DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

CHAPTER- 9

MONEY

CHAPTER - 9

- EXERCISE - 1 (T.B.)
- EXERCISE - 2 (OMIT)
- EXERCISE- 3,4,5,6(N.B.)
- EXERCISE 7 (OMIT)

₹2000 : Two Thousand rupees

₹500 : Five Hundred rupees

₹200 : Two Hundred rupees

₹100 : One Hundred rupees

₹50 : Fifty rupees

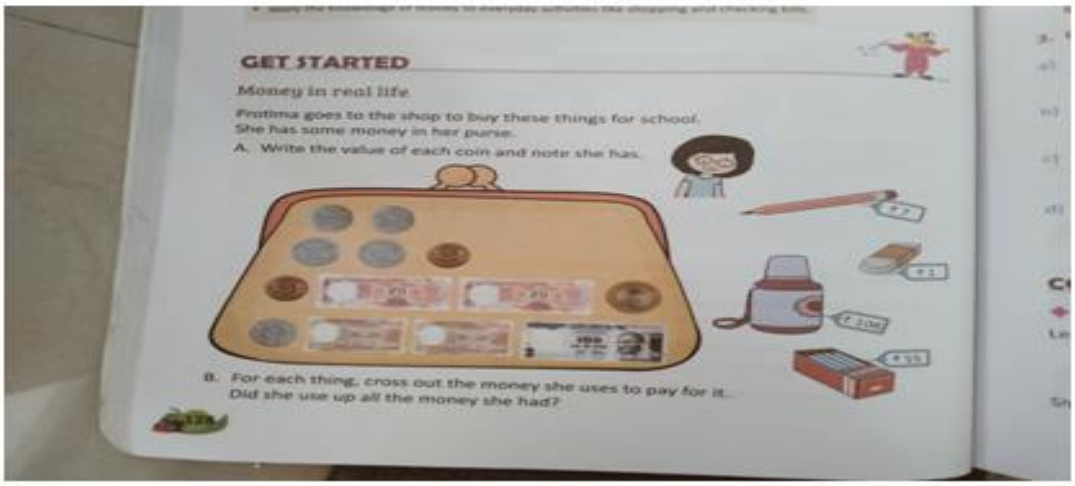
₹20 : Twenty rupees

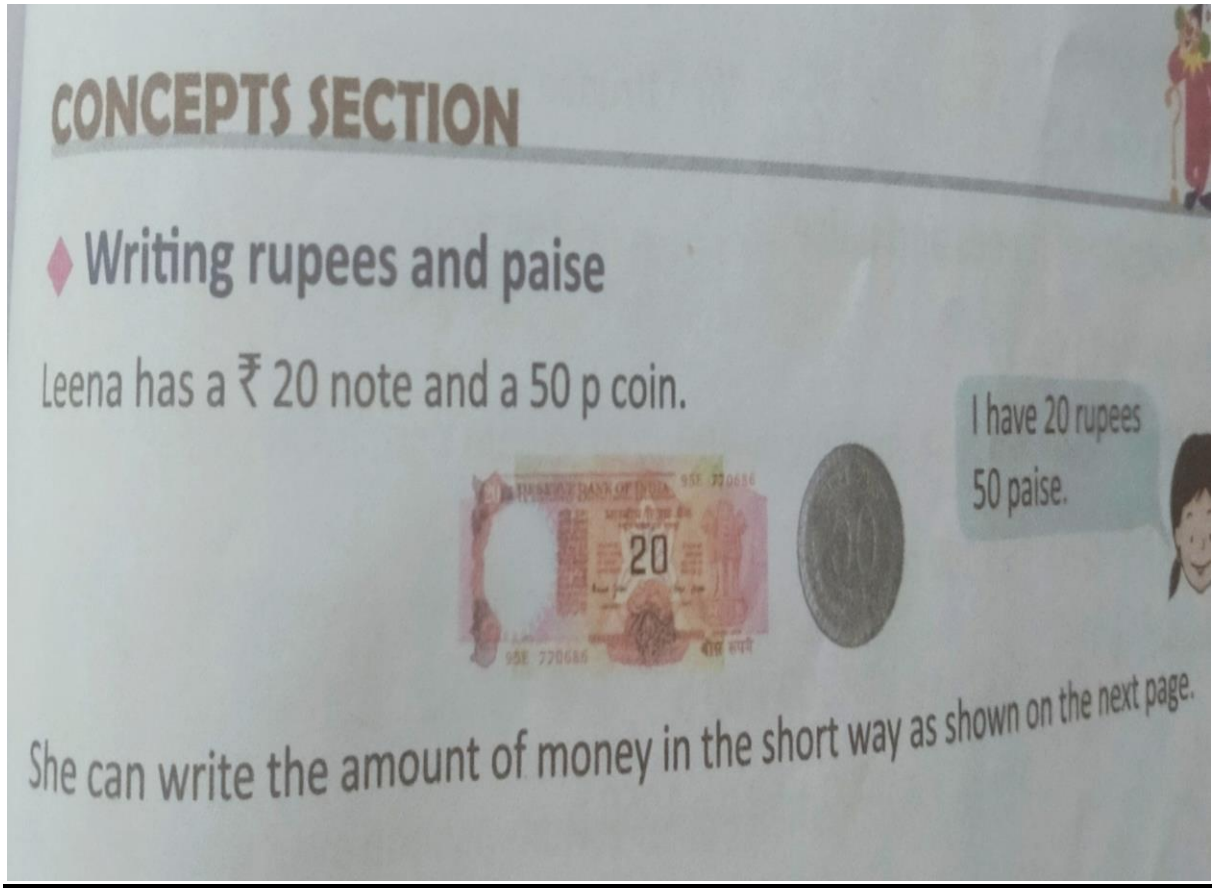
₹10 : Ten rupees

₹5 : Five rupees

₹1 : One rupee

ACTIVITY


GET STARTED
Money in real life
Pratima goes to the shop to buy these things for school.
She has some money in her purse.
A. Write the value of each coin and note she has.
B. For each thing, cross out the money she uses to pay for it.
Did she use up all the money she had?


CONCEPTS SECTION
Writing rupees and paise
Leena has a ₹ 20 note and a 50 p coin.
I have 20 rupees 50 paise.
She can write the amount of money in the short way as shown on the next page.

A dot separates the rupees and paise.

₹20.50

The number to the left of the dot shows the rupees.

The number to the right of the dot shows the paise.

The symbol ₹ for rupees is written on the left. The symbol for paise is not written.

EXERCISE 1

1. Write the money shown in the short way.

T.B.

a)  = ₹ 50.50

b)  = ₹ 100.50

c)  = ₹ 50

d)    = ₹ 16.50

Rapid check

Which of these is correctly written?

₹ 50.75 p ₹ 50.75

50.75 p

2. Write the following in the short way.

a) 20 rupees 65 paise = ₹ 20.65

b) 12 rupees 70 paise = ₹ 12.70

c) 12 rupees 7 paise = ₹ 12.07

d) 8 rupees 75 paise = ₹ 8.75

e) 6 rupees = ₹ 6

f) 9 rupees 5 paise = ₹ 9.05

g) 1 rupee = ₹ 1

h) 1 rupee 1 paisa = ₹ 1.01

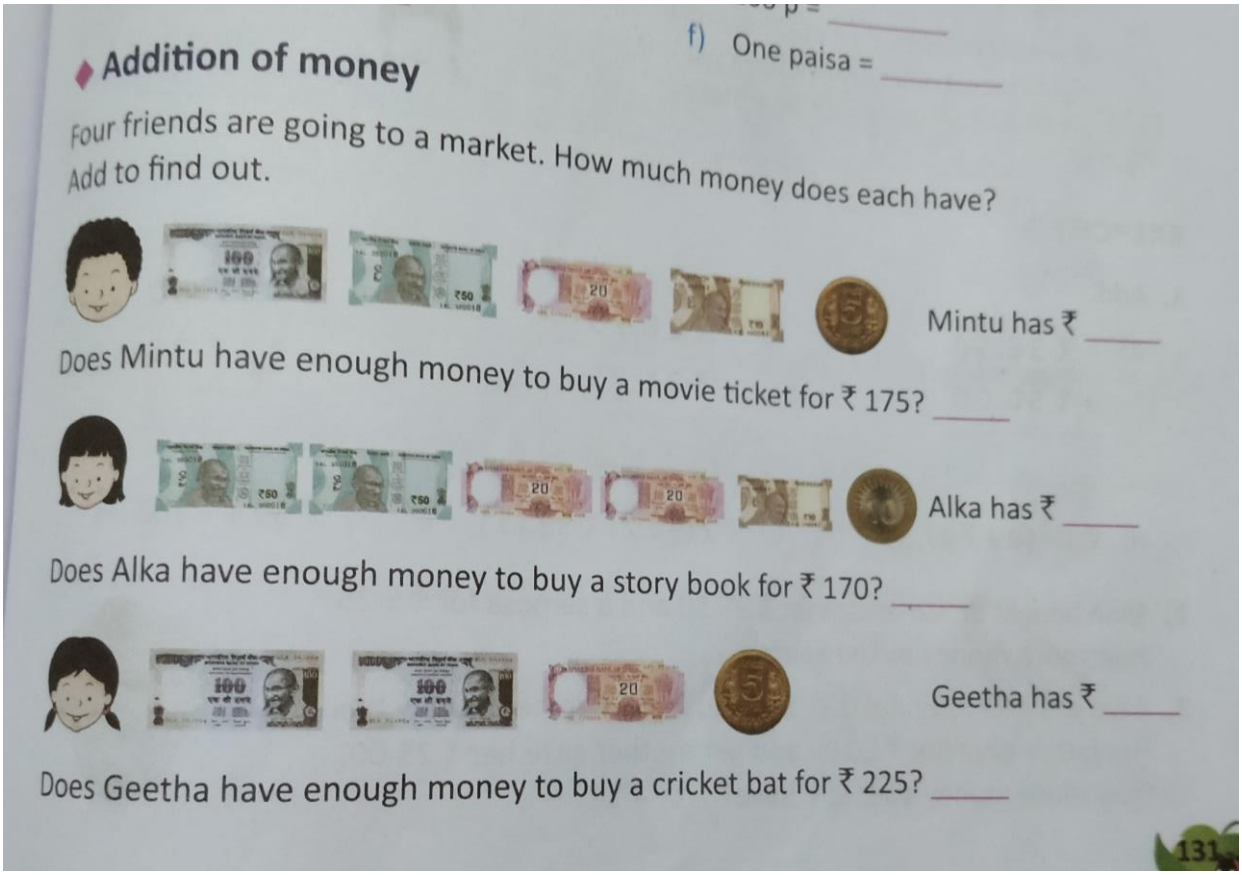
Conversion of rupees and paise

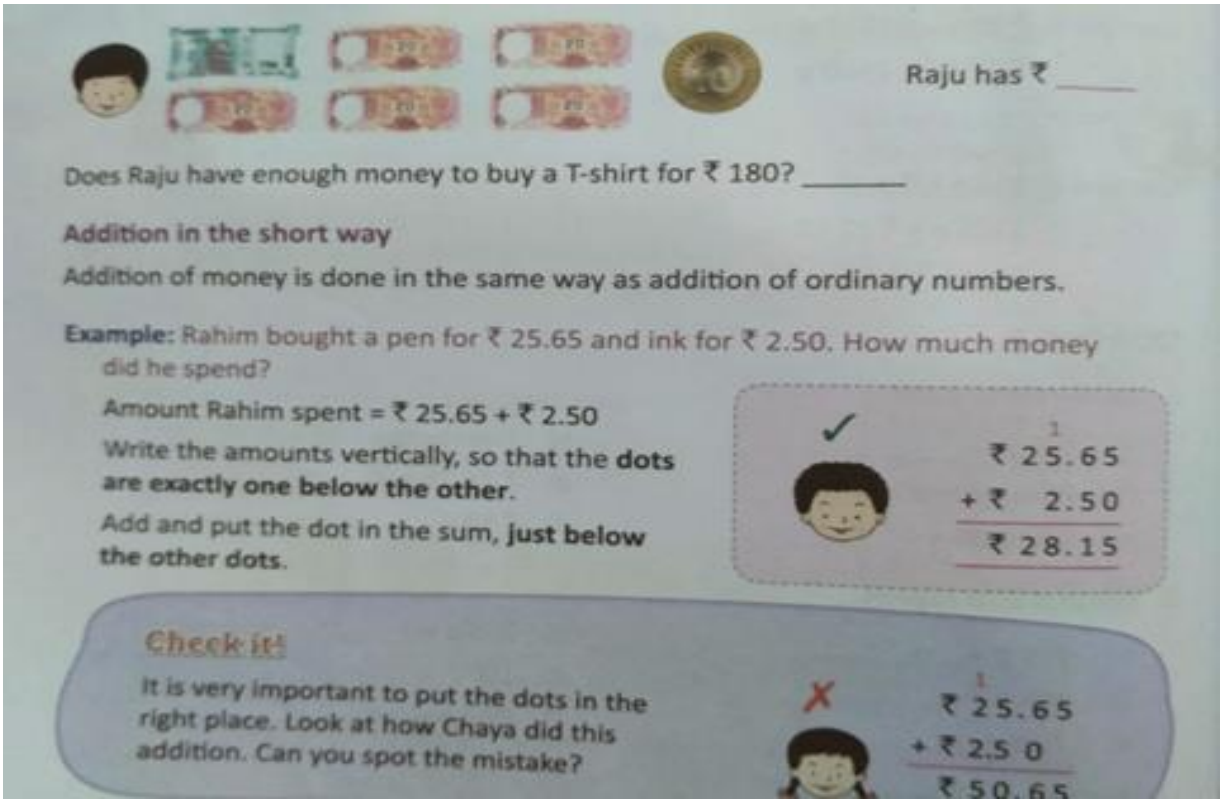
Conversion of rupees and paise

- https://youtu.be/LV_xzLfle_0

- WE KNOW,
- 1RS = 100 P
- SO TO CONVERT RUPEES INTO PAISE MULTIPLY BY 100 and TO CONVERT PAISE TO RUPEES DIVIDE BY 100.

EXERCISE 2 OMIT





Raju has ₹ _____

Does Raju have enough money to buy a T-shirt for ₹ 180? _____

Addition in the short way

Addition of money is done in the same way as addition of ordinary numbers.

Example: Rahim bought a pen for ₹ 25.65 and ink for ₹ 2.50. How much money did he spend?

