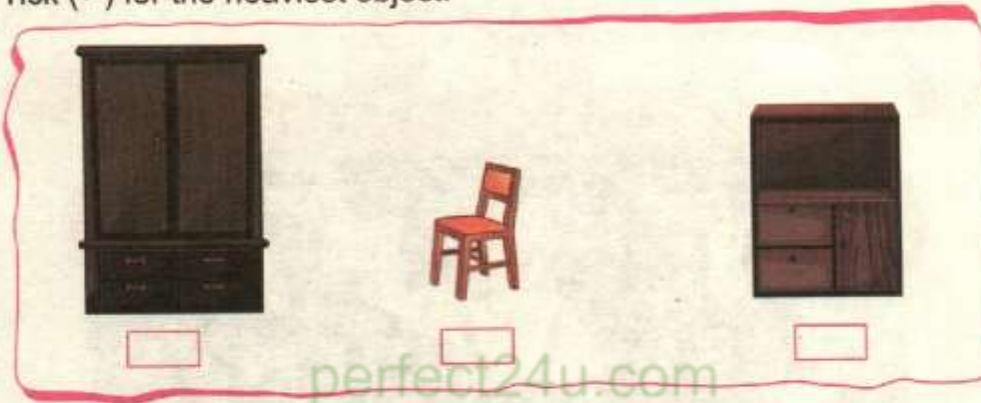
Colour the lightest object, blue and the heaviest object, yellow.
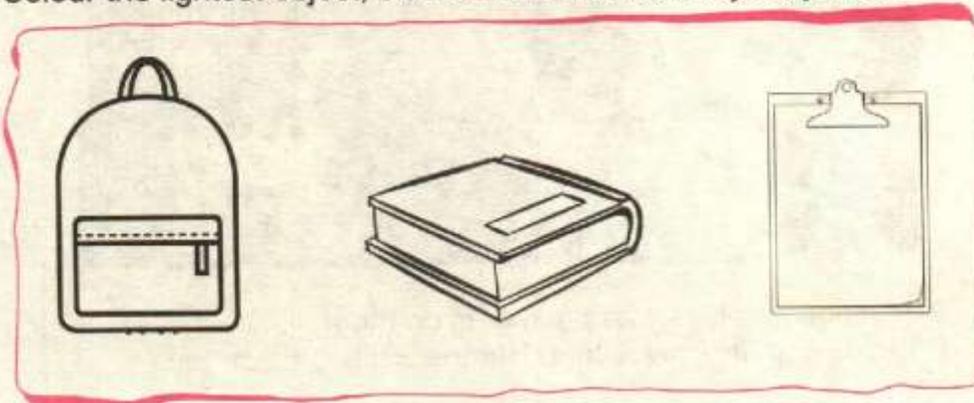
Unit 4

Money

By the end of this unit, you will be able to:
- identify Pakistani currency coins (Rs 1, 2, 5 and 10).
- identify Pakistani currency notes (Rs 10, 20, 50 and 100).
- match a group of coins/notes to an equivalent group of different denominations.
- add and subtract money using the prices of objects(transactions) (e.g.toys).
- recognize money change (up to 100) to its equivalents/denominations.
- determine if enough money is available to make a purchase (up to 100).
- add different combinations of coins/notes (to make sum up to 100).

Rs 30

Rs 70

Rs 50

Rs 100

A Toyshop has toys with price tags on them.
Can you explain how Ali and Hamna will buy these toys?

Pakistani Coins and Notes

When we go for shopping. We need money to buy things. Money is in the form of coins or notes.

Key Fact

Each coin and note has two sides.

Let's look at Pakistani coins and read their values.

1 rupee coin

2 rupees coin

5 rupees coin

10 rupees coin

Let's look at Pakistani notes and read their values.

10 rupees note

20 rupees note

50 rupees note

100 rupees note

Key Fact

Coins are made up of metal while notes are made up of paper.

Show different Pakistani coins and notes to the students and explain the importance of using money in daily life. Explain them about the values of coins and notes.

Write the value of each coin and note.

Rupee [ ]

Rupees [ ]

Rupees [ ]

Rupees [ ]

Rupees [ ]

Rupees [ ]

Rupees [ ]

Rupees [ ]

Changing Money

We can exchange one high value coin for another lower value coins.

One 2 rupees coin = Two 1 rupee coins

Rs.2 = Re.1 + Re.1

One 5 rupees coin = Five 1 rupee coins

Rs. 5 = Re. 1 + Re. 1+ Re. 1 + Re. 1 + Re. 1

One 10 rupees coin = Two 5 rupee coins

Rs. 10 = Rs. 5 + Rs. 5

We can exchange one high-value note for another lower-value coins and notes.

One 10 rupees note = Five 2 rupee coins

Rs. 10 = Rs. 2 + Rs. 2 + Rs. 2 + Rs. 2 + Rs. 2
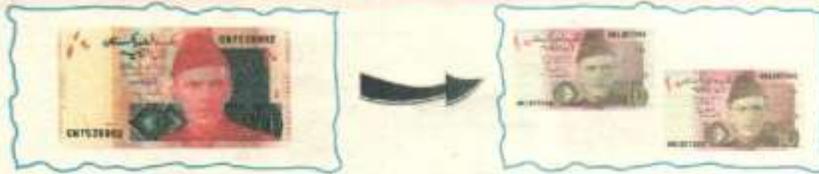
One 20 rupees note = Two 10 rupees notes

Rs. 20 = Rs. 10 + Rs. 10

One 50 rupees note = Five 10 rupees coins

Rs. 50 = Rs. 10 + Rs. 10 + Rs. 10 + Rs. 10 + Rs. 10

One 100 rupees note = Five 20 rupees notes

Rs. 100 = Rs. 20 + Rs. 20 + Rs. 20 + Rs. 20 + Rs. 20

We can also change any amount of money for different combinations of coins and notes.

One 20 rupees note = One 10 rupees note and two 5 rupees coins

Rs. 20 = Rs. 10 + Rs. 5 + Rs. 5

Use real money / paper money (coins and notes) and tell students about different ways of exchanging money with its equivalent denominations.
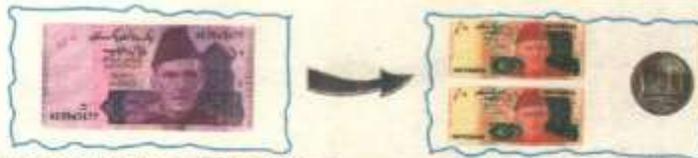
One 50 rupees note = Two 20 rupees notes and one 10 rupees coin

Rs. 50 = Rs. 20 + Rs. 20 + Rs. 10
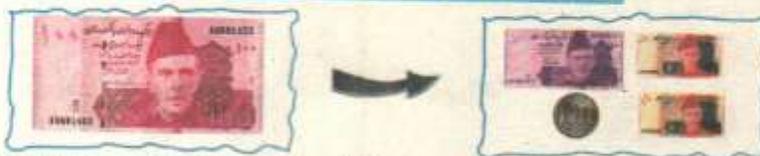
One 100 rupees note = One 50 rupees note, two 20 rupees notes and one 10 rupees coin

Rs. 100 = Rs. 50 + Rs. 20 + Rs. 20 + Rs. 10

Try Yourself

Can you think of other ways to exchange the Rs 100?

Complete the following.
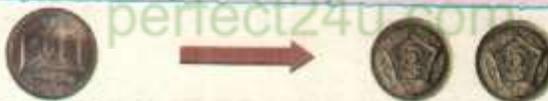
One 10 rupees coin = (____) 5 rupees coins

One 10 rupees note = (____) 2 rupees coins

One 50 rupees note = (____) 20 rupees notes and (____) 5 rupees coins

One 100 rupees note = (____) 50 rupees notes

Match the same amount of money.

Hint

First add the values of notes and coins and then match.

Tick (✓) the box if you can buy the objects with the given money.

Rs 75	
Rs 10	
Rs 90	
Rs 52	
Rs 95	

Place a few toys with price tags on the table. Distribute paper coins and notes among the students and ask if they can buy these toys with the money they have.

Adding and Subtracting Price

Ali has a money Rs 95 rupees. He wants to buy these items given below:

Rs 20

Rs 25
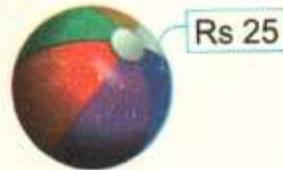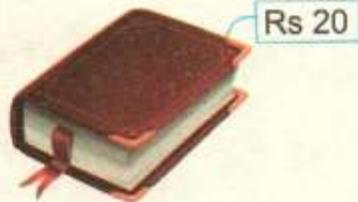
Think whether Ali can buy book and ball easily and has enough money.

Look at the following items.

Rs 25

Rs 40

Rs 65

Hassan buys a juice pack and an ice cream. How much money does he spend?

To find the total cost, we add.

Cost of the pack of juice = Rs | 2 | 5 |

Cost of the ice cream = + Rs | 4 | 0 |

Total cost = Rs | 6 | 5 |

Place a few items on the table with price tags. Distribute paper coins and notes among students. Ask them to buy any two items. Then ask them to estimate how much money did spent and how much is left.

Hassan has Rs 50 only. He wants to buy a burger of Rs 65. How much more amount does he need?

To find more amount, we subtract.

Cost of the burger	=	Rs	6	5
Total cost	= –	Rs	5	0
More amount he needs =		Rs	1	5

Try Yourself

How much more does a burger cost than the juice?

Look at the following items and their prices and then solve.

Rs 30   Rs 5   Rs 58   Rs 82

Abeeha bought a ball and a candy. How much money did she spend?

Cost of the ball	=	Rs	3	0
Cost of the candy	= +	Rs		5
Total money spent	=	Rs		

Hamza wants to buy a water paint. He has Rs 42. How much more money does he need?

Cost of the water paint	=	Rs		
Total amount	= +	Rs		
More money he needs	=	Rs		

Maryam bought a water paint and a ball. How much money did she spend?

Cost of the water paint = Rs ☐☐

Cost of the ball = + Rs ☐☐

Total cost = Rs ☐☐

Ali had Rs 95. He bought a book. How much money is left with Ali?

Amount Ali had = Rs ☐☐

Cost of the book = − Rs ☐☐

Amount left = Rs ☐☐

Hint

Subtract to find out the remaining amount.

I Have Learnt

- identifying Pakistani currency coins (Rs 1, 2, 5 and 10).
- identifying Pakistani currency notes (Rs 10, 20, 50 and 100).
- recognizing money change (up to 100) to its equivalents/denominations
- adding and subtracting price of objects.

Vocabulary

money/amount

coin

note

value

Review Exercise

Complete the following.
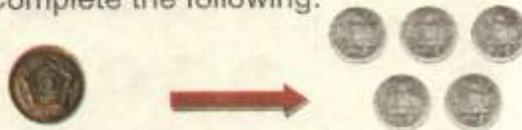
One 5-rupees coin = (_____) 1-rupee coins

Try Yourself

If you exchange 20 rupee note with anyone, how many 2 rupee coins will you get?
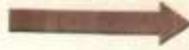
One 50-rupees note = (____) 10-rupees notes

Tick(✓) the group with the correct amount.

Rs. 30

Rs. 20

Count and write the correct amounts.

Rs	Rs
Rs	Rs

Look at the following items and their price and then solve.

Rs 63

Rs 25

Rs 70

perfect24u.com

Harris bought a train and a duck from a toy store. How much money does he spent?

Cost of the train   =   Rs ☐☐

Cost of the truck   =   + Rs ☐☐

Total money spent   =   Rs ☐☐

Ayesha wants to buy a teddy bear. She has Rs 50. How much more money does she need?

Cost of the teddy bear   =   Rs ☐☐

Total Cost   =   – Rs ☐☐

More amount she needs   =   Rs ☐☐

Unit 5

Time

Learning Outcomes

By the end of this unit, you will be able to:

- recognize the hour and minute hands of an analog clock.
- read and tell time in hours from the analog clock for example 2 o'clock.
- read and tell time in hours from the digital clock.
- name in order days of the week.
- identify which day comes after/before a particular day.
- name (orally) the solar months of the year.
- name (orally) the Islamic months of the year.