Amount Rahim spent = ₹ 25.65 + ₹ 2.50

Write the amounts vertically, so that the **dots are exactly one below the other.**

Add and put the dot in the sum, **just below the other dots.**

✓

```
  1
₹ 25.65
+₹  2.50
₹ 28.15
```

Check it!

It is very important to put the dots in the right place. Look at how Chaya did this addition. Can you spot the mistake?

✗

```
  1
₹ 25.65
+₹ 2.5 0
₹ 50.65
```

EXERCISE 3

N.B.

1. Add.

a) ₹ 36.50 + ₹ 50.00 = **₹ 86.50**

b) ₹ 28.25 + ₹ 21.75 = **₹ 50 . 00**

c) ₹ 92.50 + ₹ 17.75 = **₹ 110 .25**

d) ₹ 15.50 + ₹ 47.25

e) ₹ 119.75 + ₹ 39.25

f) ₹ 59 + ₹ 108.75

2. Shan bought an ice-cream for ₹ 25.50 and a samosa for ₹ 5.25. How much money did he spend?

3. Aarti went for a school trip. She had ₹ 15.50 in her money box. Her father gave her ₹ 50.00 and her mother gave her ₹ 25.00. How much money does she have?

e)₹ 119.75 + ₹ 39.25 pg:132

		₹			p	
		1	1		1	
	1	1	9	.	7	5
+		3	9	.	2	5
	1	5	9	.	0	0

2.Shan bought an ice cream for ₹25.50 and samosa for ₹ 5.25.How much money did he spend?

- Price of ice cream = ₹ 25.50
- Price of Samosa = ₹ 5.25
- Total money spend by shan=?

	1	₹		p	
	2	5	.	5	0
+		5	.	2	5
	3	0	.	7	5

- Shan spend **₹30.75 in all.**

Subtraction of money

Subtraction of money is also done in the same way as subtraction of ordinary numbers.

Example: Aman had ₹ 50.50. He bought a toy car for ₹ 45.25. How much money is left with Aman?

4 10 4 10
₹ 50.50
− ₹ 45.25
₹ 5.25

Money left = ₹ 50.50 − ₹ 45.25

Write vertically as shown and subtract.

Remember that the dots should be arranged one below the other.

EXERCISE 4

...anged one below the other.

N.B.

1. Subtract.

a) 6 9 9 10
₹ 70.00
− ₹ 53.75
₹ 16.25

b) 0 12
₹ 125.50
− ₹ 85.50
₹ 40.00

c) 8 12
₹ 79.25
− ₹ 3.75
₹ 75.50

d) ₹ 100.00 − ₹ 50.50

e) ₹ 210 − ₹ 105.75

f) ₹ 100 − ₹ 43.25

2. Ameena bought an apple for ₹ 15.50. She gave a ₹ 50 note to the shopkeeper. How much money will the shopkeeper return to her?

3. Saras wants to buy a book for ₹ 56.50. She has ₹ 50.00 with her. How much more money does she need?

N.B.

Ex-4 Q-1 e)₹ 210 - ₹ 105.75

		₹			p	
		0	9		9	10
	2	~~1~~	~~0~~	.	~~0~~	~~0~~
-	1	0	5	.	7	5
	1	0	4		2	5

Ex-4 Q-2Ameena bought an apple for ₹15.50.She gave ₹ 50 note to a shopkeeper. How much money will the shopkeeper return to her?

N.B.

- Cost of apple = ₹ 15.50
- Amount she gave to shopkeeper = ₹ 50.00
- Amount shopkeeper will return to Ameena=?
- Shopkeeper will return ₹ 34.50 to Ameena.

		₹		p	
	4	9		10	
	~~5~~	~~0~~	.	~~0~~	0
-	1	5	.	5	0
	3	4	.	5	0

♦ Multiplication of money

Multiplication of money is done in the same way as multiplication of ordinary numbers.

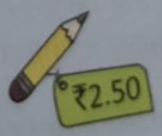
Be careful about the dot! You must remember to put the dot in the correct place—before the second digit from the right.

Example: One pencil costs ₹ 2.50. What is the cost of 5 pencils?

Cost of 5 pencils = ₹ 2.50 × 5

Write vertically as shown.

Multiply and put the dot in the correct place.



$$\begin{array}{r} {}^{2}\\ ₹\ 2.50 \\ \times\quad 5 \\ \hline 12.50 \end{array}$$

EXERCISE 5

N.B.

1. Multiply.

a) $\begin{array}{r} {}^{1}\\ ₹\ 15.00 \\ \times\quad 3 \\ \hline ₹\ 45.00 \end{array}$

b) $\begin{array}{r} {}^{1\ 2}\\ ₹\ 6.25 \\ \times\quad 5 \\ \hline ₹\ 31.25 \end{array}$

c) $\begin{array}{r} {}^{1\ 3}\\ ₹\ 8.25 \\ \times\quad 7 \\ \hline ₹\ 57.75 \end{array}$

d) ₹ 9.50 × 6

e) ₹ 5.75 × 9

f) ₹ 16 × 4

2. A ride on a roller coaster costs ₹ 15. What is the amount to be paid for 10 children?

3. Teacher bought 10 boxes of chalk for her class. Each box costs ₹ 25.75. How much money did she spend?

EXERCISE 5 Q.1- (d)

N.B.

	3			
	9	.	5	0
×				6
5	7	.	0	0

EXERCISE 5 Q.1- (E) SELF PRACTICE

N.B.

	6		4	
	5	.	7	5
×				9
5	1	.	7	5

EX-5 (Q-2) N.B.

- Teacher bought 10 boxes of chalk for her class. Each box cost ₹25.75. How much money did she spend?

Cost of one chalk box = ₹25.75

Cost of 10 chalk boxes

=10 × ₹25.75

=257.50

Therefore, she spent ₹ 257.50 .

	2	5	.	7	5
×				1	0
	0	0		0	0
2	5	7		5	0
2	5	7	.	5	0

Division of money

Example: Father had ₹ 39. He divided it equally among his 3 children. How much money did each child get?

Each child got ₹ 39 ÷ 3 = ₹ 13

```
  13
3 | 39
  -3
  09
  -9
   0
```

EXERCISE 6

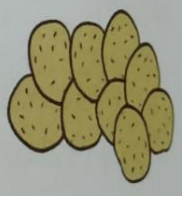
1. Divide.

a) ₹ 45 ÷ 9 b) ₹ 56 ÷ 7 c) ₹ 50 ÷ 5

d) ₹ 256 ÷ 8 e) ₹ 204 ÷ 6 f) ₹ 240 ÷ 4

2. The price of 10 pencils is ₹ 30. What is the price of 1 pencil?

3. Hari's parents bought 5 kg of potatoes for ₹ 85. What is the cost of 1 kg potatoes?



Exercise 6 Q-1 Divide

N.B.

a) ₹ 45 ÷ 9 = ₹ 5

			5
	9	4	5
-		4	5
		0	0

Exercise 6 Q-1 Divide

N.B.

e) ₹ 204 ÷ 6 = ₹ 34

			3	4
	6	2	0	4
	-	1	8	⇩
		0	2	4
		-	2	4
				0

H.W. - f

				⇩

Exercise 6

N.B.

Q-2 The price of 10 pencils is ₹ 30. What is the price of 1 pencil?

- Cost of 10 pencils= ₹ 30
- Cost of 1 pencil = ₹ 30 ÷ 10
  = ₹ 3

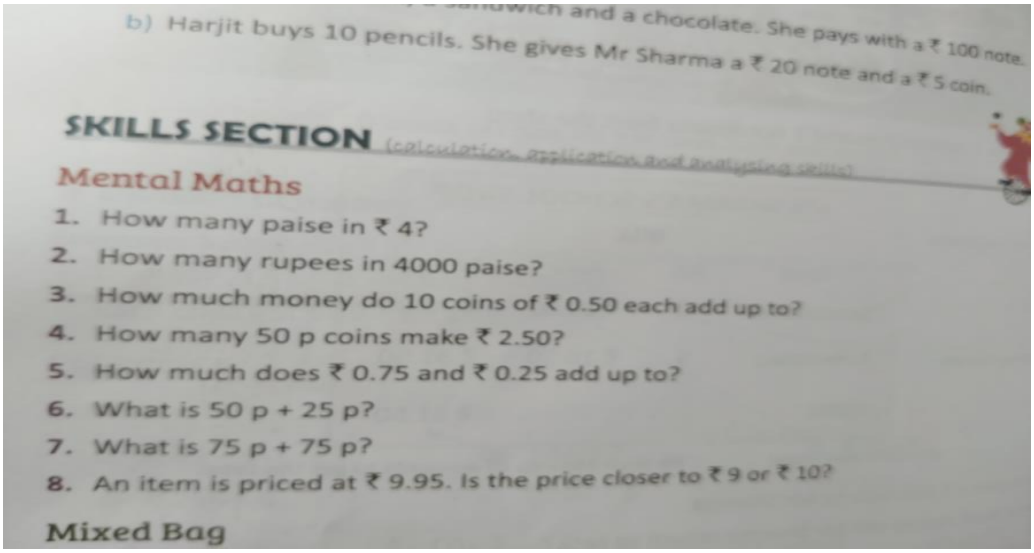
			3
	10	3	0
	-	3	0
		0	0

EXERCISE 7 OMIT

CLASS TEST

- ADD,SUBTRACT,MULTIPLY OR DIVIDE AS REQUIRED:
- ₹ 54.20 + ₹ 25.75
- ₹ 63.00 - ₹ 22.25
- ₹ 17.25 × 3
- ₹ 60 ÷ 5

Mental Maths



b) Harjit buys 10 pencils. She gives Mr Sharma a ₹ 20 note and a ₹ 5 coin.

SKILLS SECTION (calculation, application and analysing skills)

Mental Maths

1. How many paise in ₹ 4?
2. How many rupees in 4000 paise?
3. How much money do 10 coins of ₹ 0.50 each add up to?
4. How many 50 p coins make ₹ 2.50?
5. How much does ₹ 0.75 and ₹ 0.25 add up to?
6. What is 50 p + 25 p?
7. What is 75 p + 75 p?
8. An item is priced at ₹ 9.95. Is the price closer to ₹ 9 or ₹ 10?

Mixed Bag

Tables 1 to 11

- Learn and write tables in N.B.

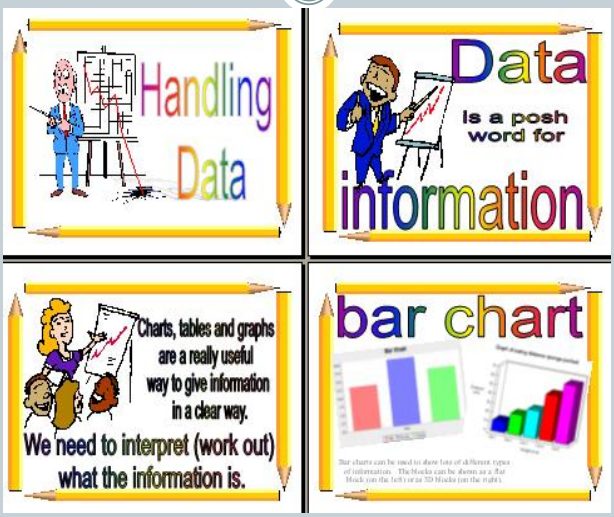
CHAPTER-12

HANDLING DATA

DATA HANDLING

- DATA HANDLING is a method of collecting and representing data or facts.

https://youtu.be/C_TA4ma5F8A



PICTOGRAPH

- https://youtu.be/my6LVtFrzAk
- The method of representing numerical **data** by **using picture** symbols is called a **pictograph**.

One tree represents 10 Trees

Name	Number of Trees
Apple	3 trees
Peach	4 trees
Guava	5 trees
Pear	2 trees

Data in real life

Today is Van Mahotsav. Teacher told the class about the festival.

Children, Van Mahotsav means festival of forests. It is an annual tree-planting festival. On this day, thousands of trees are planted all over India. We will also plant trees on this occasion.

The children were very excited. They planted trees in their school. The number of trees planted by four students is shown in the pictograph. Read the pictograph and answer the questions.

Number of trees planted by students

Seema	4 trees
Umesh	2 trees
Harvinder	7 trees
Nusrat	4 trees

Key: = 1 tree

a) Who planted the most trees? HARVINDER

b) How many more trees than Umesh did Nusrat plant? 2

c) Which students planted 4 trees? SEEMA & NUSRAT

d) How many trees were planted in all? 17

Check what you know

The picture shows the number of animals in Ashu's farm. Count and complete the table to show the number of each animal.

Animal	Number
Duck	5
Dog	2
Fish	6
Cat	3
Horse	1

Now draw a pictograph. Show 1 animal as ♥.

Number of animals in Ashu's farm

Duck	♥ ♥ ♥ ♥ ♥
Dog	♥ ♥
Fish	♥ ♥ ♥ ♥ ♥ ♥
Cat	♥ ♥ ♥
Horse	♥

Key: ♥ = 1 animal

pictograph

- The PE teacher counted the different types of balls in the school store. He made a pictograph for the principal.

He showed 1 ball as ●.

Number of balls in the school store

Key: ● = 1 ball

Football	● ● ● ● ● ● ● ● ● ● ● ●
Tennis ball	● ● ● ● ● ● ● ●
Cricket ball	● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ● ●
Basket ball	● ● ● ● ● ●

The principal said, 'I can't understand this pictograph. There are too many balls to count.'

The PE teacher had an idea. He drew one ● for 2 balls. He redrew the pictograph.

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Number of balls in the school store

Football	● ● ● ● ● ●
Tennis ball	● ● ● ●
Cricket ball	● ● ● ● ● ● ● ●
Basket ball	● ● ●

Key: ● = 2 balls

The principal was happy! She found it easier to understand this pictograph. Can you say why?

Now, answer the following questions about the pictograph.

Remember ● stands for 2 balls

a) How many cricket balls were there?

There are 8 ● for cricket balls.

Therefore, there are 8 × 2 = 16 cricket balls.

b) How many more footballs than basket balls?

There are 6 – 3 = 3 more ◯ for footballs than basket balls.

Therefore, there are 3 × 2 = 6 more footballs than basket balls.

c) There are 8 of which type of balls?

8 balls means 8 ÷ 2 = 4 ◯.

There are 8 TENNIS BALL

d) How many balls are there altogether?

There are 6 + 4 + 8 + 3 = 21 ◯ altogether.

Therefore, there are 21 × 2 = 42 balls altogether.