No. It is 7 o'clock

It is 12 o'clock.

SCHOOL

Who is correct, Sara or Ahmed?

Clock

What tells us time?

A clock tells us the time.

There are two types of clocks.

- Analog clock

- Digital clock

Analog Clock

Look at this clock.

It is an analog clock.

It has two hands, a minute hand and an hour hand which tells us time.

The long hand is called the minute hand. It shows the time in minutes.
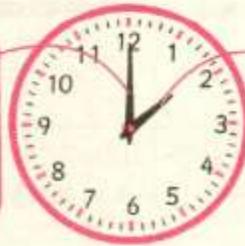
The short hand is called the hour hand. It shows the time in hours.

The analog clock has numbers from 1 to 12 in order.
The clock above shows the hour hand is at 2 and the minute hand is at 12. We can say that the time is 2 o'clock.

Let's read the time on the analog clock below.

3 o'clock

4 o'clock

8 o'clock

Digital Clock

Look at this clock.

It is a digital clock.

It shows the hours.

7:00

It shows the minutes

The digital clock has no hands. It tells us time in digits. We can say that the time is 7:00.

Place ten flash cards of digital and analog clock that shows different time in hours. Make two teams of students (Team A and Team B). Give five flash cards to each team. Instruct the team A to show the flash cards of digital clock and team B to show the same time on analog clock.

Let's read the time on the digital clock below.

01:00

04:00

11:00

1 o'clock

4 o'clock

11 o'clock

Write the time by looking at each clock.

08:00

05:00

Draw hands to show the correct time.

6 o'clock	9 o'clock	12 o'clock

Tick (✓) the digital clock to indicate the time on the analog clock on the left.

Clock			
☐	☐ 6:00	☐ 8:00	☐ 7:00
☐	☐ 3:00	☐ 5:00	☐ 4:00
☐	☐ 6:00	☐ 8:00	☐ 7:00
☐	☐ 10:00	☐ 9:00	☐ 11:00
☐	☐ 11:00	☐ 10:00	☐ 12:00

✏️ **Try Yourself**

At what time do you go to school in the morning?

Days of the Week

How many days are there in a week?

There are seven days in a week.

1st Monday

2nd Tuesday

3rd Wednesday

4th Thursday

5th Friday

6th Saturday

7th Sunday

Key Fact

1 week = 7 days

Try Yourself

What is the day of your birthday?

Encourage students to read and learn rhymes of days of the week.

Which day comes before Tuesday?

The first day of the week is Monday and the second day is Tuesday. So, Monday comes before Tuesday. Friday comes before Saturday and after Thursday.

Write the correct ordinal number for each day of the week.

Monday   Wednesday   Thursday   Saturday

Friday   Tuesday   Sunday

Colour the box with the correct answer.

Which day comes before?	Thursday	Wednesday
Which day comes after?	Sunday	Saturday
What is the first day of the week?	Friday	Monday
What is the last day of the week?	Monday	Sunday

Try Yourself

What day do you take a day off from school?

Solar Months

How many solar months are there in a year?

There are 12 solar months in a year.

1st	January
2nd	February
3rd	March
4th	April
5th	May
6th	June
7th	July
8th	August
9th	September
10th	October
11th	November
12th	December

Key Fact

1 year = 12 months

Encourage students to name the Solar months orally.

Islamic Months

These are months of the Lunar year which are called Islamic months.

1st Muharram

2nd Safar

3rd Rabi-ul -Awwal

4th Rabi-ul -Sani

5th Jamadi-ul -Awwal

6th Jamadi-ul -Sani

7th Rajab

8th Shaaban

9th Ramadan

10th Shawal

11th Ziq'ad

12th Zil Hajj
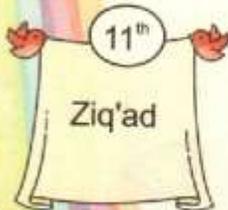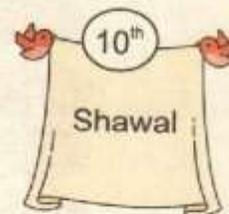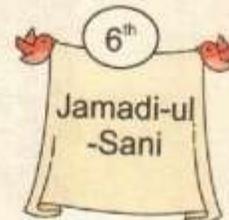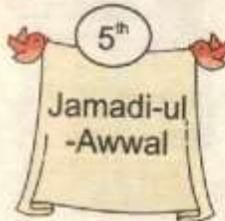
Try Yourself

In which Holy month Hajj is performed?

Encourage students to name the Islamic months orally.

Match each solar month with the correct ordinal number.

January	1st
March	2nd
May	3rd
July	4th
October	5th
April	6th
June	7th
December	8th
September	9th
August	10th
November	11th
February	12th

Colour the box with the correct answer.

Which Islamic month comes before Safar?   Jamadi-ul-Sani   Muharram

What is the first Islamic month?   Muharram   Zil Hajj

What is the last Islamic month?   Zil Hajj   Ziq'ad

Which Islamic month comes after Shaaban?   Shawal   Ramadan

Try Yourself

In which month does Eid-ul-Fitr come?

I Have Learnt

- reading and telling the time in hours by identifying the hour and minute hands of the analog clock.
- reading and telling the time in hours from the digital clock.
- naming in order the days of the week.
- naming (orally) the solar months of the year.
- naming (orally) the Islamic months of the year.

Vocabulary

analog clock

digital clock

day

week

month

year

Review Exercise

Write the time by looking at each clock.

7:00

12:00
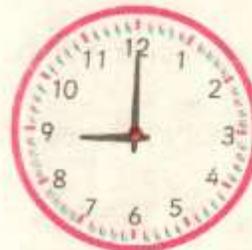
Look at the time in a digital clock and match it with an analog clock.

10:00

7:00

4:00

2:00

12:00

perfect24u.com

Colour the box with the correct answer.

Which day comes before Friday? **Thursday** **Saturday**

Which day comes after Monday? **Sunday** **Tuesday**

What is the 3rd day of the week? **Tuesday** **Wednesday**

Which Solar month comes before May? **June** **April**

What is the first Solar month?   February   January

In which month do we celebrate independence day?   March   August

Match each Islamic month with the correct ordinal number.

Safar	5th
Ramadan	2nd
Rajab	7th
Muharram	1st
Jamadi-ul-Awwal	10th
Zil Hajj	6th
Shawal	3rd
Jamadi-ul-Sani	4th
Ziq'ad	12th
Rabi-ul-Sani	9th
Shaaban	11th
Rabi-ul-Awwal	8th

Unit 6

Geometry
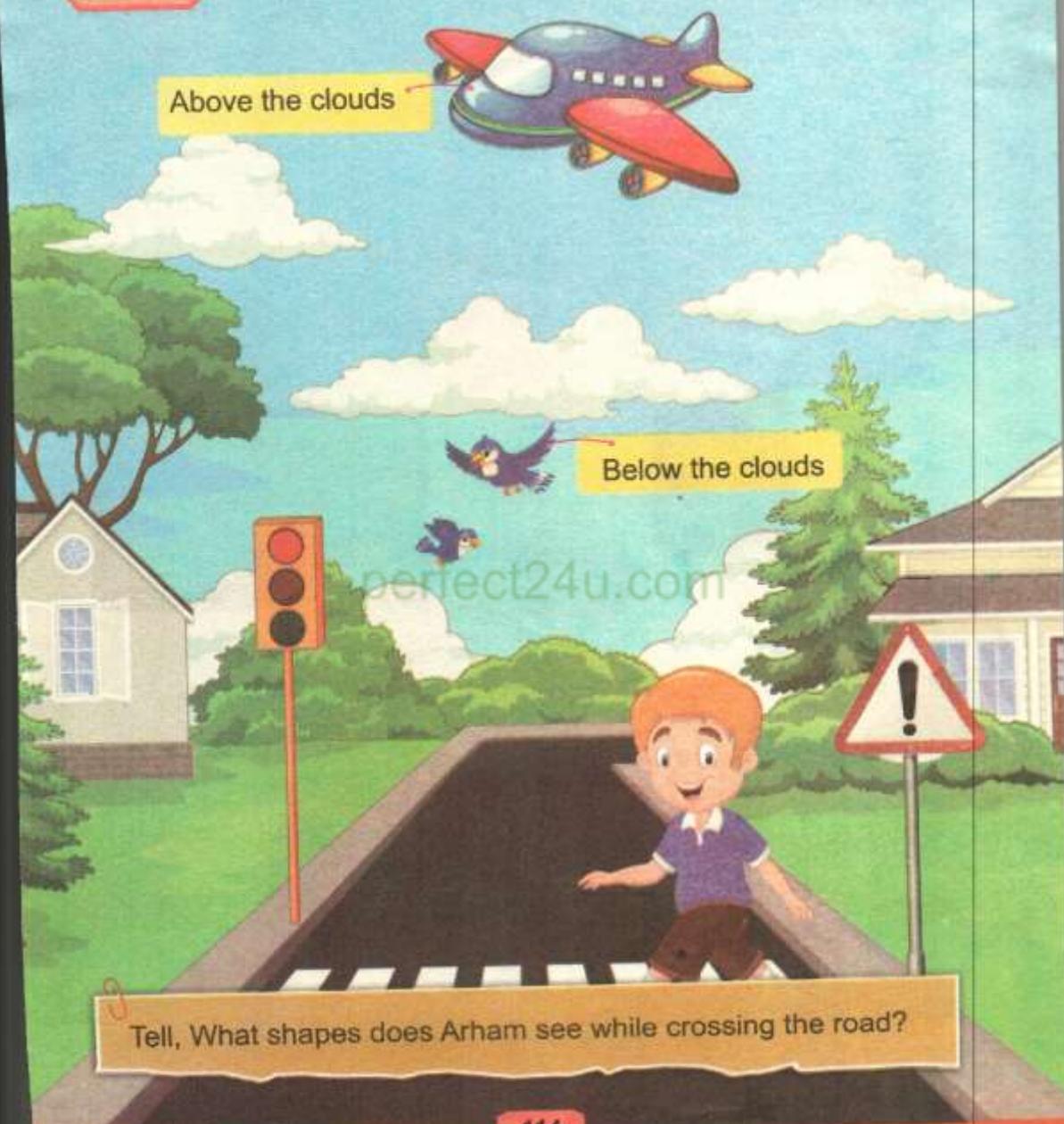
Above the clouds

Below the clouds

Tell, What shapes does Arham see while crossing the road?

2-D Shapes

Learning Outcomes

By the end of this unit, you will be able to:
- recognize and identify shapes of similar objects in daily life.
- identify the following basic shapes
  - rectangle
  - square
  - circle
  - triangle
- match similar basic shapes in daily life.
- distinguish basic shapes by considering their attributes (sides).
- classify 2-D shapes according to number of sides and corners.
- identify the next shape in the patterns with 2 or 3 elements.
- extend a given pattern of 2 or 3 elements.

Amna is looking for 2-D shapes in her room. Will you help her?

2-D Shapes

Let's read the rhyme of 2-D shapes.

We are 2-D shapes.
We spread a net everywhere
You can find us everywhere
We make friends everywhere

Circle circle is my name
Round and round, never stop again
Look at the wheel, it looks like me

Square square is my name
My 4 sides are the same
Look at the carrom, it looks like me

Rectangle Rectangle is my name
My 4 sides are not the same
Look at the door, it looks like me

Triangle triangle is my name
Look at me, look at me
Count my sides one, two, three
Look at the snack, it looks like me

Show some cut outs of 2-D shapes to students and ask them to read a rhyme by looking at these shapes.

On my birthday, My father brought a box of biscuits. There were biscuits of different shapes in it. Let's identify the different shapes by looking at these biscuits.

Rectangle

I have a Rectangle-shaped biscuit. It has 4 corners and 4 sides.