EXERCISE 1

1. Read the pictograph and answer the questions.

Number of children in Class 3 in Tiny Tots School

Key: = 5 children

Class 3A	
Class 3B	
Class 3C	
Class 3D	

a) Which section has the most students? How many? Class 3B 35 STUDENT

b) Which section has the least students? How many? Class 3D 20 STUDEN

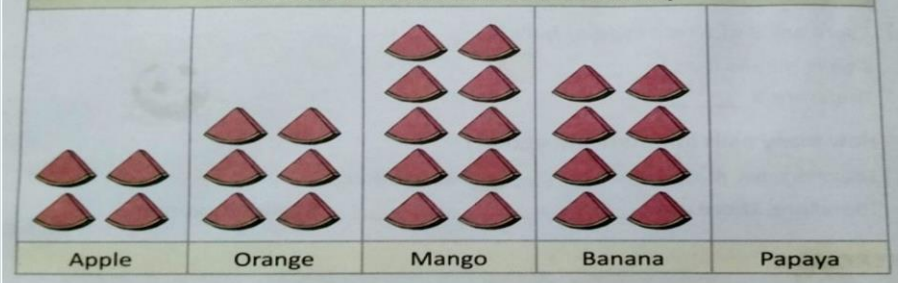
c) How many more students are there in Class 3B than in Class 3C? 10

d) Which section has 25 students? Class 3C

e) How many students are there altogether in class 3? 110 STUDENTS

2. The pictograph shows the number of fruits sold by Manu in a day. Answer the questions.

Fruits sold in Manu's fruit stall on Sunday



Apple	Orange	Mango	Banana	Papaya

a) If the number of apples sold were 40, 1 stands for **10** fruits.

b) He sold 30 papayas. How many should he draw for the papayas? **3**

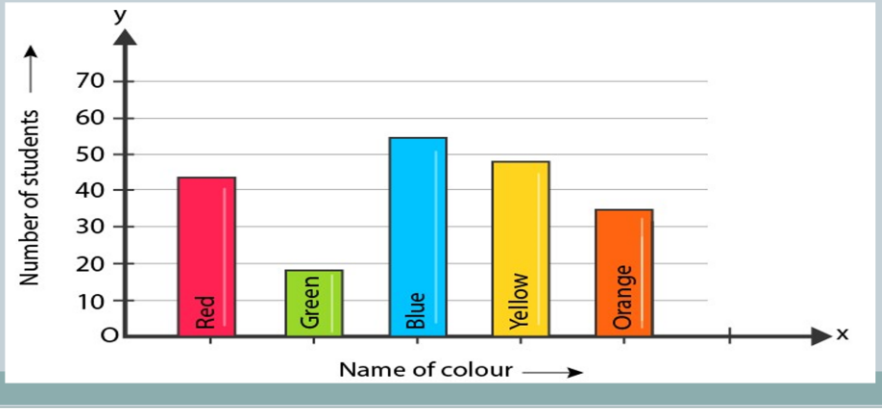
c) Which fruit did he sell the most? **mango** How many? **100**

d) He sold **20** more bananas than oranges.

e) He sold **280** fruits altogether.

BAR GRAPH

- https://youtu.be/SK1GZaSkXss
- A **bar graph** is a **chart** that plots **data using** rectangular **bars** or columns.



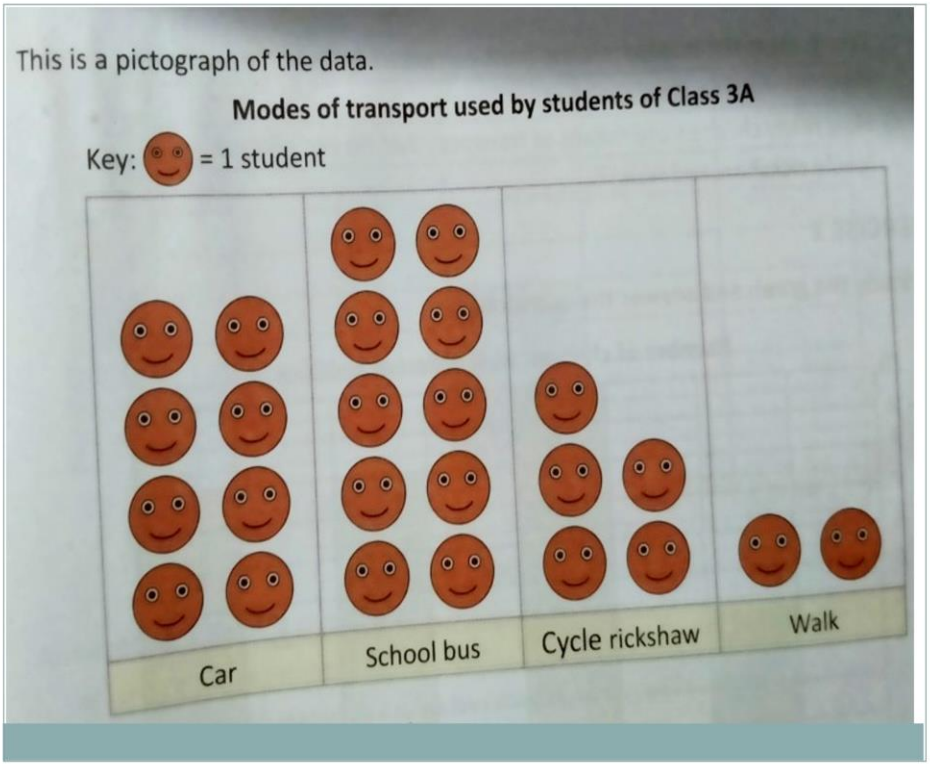
Bar Graphs

Drawing pictures in a pictograph takes time. To make it easier, we can show a coloured box instead of drawing a symbol. Such a graph is known as a **bar graph**.

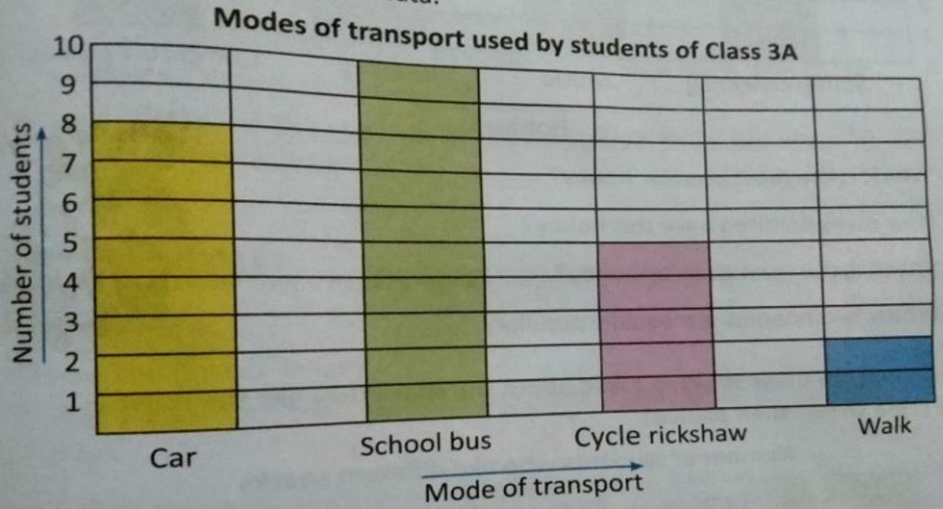
The table gives the number of students in Class 3A and their mode of transport to school.

Mode of transport	Car	School bus	Cycle rickshaw	Walk
Number of students	8	10	5	2

This is a pictograph of the data.



This is a bar graph of the same data.



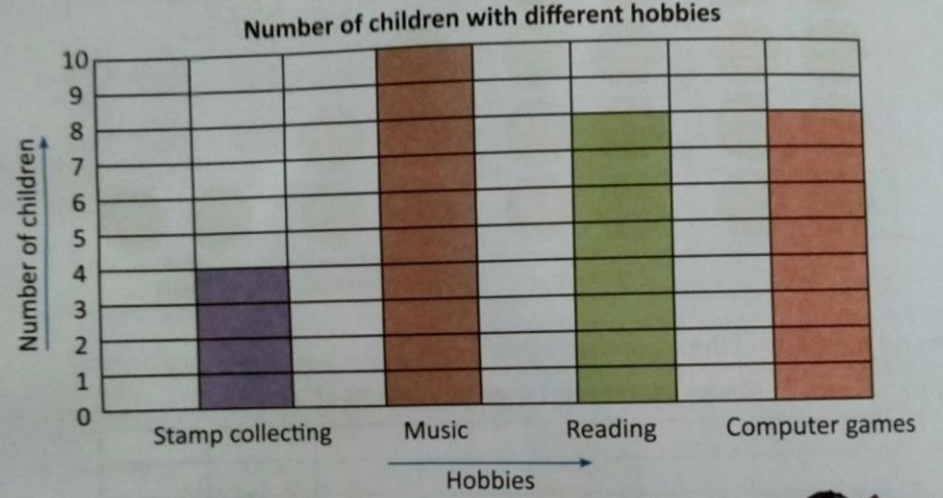
Look at the bar graph and answer the questions.

a) How many children come to school by car? 8.

b) How many children live close enough to walk to school? 2.

EXERCISE 2

1. Study the graph and answer the questions.



a) Which is the most popular hobby? MUSIC

How many children have this hobby? 10

b) Which is the least popular hobby? STAMP COLLECTING

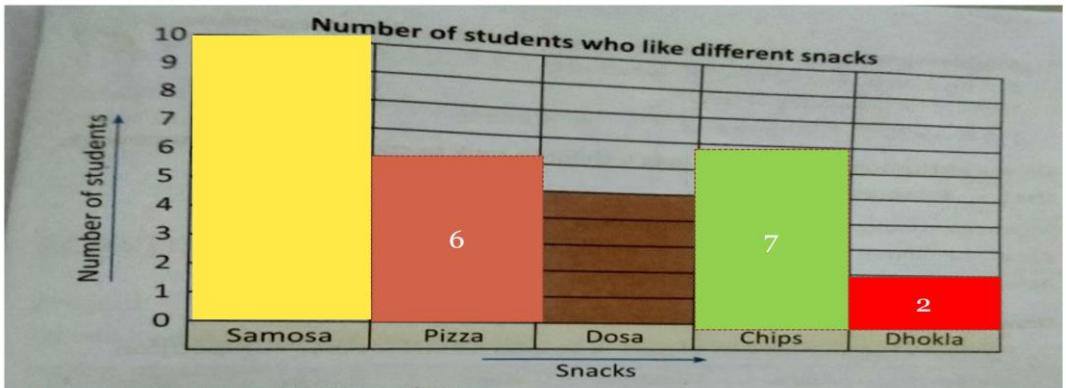
c) Which two hobbies are equally popular? READING & COMPUTER GAMES

2. 30 students of Class 3B were asked about the snack they like the most. The table shows their choices.

Number of students who like different snacks

Food item	Samosa	Pizza	Dosa	Chips	Dhokla
Number of children	10	6	5	7	2

Complete the bar graph by colouring.



Answer the following questions.

a) Which is the most popular snack? **SAMOSA**

b) How many students like pizza the most? **6**

c) How many more students like dosa than dhokla? **3**

d) 6 girls chose samosa as their favourite snack. How many boys chose samosa as their favourite snack? **10 - 6 = 4 BOYS**

e) Only 1 boy said that chips are his favourite. How many girls chose chips as their favourite snack? **7 - 1 = 6 GIRLS**

CLASS TEST

3. Draw a bar graph to show the following data.

Number of goals scored by players in an inter-school football competition

Name	Asma	Maninder	Rajiv	Harish	Akash
Goals scored	5	6	10	1	3

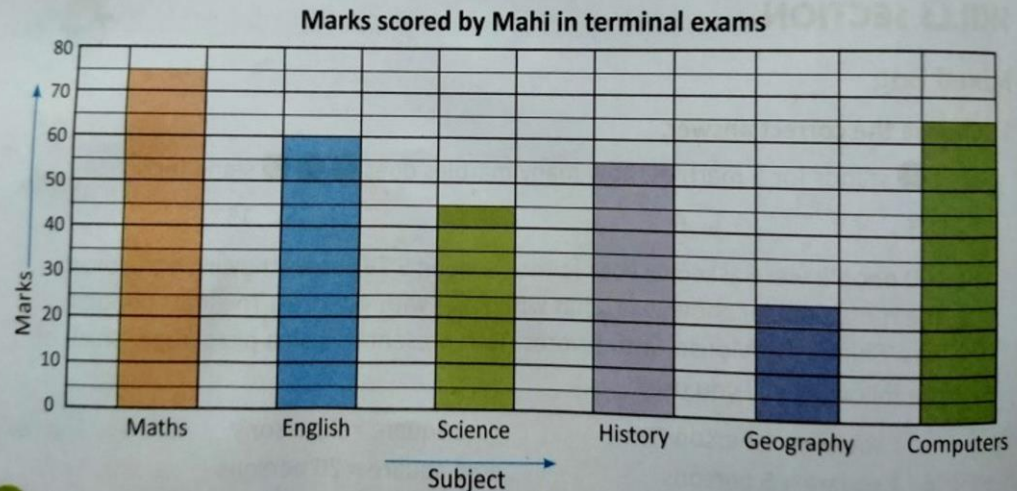
1. If  = 20 buses, then  = _____ buses.

a) 10 b) 8 c) 5 d) 4

2. If  = 100 pizzas, then  = _____ pizzas?

a) 325 b) 335 c) 350 d) 375

3. These are the marks scored by Mahi in his terminal exams.



How many more marks did he score in his best subject than in his worst subject?