Complete the picture by joining the dots and colour all the rectangles.
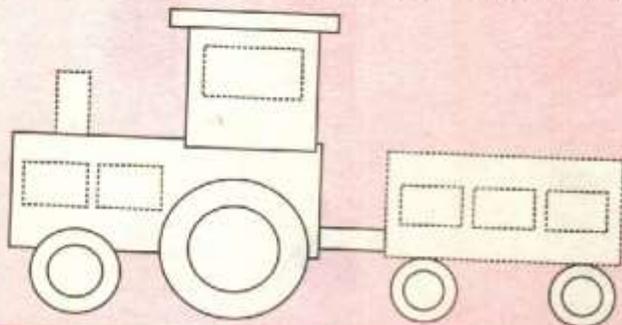
Try Yourself

What is the shape of our national flag?

Show flash cards of a few rectangular objects that we use in our daily life to students. Ask them to name the objects.

Square

I have a Square-shaped biscuit.
It has 4 corners and 4 sides.

Help the tortoise to reach the pond by colouring the Squares.

With the relevance of the objects given above, ask students to name some of the square objects that they use in their daily lives.

Circle

I have a Circle-shaped biscuit.
It has 0 corners and 0 sides.

Colour all Circles in the picture below.
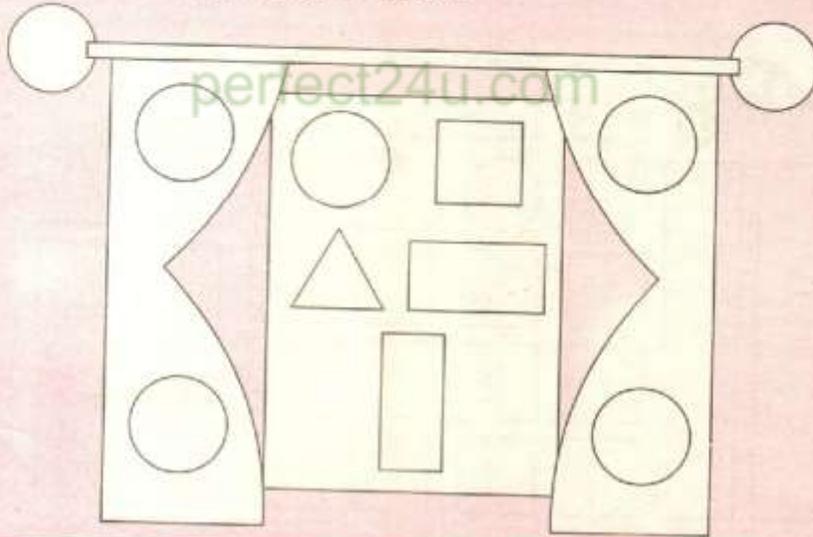
perfect24u.com

Triangle

I have a Triangle-shaped biscuit.

It has 3 corners and 3 sides.
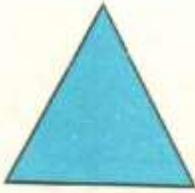
Find the Triangles in the picture and colour them Green.

Put some flash cards of different shapes in a basket and place it on the table. Ask students to pick and show all the triangles.

Patterns

We can make patterns with different shapes, colours and sizes.

Let's observe the following patterns.
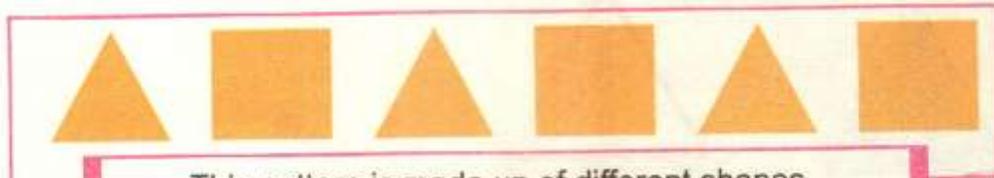
This pattern is made up of different shapes.
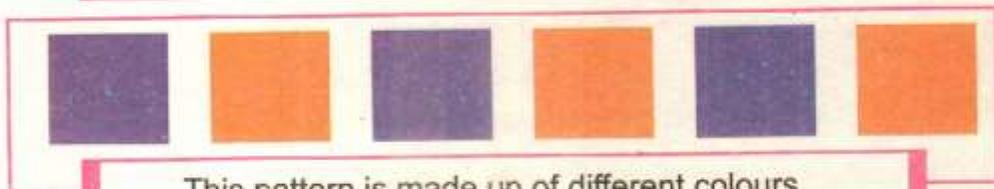
This pattern is made up of different colours.

This pattern is made up of different shapes and colours.
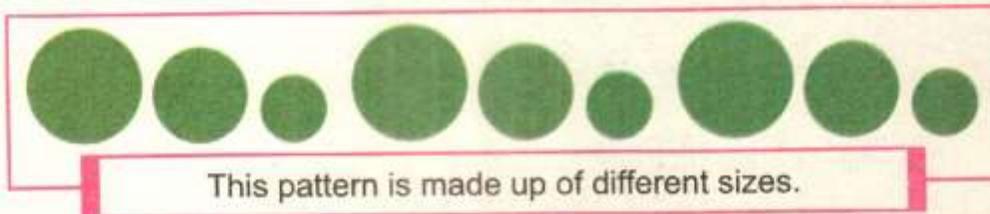
This pattern is made up of different sizes.

Draw different objects on the board to illustrate the patterns and give a few more examples.

Colour the shapes to complete the patterns.
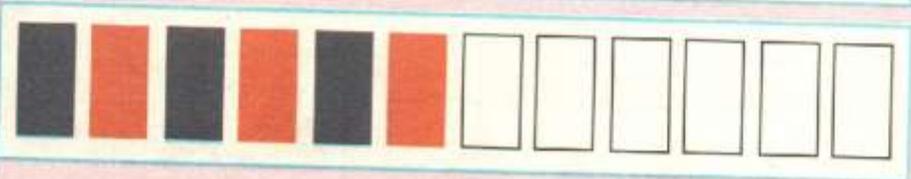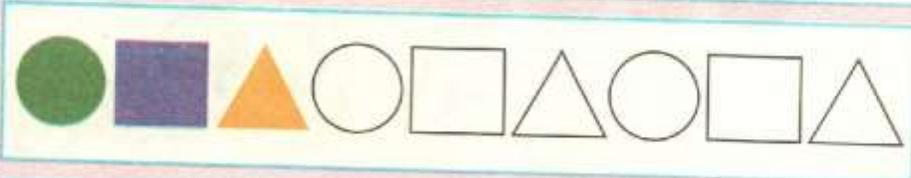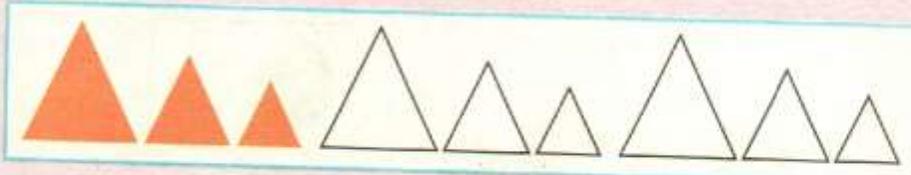
Complete the patterns.
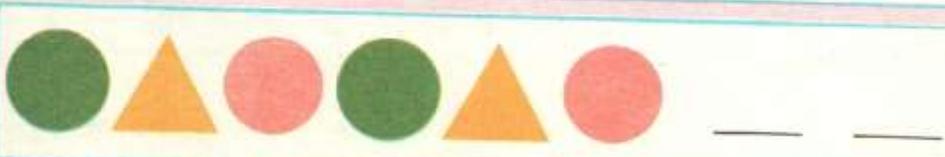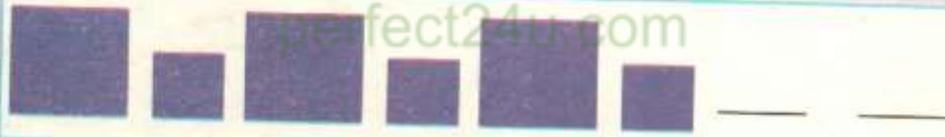
Tick (✓) the correct answer to complete each pattern.
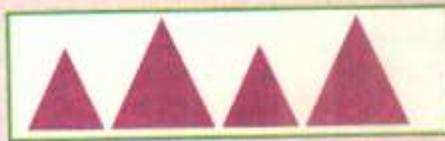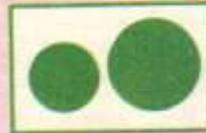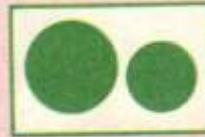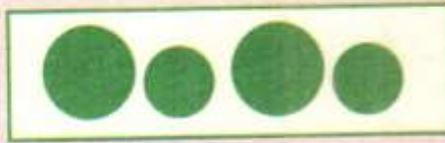

Colour the objects to create patterns of your own choice.
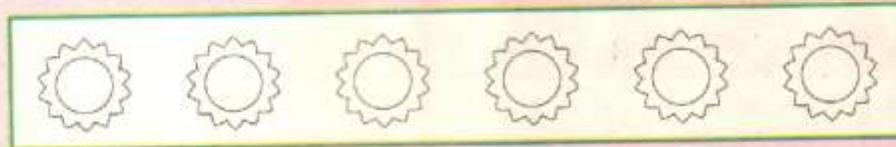
Position

By the end of this unit, you will be able to:
- identify whether an object is placed
  - inside or outside
  - above or below
  - over or under
  - far or near
  - before or after of a given picture.

Who is outside the room?

124

Inside or Outside

Samra is inside the tent.

Saad is outside the tent.

Try Yourself

What is inside your bag?

Ask students to observe their surroundings and identify things that are inside or outside of something.

125

Tick (✓) the picture where the cat is outside the box.

Colour the picture where the biscuits are inside the jar.

Encircle the hen and chicks which are outside their home.

Above or Below

The clock is above the picture.

The sofa is below the picture.

Try Yourself

Does the plane fly_____the mountains? (above or below)

Explain to the students about 'above' and 'below'. Ask them to observe in their surrounding and finding the things that are above and below of somethings.

Tick (✓) the picture where the plane is above the cloud.

Colour the objects that are below the boat.

Encircle the object that is above the board.
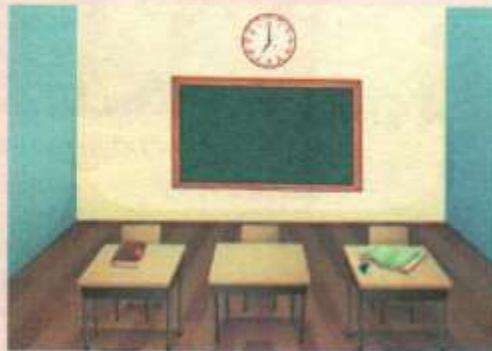
Over or Under