a) 25 b) 35 c) 45 d) 50

4. Mahi's friend Virat scored 23 marks more than him in Science. What were Virat's marks in Science?

a) 68 b) 65 c) 60 d) 45

DELHI PUBLIC SCHOOL, GANDHINAGAR

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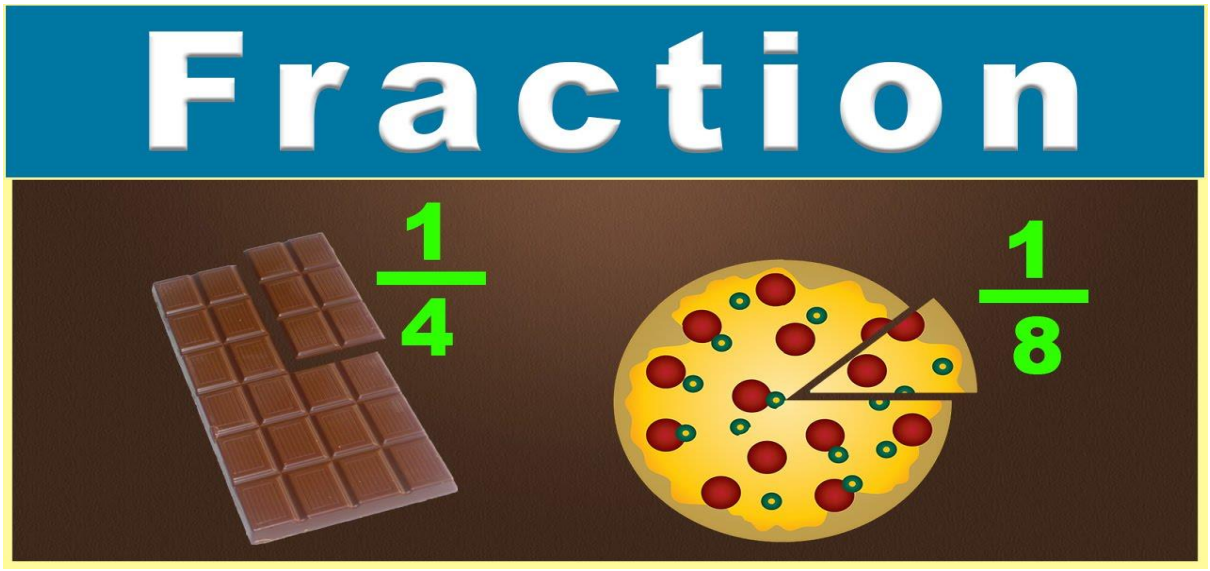
Academic Session 2021-22

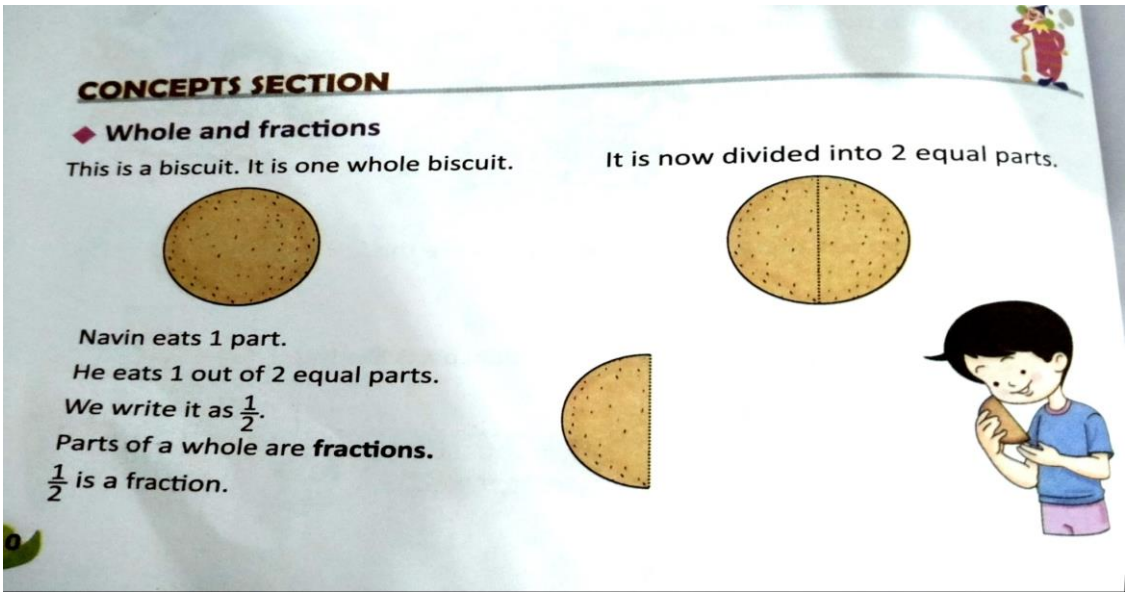
CHAPTER- 8

Fractions

FRACTION IS A PART OF A WHOLE.

- **https://youtu.be/n0FZhQ_GkKw**

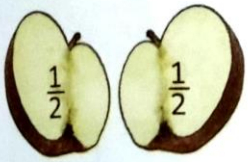




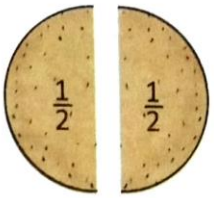
Halves

When a whole is divided into 2 equal parts, each part is called a **half.** It is written as: $\frac{1}{2}$ ← number of parts taken; $\frac{1}{2}$ ← number of equal parts

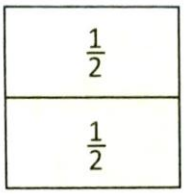
Each equal part of this apple is a half or $\frac{1}{2}$.



Each equal part of this biscuit is a half or $\frac{1}{2}$.

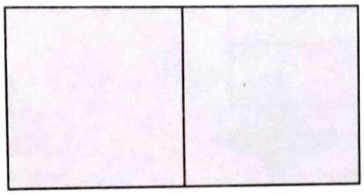


Each equal part of this square is a half or $\frac{1}{2}$.



This rectangle is divided into 2 equal parts.
Both parts are coloured.

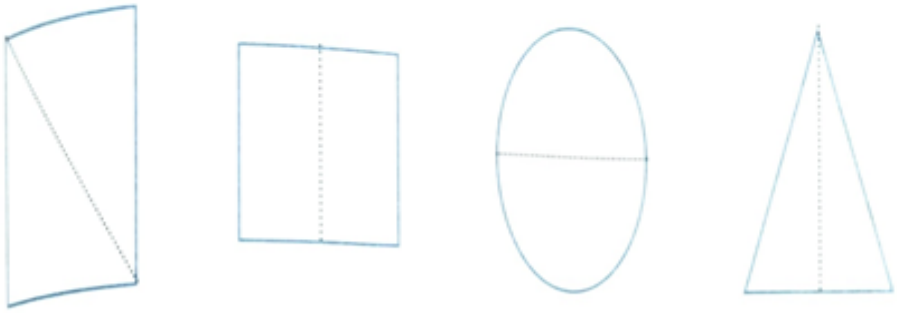
$\frac{2}{2}$ of the rectangle is coloured.



Two halves make a whole.

EXERCISE 1

1. Colour $\frac{1}{2}$ of each shape.



Thirds

Why is mother dividing the cake into 3 equal parts?

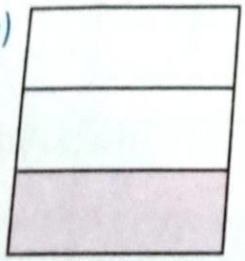
This strip of paper is divided into 3 equal parts.
Each part is called a **third**.

One part is coloured. We say that one-third is coloured.

One-third is written as $\frac{1}{3}$.

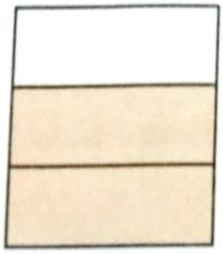
EXERCISE 2

Write the fraction for each coloured part.

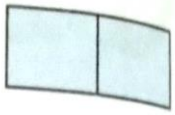
a) 

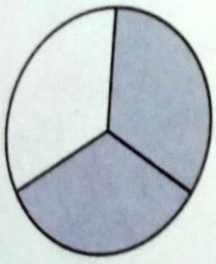
$\frac{1}{3}$

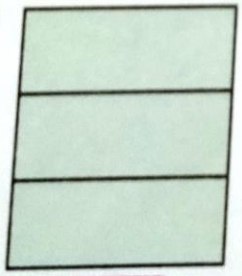
b) 

c) 

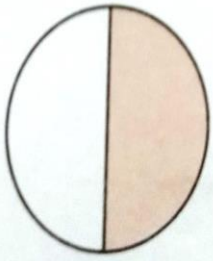
$\frac{2}{3}$

d) 

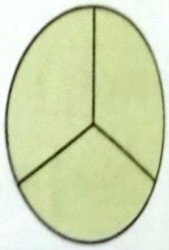
e) 

f) 

$\frac{3}{3}$

g) 

$\frac{1}{2}$

h) 

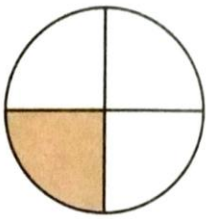
◆ Fourths

This circle is divided into 4 equal parts.

Each part is called a **fourth**.

One part is coloured.

We say that **one-fourth** is coloured.

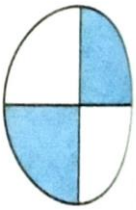


One-fourth is written as $\frac{1}{4}$.

Two parts are coloured.

We say that **two-fourths** is coloured.

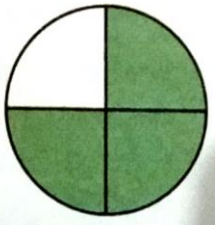
Two-fourths is written as $\frac{2}{4}$.



Three parts are coloured.

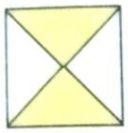
We say that **three-fourths** is coloured.

Three-fourths is written as $\frac{3}{4}$.

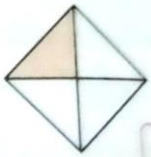


EXERCISE 3

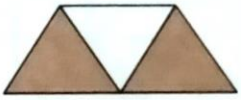
1. Write the fractions for the shaded parts.

a) 

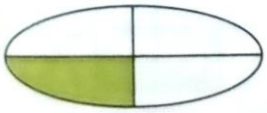
b) 

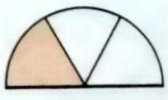
c) 

d) 

e) 

f) 

g) 

h) 

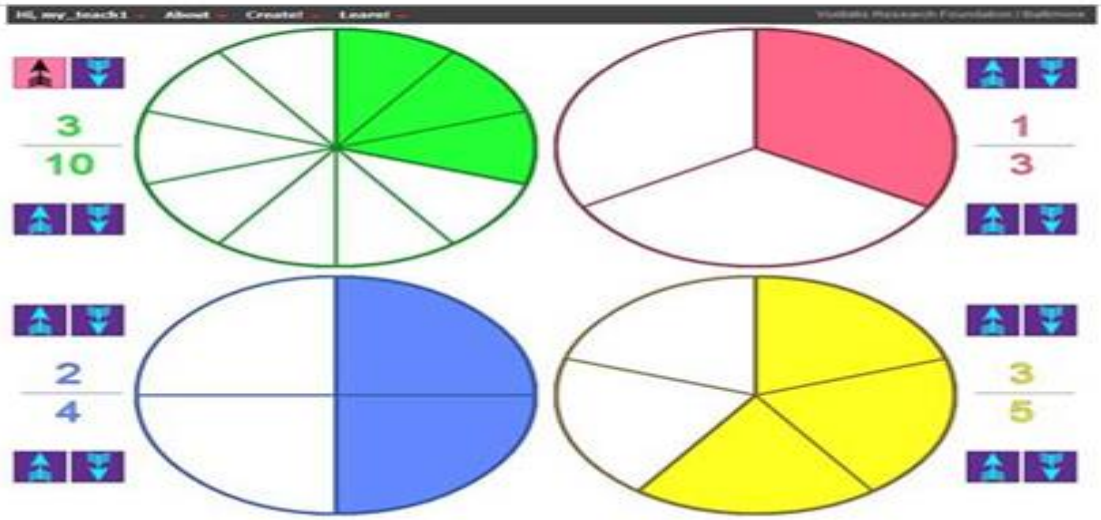
i) 

j) 

k) 

l) 

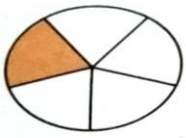
SOME OTHER FRACTIONS



EXERCISE 4

1. **Fill in the blanks.**

a)

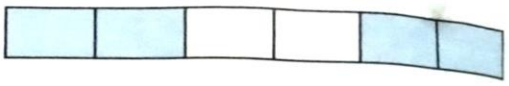


How many equal parts? 5

How many coloured parts? 1

Fraction that is coloured: $\frac{1}{5}$

b)



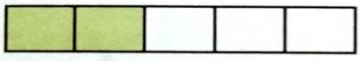
How many equal parts? 6

How many coloured parts? 4

Fraction that is coloured: $\frac{4}{6}$

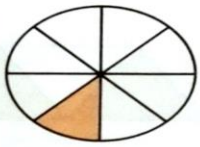
2. **Write what fraction is coloured.**

a)



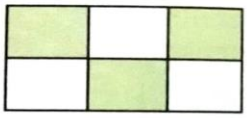
$\frac{2}{5}$

b)



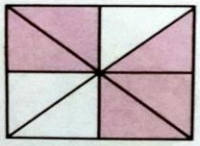
$\frac{1}{8}$

c)



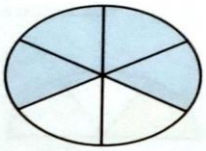
$\frac{3}{6}$

d)



___

e)



$\frac{4}{6}$

f)

___

3. **Choose the fraction to show how much of the glass is full.**

a)

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

b)

$\frac{1}{2}$ $\frac{1}{4}$ $\frac{1}{6}$

c)

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

d)

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

◆ Numerator and denominator

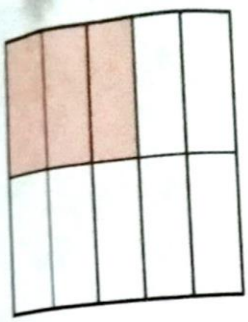
In the fraction $\frac{2}{5}$, the whole is divided into 5 equal parts. 2 parts are taken.

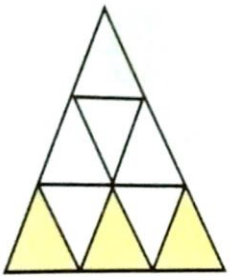
2 is the **numerator** of the fraction. → 2

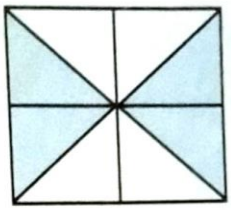
5 is the **denominator** of the fraction. → 5

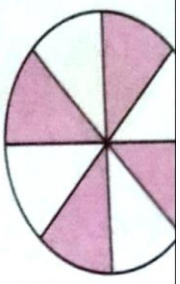
EXERCISE 5

In each case, write the numerator, denominator and the fraction in the table.

a) 

b) 

c) 

d) 

	a)	b)	c)	d)
Numerator	3		4	
Denominator	10		8	
Fraction	$\frac{3}{10}$		$\frac{4}{8}$	

◆ Fraction of a collection

You know that fractions are parts of a whole.

Fractions can also be parts of a collection or group.

Nandu has a collection of 3 balloons.
1 balloon is red and 2 are green.

We can say that: $\frac{1}{3}$ of the balloons are red.