The train is over the bridge.
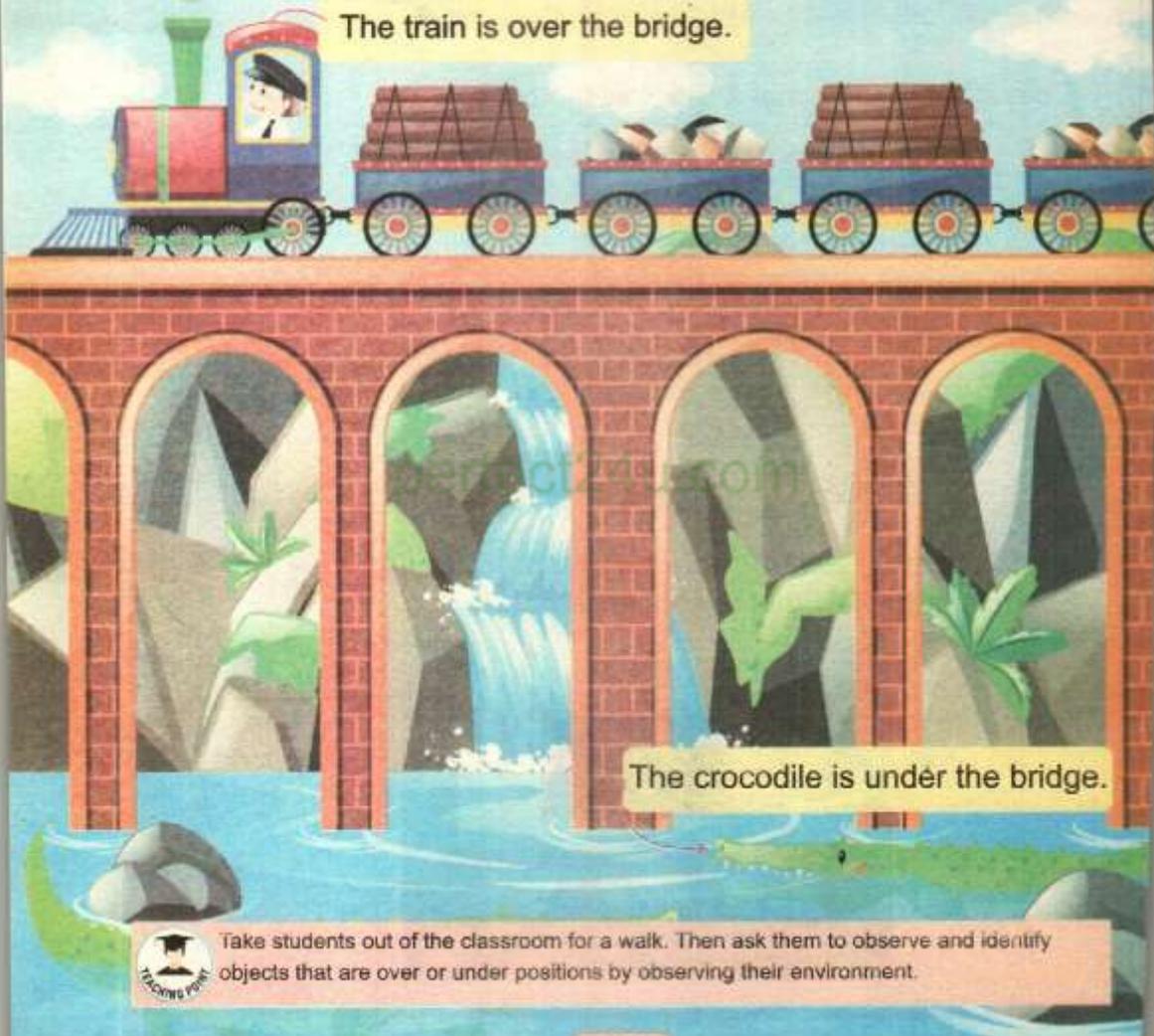
The crocodile is under the bridge.

Take students out of the classroom for a walk. Then ask them to observe and identify objects that are over or under positions by observing their environment.

Tick (✓) the picture where the bird is over the house.
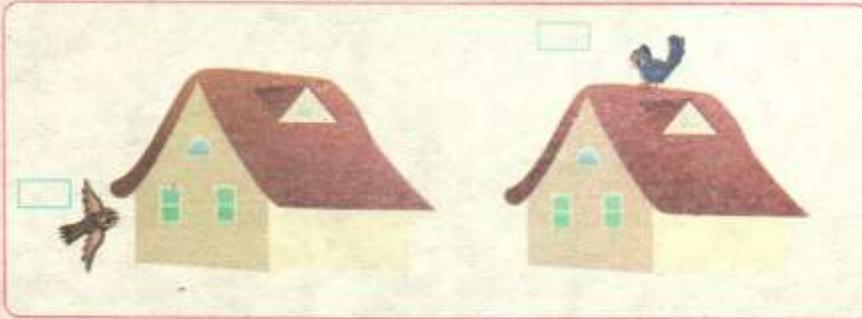
Encircle the boy under the slide.

Tick (✓) the picture where the horse is over the fence.

Far or Near

Zara is near the tent.

Hamid is far from the tent.

Try Yourself

Is the school far from your home or the mosque?

Ask students to observe the classroom objects and explain which objects are far from them and which are near to them.

Tick (✓) the picture where the kid is far from the ball.

Encircle the cow which is near the house.
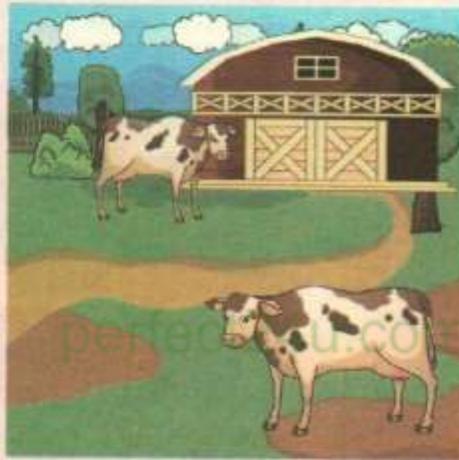
Draw a cat far from the pond and colour it.
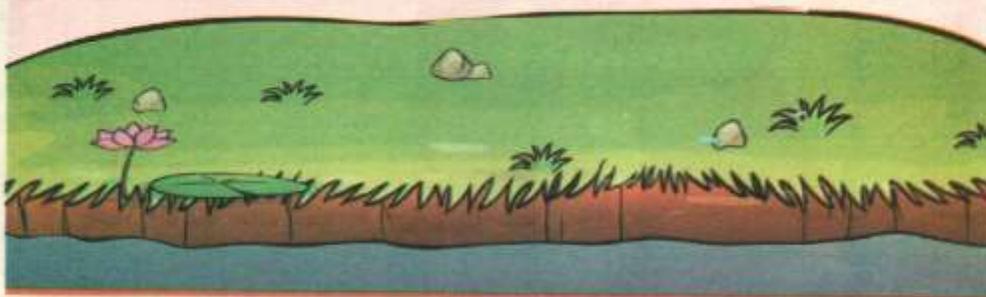
Before or After

Hina's car is after Arham's car.

Hooria's car is before Arham's car.

Try Yourself

Who is sitting before you in the classroom?

Ask students to make a queue and then call the name of one student and ask him/her to tell the name of the student who is standing before and after him/her.

Encircle the girl who is before the boy.

Encircle the vehicle which is after the bus.