$\frac{1}{3}$ → numerator shows the number considered (red balloons)
$\frac{1}{3}$ → denominator shows the total number in the collection

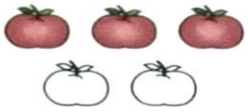
$\frac{2}{3}$ of the balloons are green.

$\frac{2}{3}$ → numerator shows the number considered (green balloons)
$\frac{2}{3}$ → denominator shows the total number in the collection

EXERCISE 6

1. Write the fractions for the number coloured and the number not coloured.

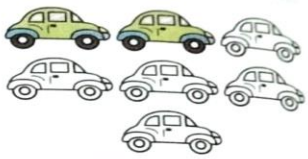
a) 
In colour $\frac{2}{4}$ Not in colour $\frac{2}{4}$

b) 
In colour $\frac{3}{5}$ Not in colour $\frac{2}{5}$

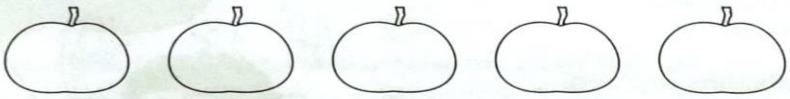
c) 
In colour ___ Not in colour ___

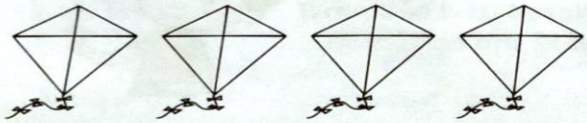
d) 
In colour ___ Not in colour ___

e) 
In colour $\frac{3}{6}$ Not in colour $\frac{3}{6}$

f) 
In colour $\frac{2}{7}$ Not in colour $\frac{5}{7}$

2. Colour to show the fraction.

a)  $\frac{2}{5}$

b)  $\frac{3}{4}$

c)  $\frac{3}{6}$

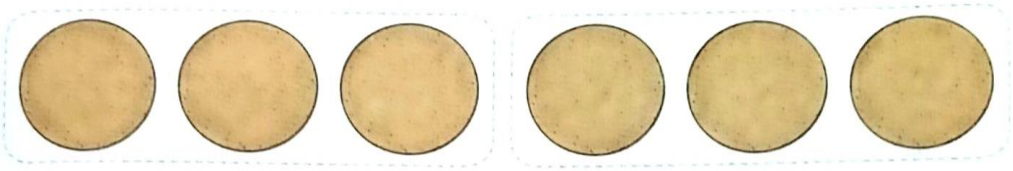
d)  $\frac{5}{5}$

Finding fraction of a collection

Jacob has 6 biscuits. He wants to give half of them to his friend. How many should he give her?

How will he do this?

He will first divide the biscuits into 2 equal parts. That means he will divide 6 by 2.

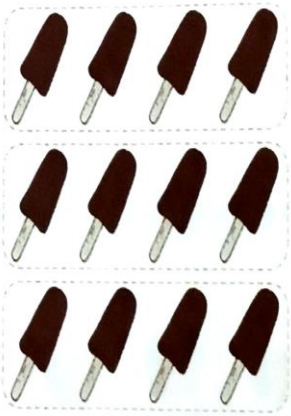


He will then give 1 part, that is, 3 biscuits to his friend.

Therefore half of 6 is 3, or $\frac{1}{2}$ of 6 = 3

To find $\frac{1}{2}$ of 6, divide 6 by 2.

There are 12 ice-creams.

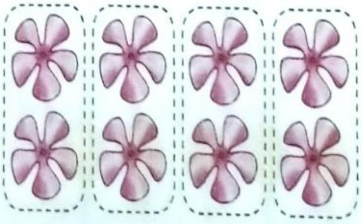


What is one-third of this collection?

$\frac{1}{3}$ of 12 = 12 ÷ 3 = 4

To find $\frac{1}{3}$, divide by 3.

There are 8 flowers.

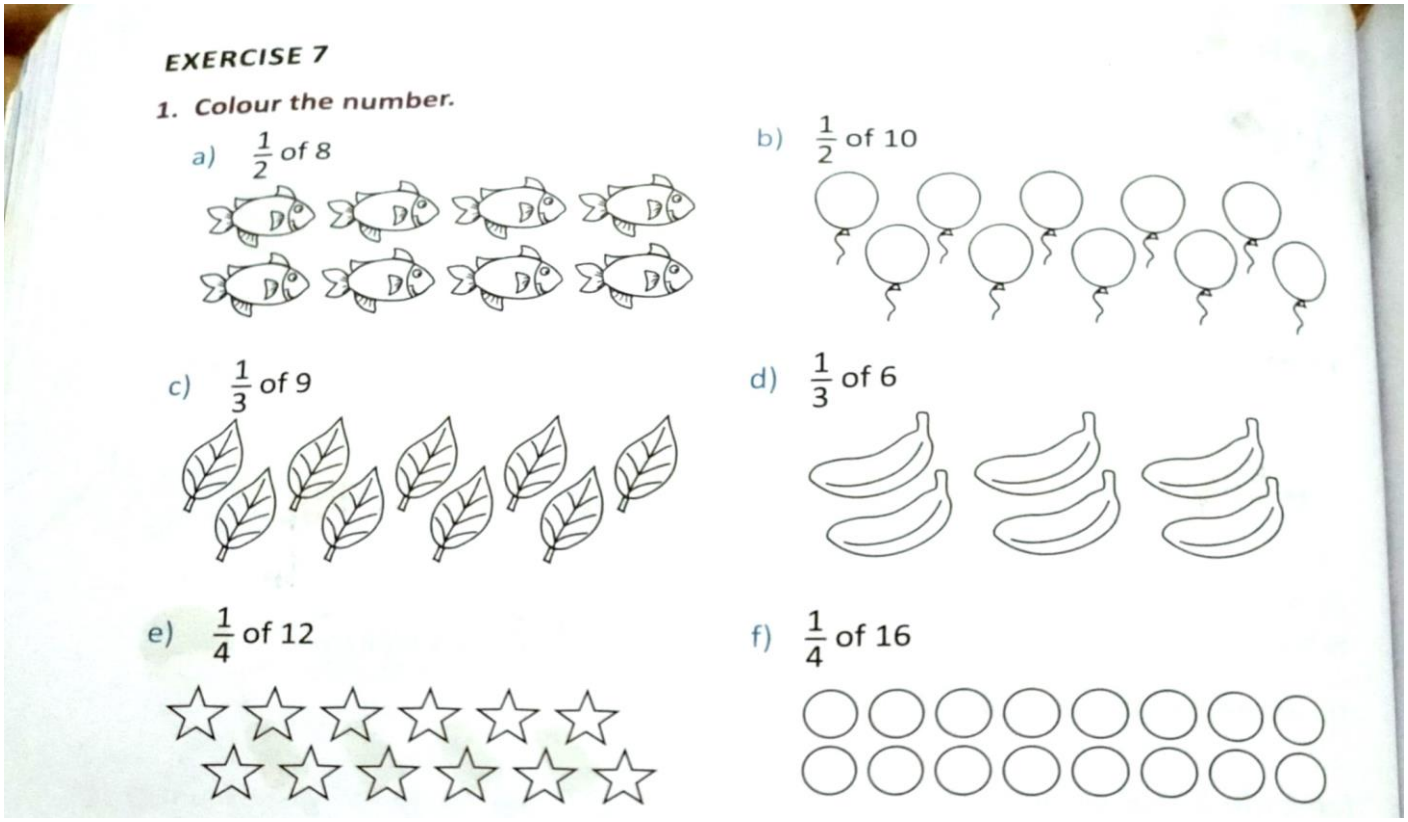


What is one-fourth of this collection?

$\frac{1}{4}$ of 8 = 8 ÷ 4 = 2

To find $\frac{1}{4}$, divide by 4.

Refer Maths Lab Activity 2 on page 126.



EXERCISE -7 Q-1 (N.B.)

A) ½ OF 8

½ OF 8

= 8 ÷ 2

=4

C) 1/3 OF 9

1/3 OF 9

= 9 ÷ 3

=3

E) ¼ OF 12

¼ OF 12

= 12 ÷ 4

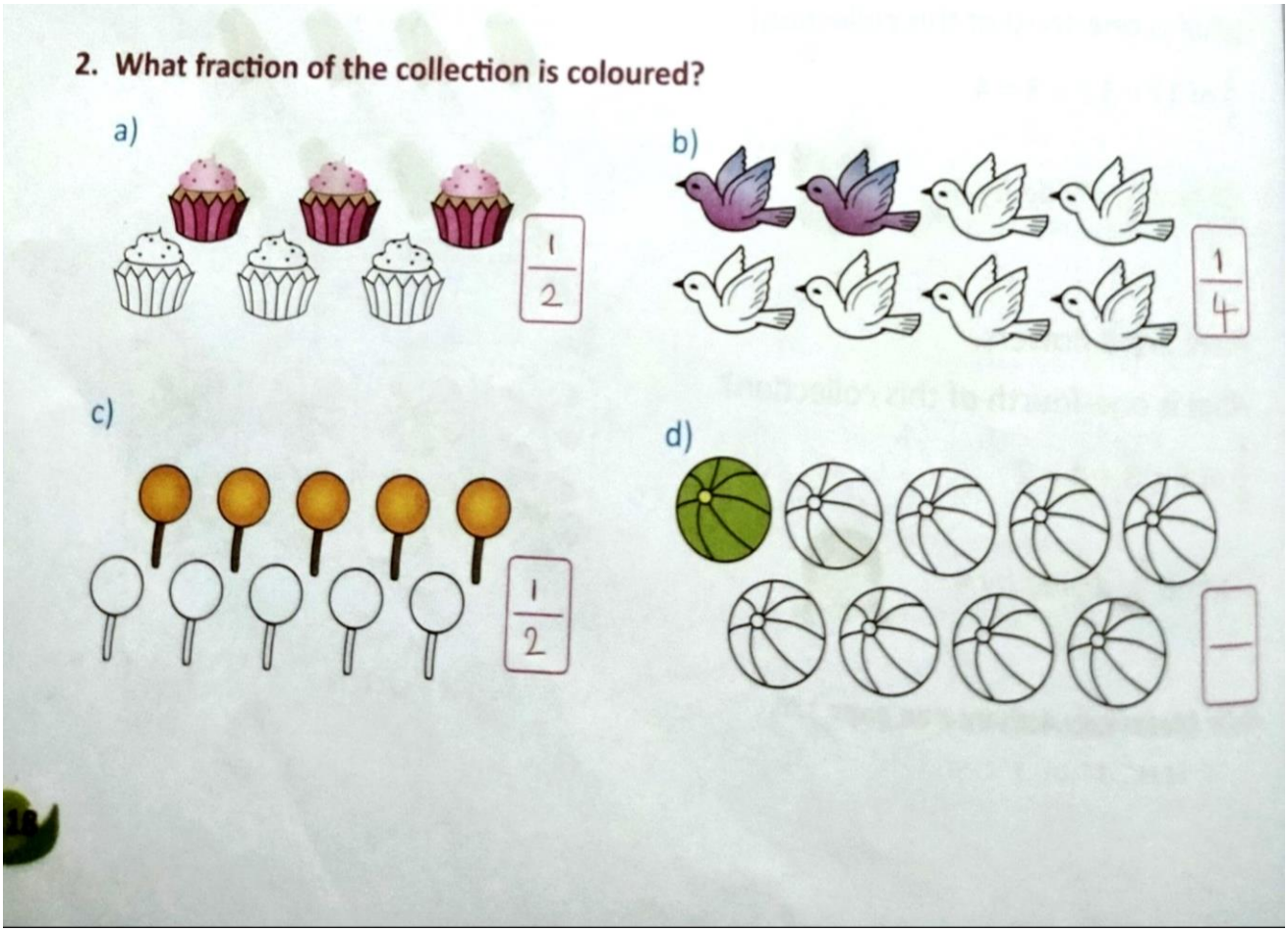
=3

F) ¼ OF 16

¼ OF 16

= 16 ÷ 4

=4



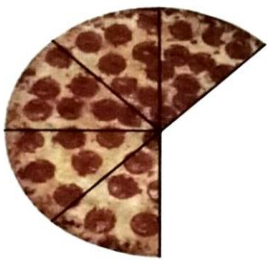
Comparing fractions

Two friends, Mubin and Alka ordered a pizza.

It was cut into 8 equal parts.

Mubin loves pizza.

He ate $\frac{5}{8}$ of the pizza.



Alka does not like pizza very much.

She ate $\frac{3}{8}$ of the pizza.

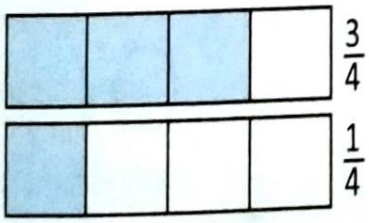
Who ate more pizza?

You can see that Mubin ate more pizza than Alka.

Therefore, $\frac{5}{8} > \frac{3}{8}$

Look at these examples.

a)



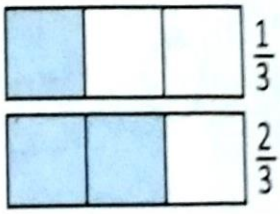
$\frac{3}{4}$

$\frac{1}{4}$

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

because 3 parts > 1 part

b)



$\frac{1}{3}$

$\frac{2}{3}$

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

because 1 part < 2 parts

When the denominators are the same, the fraction with the greater numerator is greater.

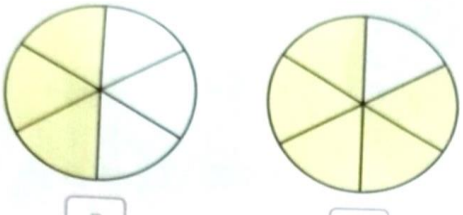
Fractions with same denominators are known as **like fractions.**

You can only compare like fractions in this way.

EXERCISE 8

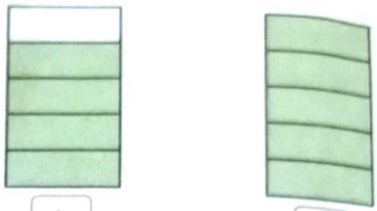
1. Write the fractions and fill in the ◯ with > or <.

a)



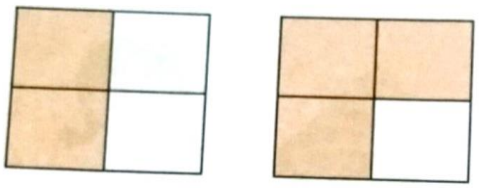
$\frac{3}{6}$ < $\frac{5}{6}$

b)



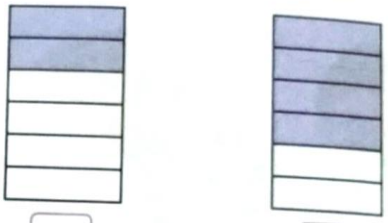
$\frac{4}{5}$ < $\frac{5}{5}$

c)



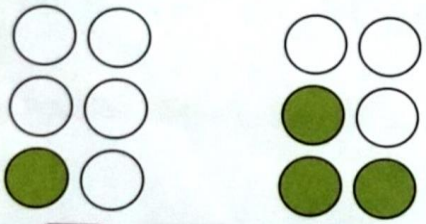
— ◯ —

d)



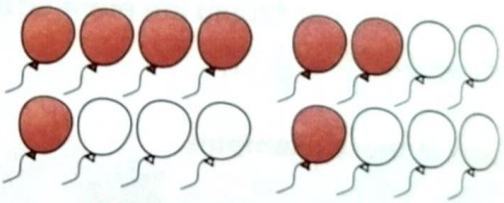
— ◯ —

e)



$\frac{1}{6}$ < $\frac{3}{6}$

f)



$\frac{5}{8}$ > $\frac{3}{8}$

2. Compare the like fractions and write <, > or =.

a) $\frac{2}{5}$ < $\frac{4}{5}$

b) $\frac{2}{9}$ > $\frac{1}{9}$

c) $\frac{6}{8}$ > $\frac{5}{8}$

d) $\frac{3}{7}$ < $\frac{6}{7}$

e) $\frac{3}{6}$ = $\frac{3}{6}$

f) $\frac{5}{7}$ > $\frac{3}{7}$

g) $\frac{8}{9}$ < $\frac{9}{9}$

h) $\frac{1}{5}$ < $\frac{3}{5}$

i) $\frac{1}{4}$ < $\frac{2}{4}$

j) $\frac{3}{10}$ < $\frac{5}{10}$

k) $\frac{3}{8}$ < $\frac{4}{8}$

l) $\frac{9}{10}$ > $\frac{1}{10}$

SKILLS SECTION (calculation, application and analysing skills)

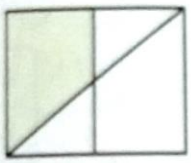
Mental Maths

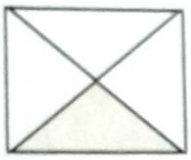
1. Which of these is a whole? $\frac{1}{2}$, $\frac{1}{3}$, $\frac{2}{3}$, $\frac{3}{3}$
2. What fraction is 1 out of 4 equal parts?
3. What fraction is 2 out of 10 marbles?
4. $\frac{2}{5}$ of a fraction is coloured. What fraction is not coloured?
5. What is half of 4?
6. A cake is divided into 8 unequal parts. Is each part equal to $\frac{1}{8}$?

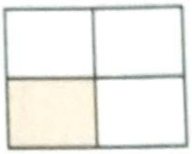
Mixed Bag

1. **Choose the right answer.**

a) The coloured portion in which of these represents the fraction $\frac{1}{4}$?

i. 

ii. 

iii. 

iv. Both ii and iii

b) What is the denominator of the fraction that represents the shaded portion in this figure?

i. 2 ii. 5 iii. 7 iv. 9

c) $\frac{4}{4}$ is equal to:

i. one-fourth ii. half iii. quarter iv. one whole

d) $\frac{3}{6}$ is smaller than:

i. $\frac{1}{6}$ ii. $\frac{2}{6}$ iii. $\frac{4}{6}$ iv. all of these

CLASS TEST

- **SOLVE**

A) 1/5 OF 15

B) ½ OF 10

. WRITE THE FRACTIONS

A) NUMERATOR = 6 ,
DENOMINATOR = 8

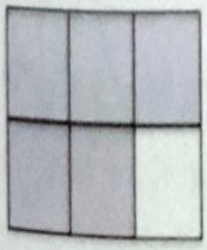
B) NUMERATOR =7 ,
DENOMINATOR = 11

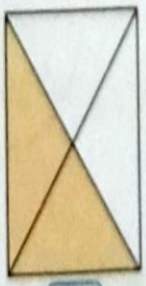
. COMPARE THE FRACTIONS

A) 4/11 _____3/11

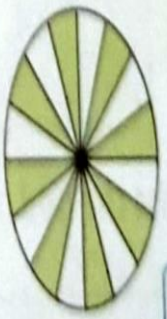
B) 2/10 _____ 2/10

2. Write the fraction for the portion in colour.

a) 

b) 

c) 

d) 

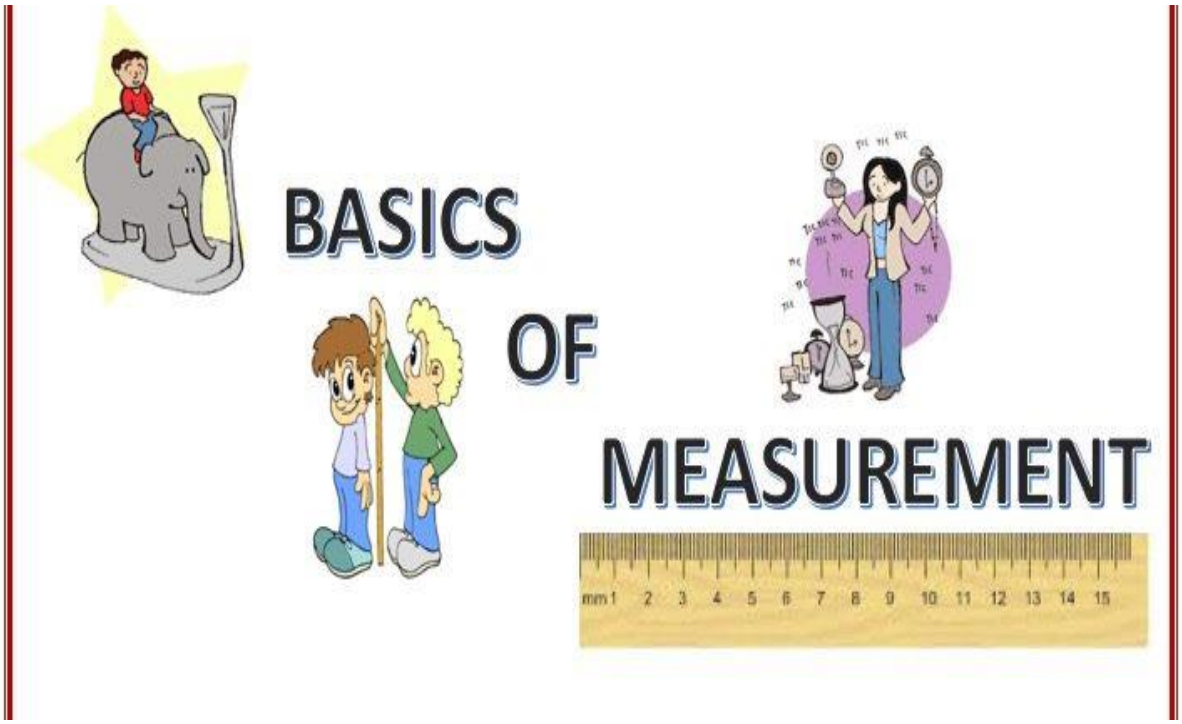
DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

CHAPTER- 11

MEASUREMENTS



UNITS OF MEASUREMENTS

LENGTH	METRE(m) , CENTIMETRE(cm), KILOMETRES(km)
WEIGHT (MASS)	GRAM(g) AND KILOGRAMS(kg)

CAPACITY	MILLILITRES(ml) AND LITRES (l)

BASIC CONVERSIONS

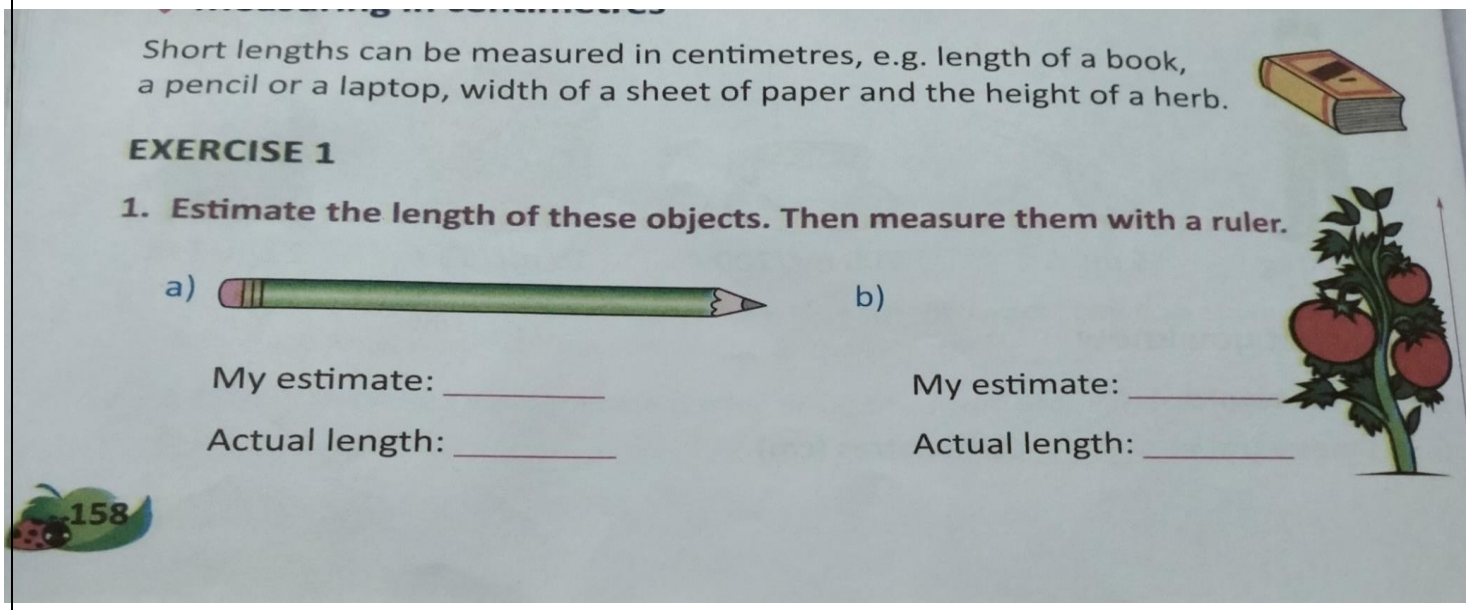
1 KILOGRAM	1000 GRAM
1 METRE	100 CENTIMETRE
1 LITRE	1000 MILLILITRE

LENGTH

METRE =BIGGER UNIT OF MEASURING LENGTH

CENTIMETRE =SMALLER UNIT OF MEASURING LENGTH

EXERCISE 1 (PG 158) T.B.



Short lengths can be measured in centimetres, e.g. length of a book, a pencil or a laptop, width of a sheet of paper and the height of a herb.

EXERCISE 1

1. **Estimate the length of these objects. Then measure them with a ruler.**

a)

My estimate: _____

Actual length: _____

b)

My estimate: _____

Actual length: _____

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c) 

My estimate: _____ Actual length: _____

d) 

My estimate: _____ Actual length: _____

e) My estimate of length: _____

Actual measurement: _____

My estimate of width: _____

Actual measurement: _____

2. Measure these line segments with a ruler.

a) _____ b) _____

c) _____

d) _____

d)

Measuring in metres

1 metre is 100 times the length of a centimetre.

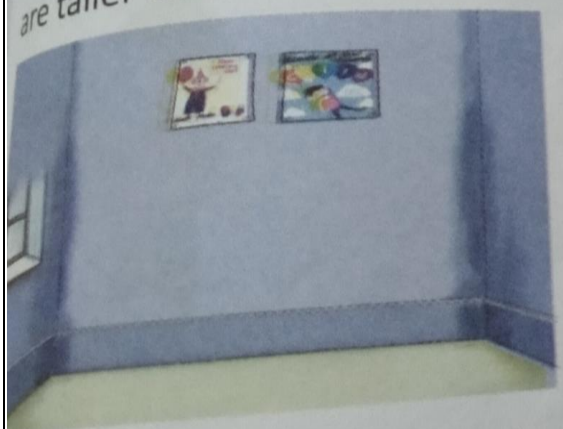
1 m = 100 cm

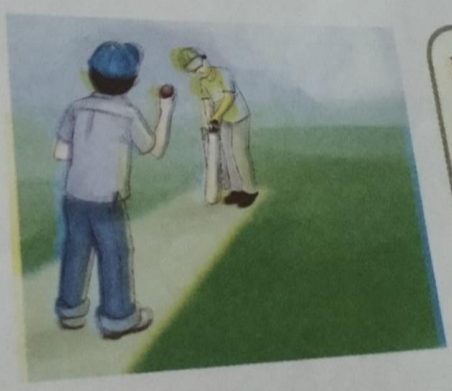
Therefore, longer lengths can be measured in metres.

Length of a small room is about 4 metres.

Length of a cricket pitch is about 20 metres.

The redwood trees are the tallest trees. Many of them are taller than 100 metres.





Rapid check

You will measure:

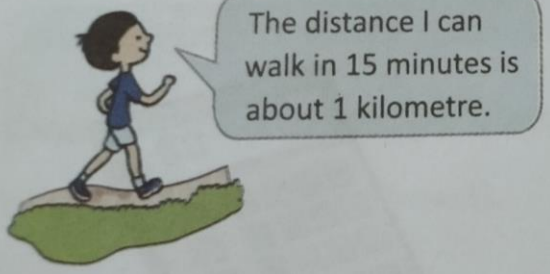
- the height of your house in _____
- the length of your nose in _____

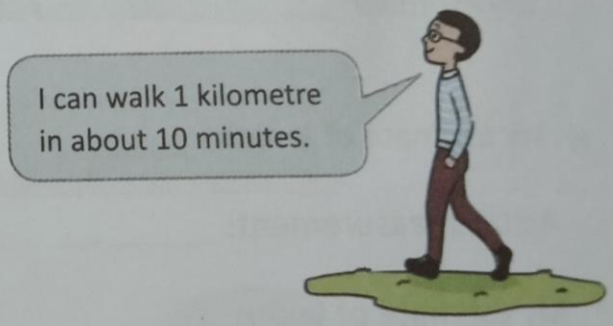
Measuring in kilometres

1 kilometre is 1000 times as long as a metre.