Colour the animal which is before the camel and cross out (×) the animal that is after the camel.
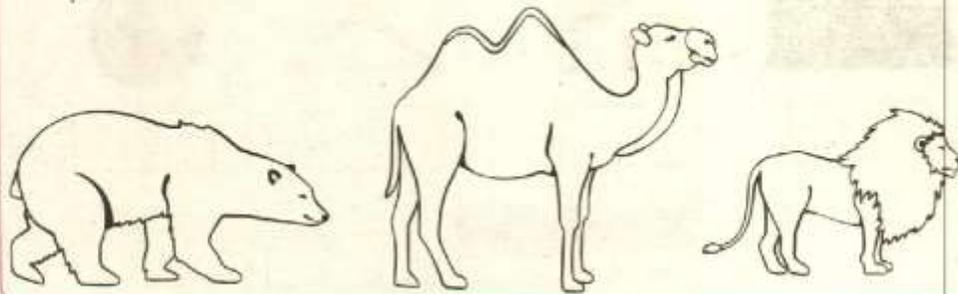
I Have Learnt

- recognizing and identifying shapes of similar objects in daily life.
- identifying the following basic shapes
  - rectangle
  - square
  - circle
  - triangle
- classifying 2-D shapes according to their number of sides and corners.
- completing the patterns by considering shapes, colours and sizes.
- identifying whether an object is placed _____ of a given picture:
  - inside or outside
  - above or below
  - over or under
  - far or near
  - before or after

Review Exercise

Write the correct shape for these daily life objects.
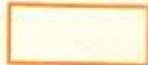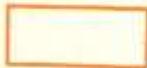
Try Yourself

What is the difference between a rectangle and a square?

Draw and write the number of corners and sides of each shape.

Name	Shapes	Sides	Corners
Rectangle			
Square			
Circle			
Triangle			

Match the objects having the same shape.
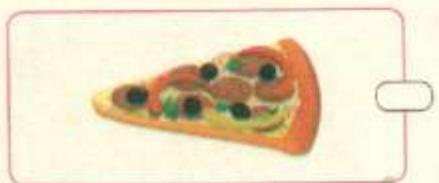
Colour the Circles Blue, Squares Green, Rectangles Yellow, Triangles Red.
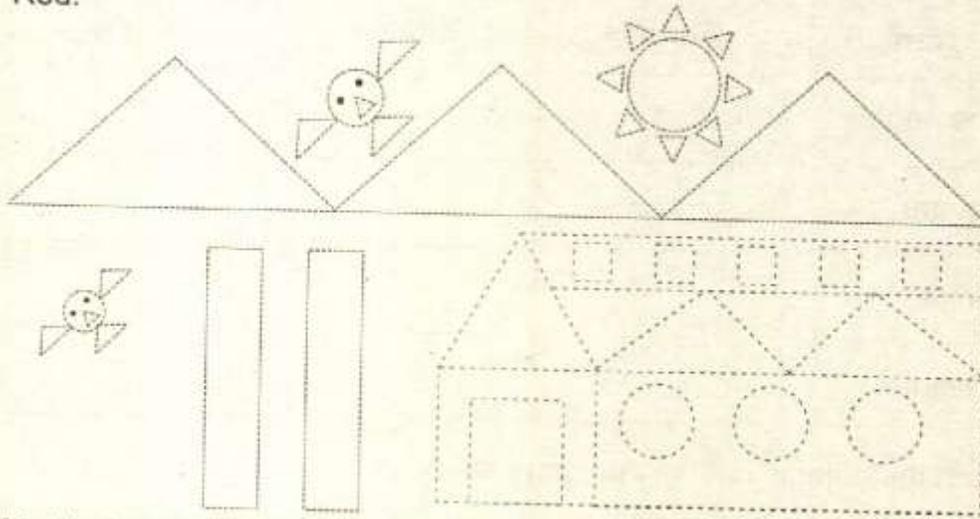
Match the objects with the similar shapes.
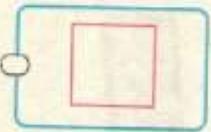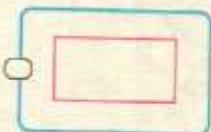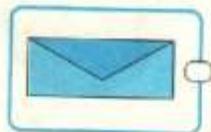
Draw and colour the shapes to complete each pattern.

Look at that picture and tick (✓) the correct answer.

Where is Ahmed?   outside   inside

Where is Zara?   outside   inside

Colour the object that is under the car.

Encircle the object over the lamp.

Colour the animal which is near the tree.

Some kids are queuing up to get tickets.

Who is standing just
after Amna? _____

Who is standing just
before Umer? _____

Who is standing just
after Ahmer? _____

Ticket

Ahmer Umar Amna Fahad

Author Profile

Mrs. Sadia Jabeen

Is currently working as Content Manager at Ulearn Education Pvt. Limited. She has completed her Master in Mathematics from University of Gujrat and did her B.Ed. from Allama Iqbal Open University Islamabad. She has more than 14 years, experience in the field of education. She has also worked as Senior Mathematics Teacher in renowned educational institutes including Army Public School & College and Aligarh Public School & College. Her publications include more than 56 textbooks and Workbooks (National and International Series) of Mathematics for Pre-primary to Grade-VII. Most recently the author has developed Mathematics Textbooks Grade-1 under the Singal National Curriculum with National Curriculum Council Islamabad. She has also developed curriculum and support material i.e. teacher training manuals, assessments bank and lesson plans etc.

Khyber Pakhtunkhwa Textbook Board

Phase – V, Hayatabad Peshawar

Phone: 091-9217714-15   Fax: 091-9217163,   Website: www.kptbb.gov.pk

TEXTBOOK FEEDBACK FORM

S#	Statement	Remarks
1.	Overall the book is interesting and user friendly.	
2.	The language and content of the book is age / grade appropriate and the content is free of grammatical and punctuation errors.	
3.	Content is supported with examples from real life / culture.	
4.	Contents / texts are authentic and updated.	
5.	Pictures / diagrams / graphs / illustrations are informative, relevant and clear if not, then identify them.	
6.	Activities, projects and additional work is suggested for reinforcement of concepts.	
7.	Assessment achievements are thought provoking and comprise cognitive, psychomotor and effective skills.	
8.	The textbook is easy to be covered within academic year.	

Page No.	Observation/comments	Suggested amendment along with rationale

General Remarks:

_____

_____

Name & Address: _____

Contact No. & Email: _____