1 km = 1000 m

Therefore, very long lengths are measured in kilometres, for example the distance between cities.



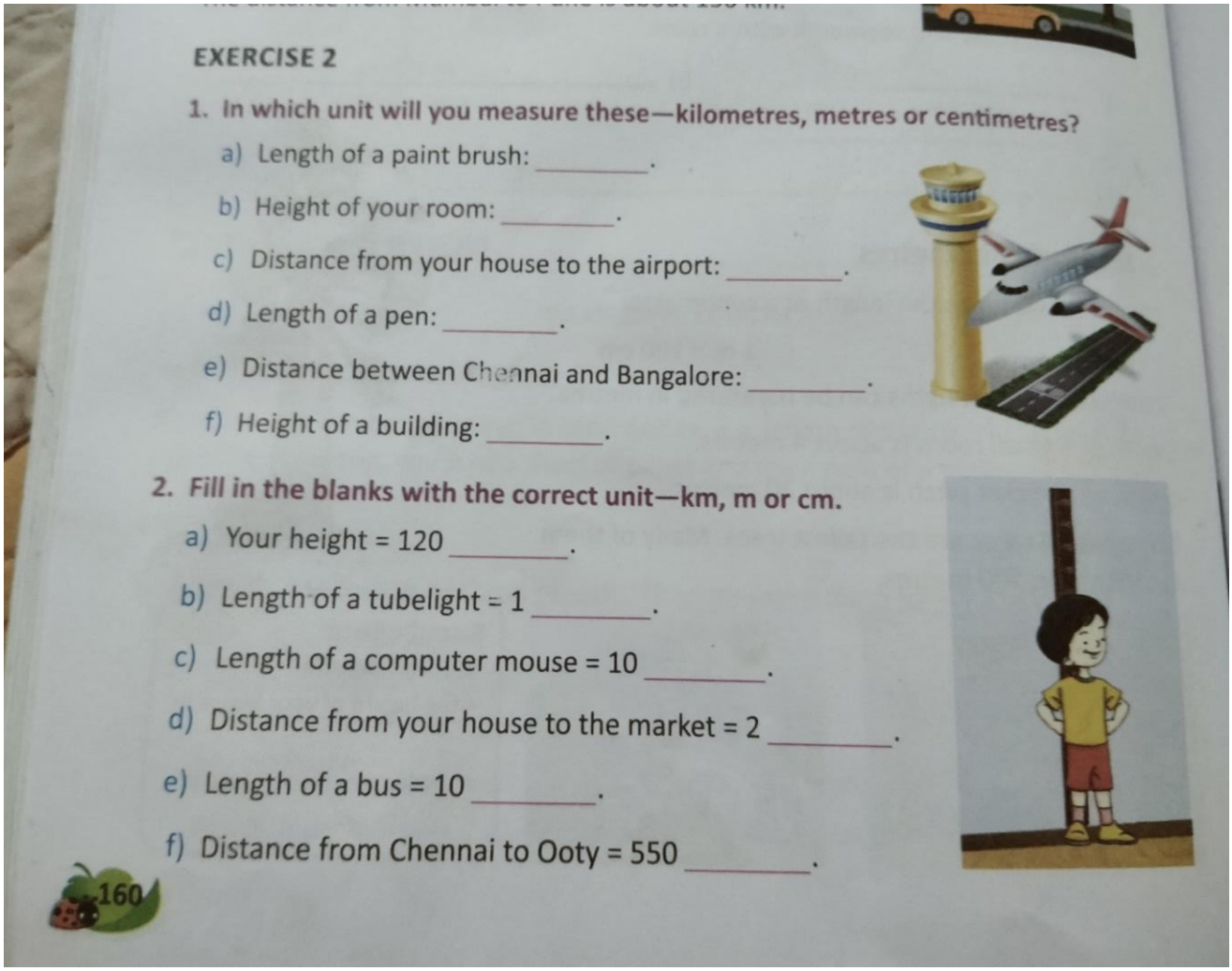


The distance a car can cover in a city in 1 hour is about 30 kilometres.

The same car can cover 80 kilometres in 1 hour on a highway.

The distance from Mumbai to Pune is about 150 km.

EXERCISE 2 (PG: 160) T.B



EXERCISE 2

1. In which unit will you measure these—kilometres, metres or centimetres?
   a) Length of a paint brush: _____.
   b) Height of your room: _____.
   c) Distance from your house to the airport: _____.
   d) Length of a pen: _____.
   e) Distance between Chennai and Bangalore: _____.
   f) Height of a building: _____.

2. Fill in the blanks with the correct unit—km, m or cm.
   a) Your height = 120 _____.
   b) Length of a tubelight = 1 _____.
   c) Length of a computer mouse = 10 _____.
   d) Distance from your house to the market = 2 _____.
   e) Length of a bus = 10 _____.
   f) Distance from Chennai to Ooty = 550 _____.

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CONVERSION OF LENGTH

CONVERTING METRES INTO CENTIMETRES

- **1m = 100 cm**

Therefore,

- **2m=200 cm**
- **3m=300cm**

Conversion of length

Converting metres to centimetres

Example 1:

The length of my sari is about 6 metres.
How many centimetres is that?

1 m = 100 cm

6 m = 6 × 100 cm = **600 cm**

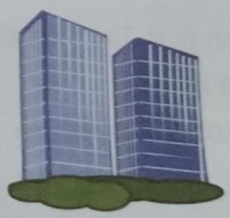
To convert metres into centimetres, add two zeros to the right.

Example 2: Convert 3 m 50 cm into centimetres.

3 m 50 cm = 3 × 100 cm + 50 cm

= 300 cm + 50 cm = 350 cm

3 m 50 cm = 350 cm



Converting centimetres to metres

Example 3:

I want to buy a dining table about 200 cm long.
How many metres is that?

100 cm = 1 m

Exercise 3

Q-1 Convert into centimetres

A) 2m

1m =100cm

Therefore,

$2m = 2 \times 100 = 200\ cm$

C) 3 m 20 cm

We know,

1m =100cm

3m =300cm

Therefore,

3m 20 cm = 300cm+20cm

= 320 cm

Q-2 Convert into metres and centimetres

A) 500 cm

100 = 1m

Therefore,500 cm = 500÷100m = 5 m

C) 110cm

We know,

100 cm = 1m

Therefore,

110 =100 cm+10cm

=1m 10cm

E) 3200 cm

We know,

100 cm = 1m

Therefore,

3200cm = 3200 ÷100m

= 32m

G) 1040 cm

100 cm = 1m

Therefore, 1040 cm =1000cm+40cm

= 10m 40 cm

Exercise 4

Q-1 Convert into metres

A) 3km

1 km =1000m

Therefore,

3km = 3 × 1000m

=3000m

C) 3km 100m

1 km =1000m

Therefore,

3km = 3 × 1000m

=3000m

3km 100m=3000+100m

= 3100m

E) 7km 75m

1 km =1000m

Therefore,

7km = 7 × 1000m

=7000m

7km 75m= 7000+75m

= 7075m

G) 5km 500m

1 km =1000m

Therefore,

5km = 5 × 1000m

=5000m

5km 500m=5000+500m

=5500m

Q-2 Convert into kilometres and metres

a) 5000m

1000m=1km

Therefore,

5000m= 5000÷1000

= 5km

c) 1500m

1000m=1km

Therefore,

1500m = 1000m+500m

= 1km 500m

e)5550m

1000m =1km

Therefore,

5550m= 5550÷1000

=5.550

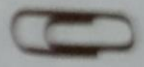
=5km 550m

MEASURING MASS (OR WEIGHT)

We measure mass in **grams** (g) and **kilograms** (kg).

1 kg = 1000 g

Measurement of mass (or weight) tells us how heavy something is. A paper clip weighs about 1 gram.

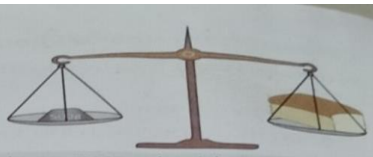


Gram is a small unit of mass. It is used to measure the mass of light objects such as a pencil, stapler, packet of chips, computer mouse and a loaf of bread.


About 20 g


About 50 g


About 100 g



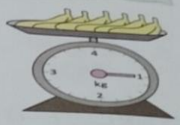

About 200 g


About 500 g

To the Teacher: In science, mass and weight are two different quantities. Gram and kilogram are the units of mass, not weight. However, since their numerical values on the earth are the same, they are used interchangeably in common language. In this book also, we have used them interchangeably.

6 bananas weigh about 1 kilogram.

A kilogram is a bigger unit of mass. It is used to measure the mass of heavy objects such as a dog, cow, car, desktop computer and a big bag of flour.




About 3 kg


About 10 kg


About 20 kg


About 200 kg

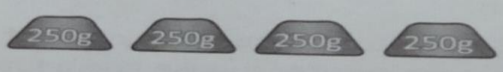

About 800 kg

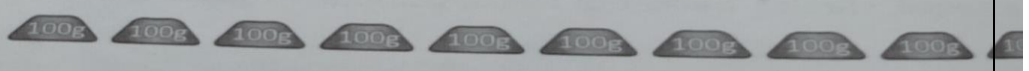
We use a weighing scale and standard weights to weigh objects. Here are some commonly used standard weights you can see in the market.

A 1 kg weight 

weighs the same as:

two 500 g weights. 

_____ 250 g weights. 

_____ 100 g weights. 

EXERCISE 5

1. Fill in the blanks with the correct unit—g or kg.

a)  About 5 _____

b)  About 200 _____

c)  About 100 _____

d)  About 3000 _____

e)  About 2 _____

f)  About 20 _____

◆ Conversion of mass

Compare:

1 km = 1000 m	1 kg = 1000 g

So, conversion of:

- kilogram to gram is done in the same way as kilometre to metre.
- gram to kilogram is done in the same way as metre to kilometre.

Exercise 6

Q-1 Convert into grams

a) 3kg

We know,

1kg=1000g

Therefore,

3kg=3 ×1000=3000g

c)3kg 125g

We know,

1kg=1000g

Therefore,

3kg=3 ×1000=3000g

3kg 125g= 3000 g+ 125 g

= 3125g

Q2 Convert into kilograms and grams

a)5000g

We know,

1000g = 1kg

Therefore,

5000g= 5000÷1000

=5kg

c) 10500g

We know, 1000g = 1kg

Therefore,

10500g = 10500 ÷ 1000

= 10.500g

=10 kg 500g

e) 7575 g

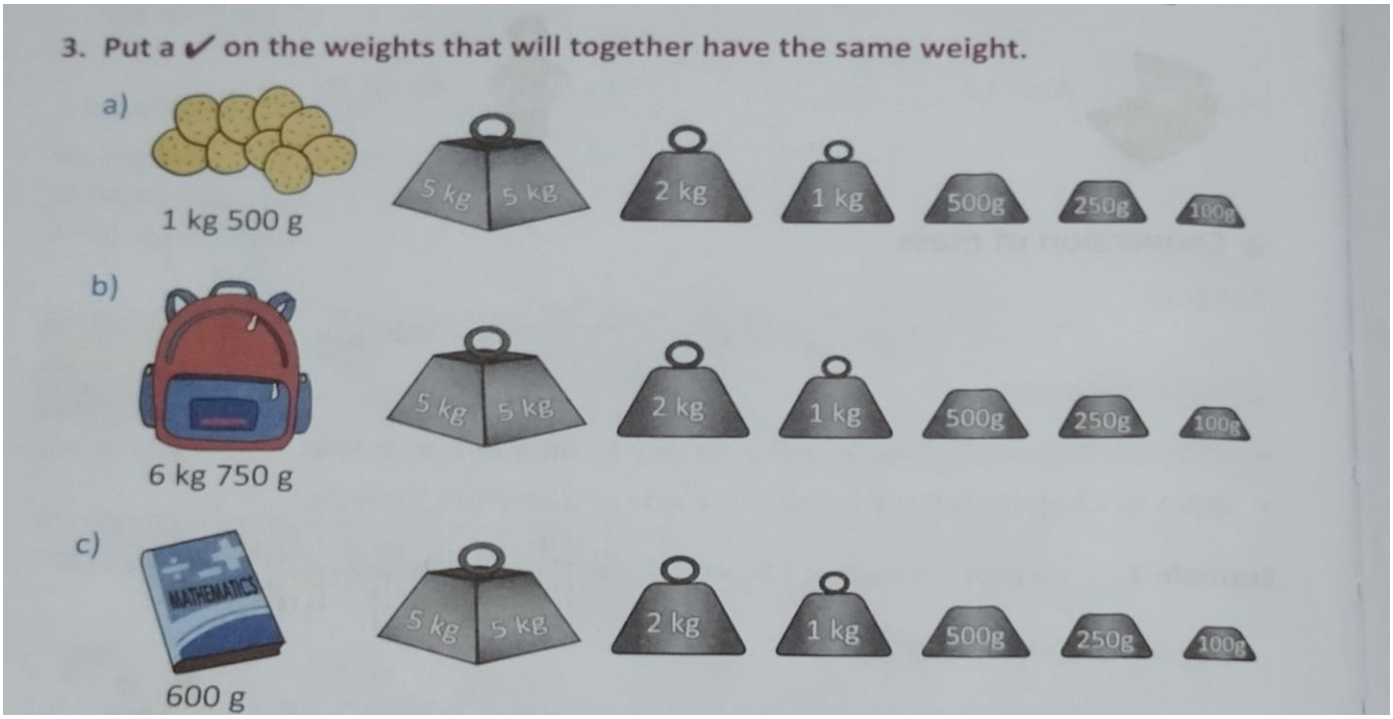
We know,

1000g = 1kg

Therefore,

7575g= 7575÷1000

= 7kg 575g



MEASURING CAPACITY

We measure capacity in **millilitres** (mℓ) and **litres** (ℓ)

1 ℓ = 1000 mℓ

The measure of capacity of a container tells us how much liquid it can hold.

The capacity of a teaspoon is about 5 mℓ.

Millilitre is a small unit of capacity. It is used to measure the capacity of small containers such as a teaspoon, tablespoon, cup, tumbler, cough syrup bottle and a small bottle of mineral water.

About 15 mℓ (tablespoon)

About 150 mℓ

About 250 mℓ

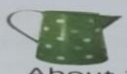
About 100 mℓ

About 500 mℓ

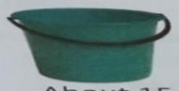
Litre is a bigger unit of capacity. The capacity of a mineral water bottle is about 1 litre.

Litre is used to measure the capacity of big containers such as a big bottle of cold drink, jug, bucket, water tank and a petrol tanker.

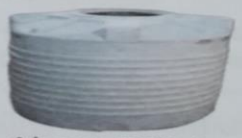
About 2 ℓ



About 3 ℓ



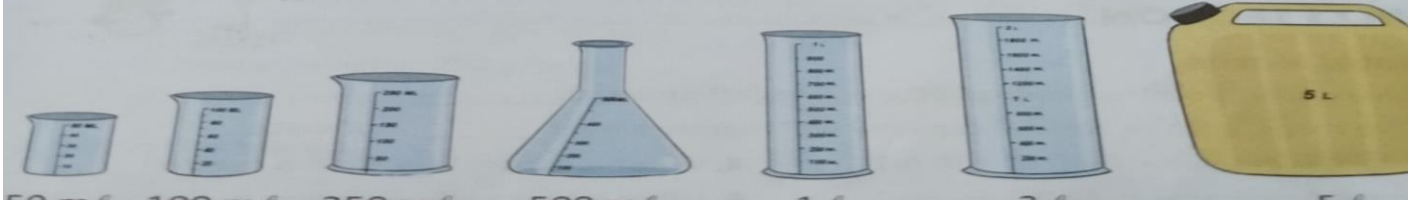
About 15 ℓ



About 500 ℓ

About 15,000 ℓ

Containers with standard measures are used to measure the amount of liquids. Here are some commonly used standard containers.



50 mℓ 100 mℓ 250 mℓ 500 mℓ 1 ℓ 2 ℓ 5 ℓ

Exercise-7

Q-1 Convert into milliliters

a) 4 l

1litre= 1000ml

Therefore,

4 l = 4 × 1000ml

= 4000ml

c)2 l 425 ml

1litre= 1000ml

Therefore,

2l = 2 × 1000ml

= 2000ml

2l 425 ml = 2000+425ml

=2425ml

Q2 Convert into litres and milliliters

a) 3000ml

1000ml =1 l

Therefore,

3000ml = 3000÷1000

= 3 l

c)10050 ml

1000ml =1 l

Therefore,

10050ml= 10050 ÷ 1000 ml

=10 litres 50 ml

g) 15150 ml

1000 ml = 1 l

Therefore,

15150ml = 15150÷1000 l

= 15 litres150 ml

DELHI PUBLIC SCHOOL, GANDHINAGAR

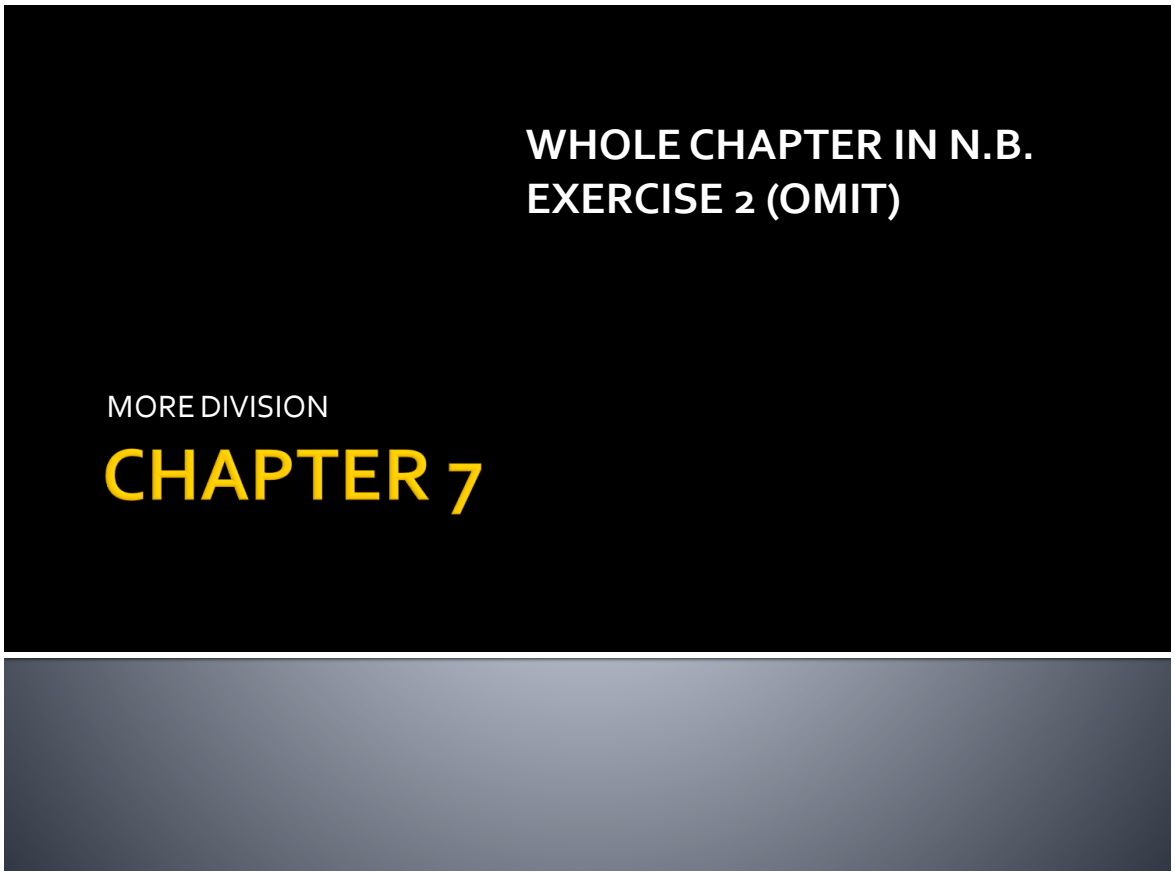
CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

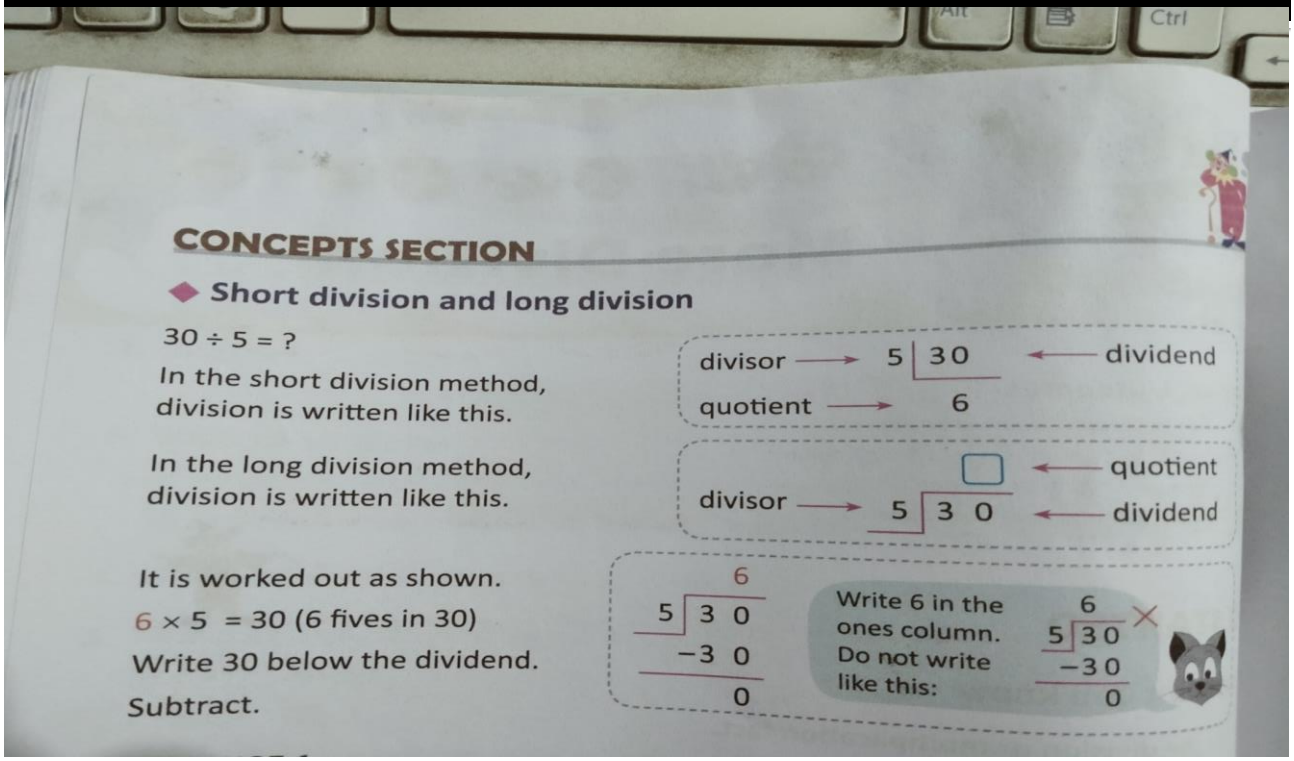
CHAPTER- 7

MORE DIVISION

NOTE: WHOLE CHAPTER IN N.B.
EXERCISE 2 OMIT



SHORT DIVISION AND LONG DIVISION



CONCEPTS SECTION

Short division and long division

30 ÷ 5 = ?

In the short division method, division is written like this.

divisor → 5 | 30 ← dividend

quotient → 6

In the long division method, division is written like this.

□ ← quotient

divisor → 5 | 3 0 ← dividend

It is worked out as shown.

6 × 5 = 30 (6 fives in 30)

Write 30 below the dividend.

Subtract.

```
   6
5 | 3 0
  −3 0
    0
```

Write 6 in the ones column. Do not write like this:

```
   6
5 | 30
 −30
   0
```

- https://youtu.be/MNykrb5G2hU (LONG DIVISION METHOD)

EXERCISE 1 Q-1 PG:94 (N.B.)

A)	3	27	
		9	

$3 \times 9 = 27$

C)	6	48	
		8	

$6 \times 8 = 48$

EX-1 Q-2 LONG DIVISION (N.B.) PG:94

A)

		5
7	3	5
-	3	5
	0	0

E)

		9
4	3	6
-	3	6
	0	0

Q-3 (B,C) ⇒ H.W. (PRACTICE N.B.)

EX-1 Q-2 LONG DIVISION (N.B.) PG:94

F) $3\overline{)21}$

		7
3	2	1
-	2	1
	0	0

EX-1 Q-3 LONG OR SHORT DIVISION (N.B.) PG:94

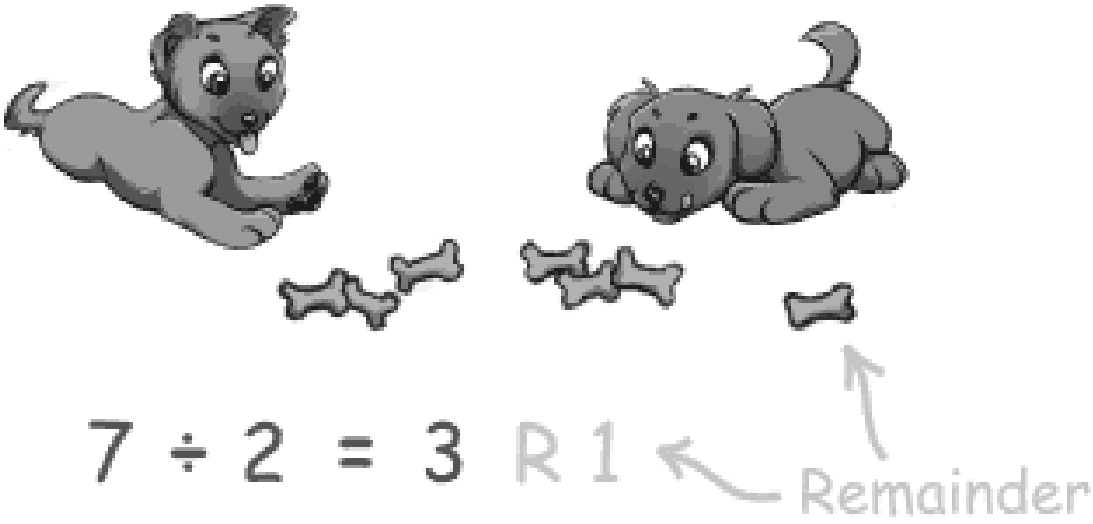
B) $81 \div 9$

Q=3 (A,C) ⇨ H.W.

		9
9	8	1
-	8	1
	0	0

EXERCISE 2 OMIT

REMAINDER IN DIVISION



- https://youtu.be/0cG_jL39XZE **(REMAINDER IN DIVISION)**

EXERCISE 3 Q-1 PG:96 (N.B.)

A)		8
2	1	7
-	1	6
	0	1

Q=8 R=1

C)		5
6	3	5
-	3	0
	0	5

Q=5 R=5

EXERCISE 3 Q-1(CNTD) PG:96

E)		8
8	6	4
	6	4
		0

Q=8 R=0

H.W.

- Q-1 ⇨ B,D,F IN (PRACTICE N.B.)

EX-3 Q-2 DIVIDE PG:96 (N.B.)

A) 25 ÷ 5

		5
5	2	5
-	2	5
	0	0

Q=5 R=0

B) 55 ÷ 6

		9
6	5	5
-	5	4
	0	1

Q=9 R=1

Q-2 C,D IN (PRACTICE N.B.)

DIVISION OF A 2 DIGIT NUMBER
EXERCISE 4 Q-1 PG:98(N.B.)

A) 39 ÷ 3

	1	3
3	3	9
-	3	⇩
	0	9
		9
		0

C) 72 ÷ 4

	1	8	
4	7	2	
-	4	⇩	24
	3	2	28
-	3	2	32
	0	0	

EXERCISE 4 Q-1 (Cntd) pg:98

F) 56 ÷ 4

	1	4
4	5	6
-	4	⇩
	1	6
-	1	6
	0	0

H.W.

- Q-1 ⇨ b,d,e

Exercise 4 Q-2 PG:98 (N.B.)

A) 48 ÷ 3

	1	6
3	4	8
-	3	⇩
	1	8
-	1	8
	0	0

C) 96 ÷ 6

	1	6
6	9	6
-	6	⇩
	3	6
-	3	6
	0	0

Q-2 b , d H.W.

Q3) 91 children are going for a class picnic in cars.If 7 children can sit in 1 car,How many cars are required?

- No of children going for a picnic=91
- No of children in 1 car = 7
- No. of cars=?

N.B.

	1	3
7	9	1
-	7	⇩
	2	1
-	2	1
	0	0

13 cars are required

Exercise 5 Q-1 PG:99 (N.B.)

A) 74 ÷ 5

	1	4
5	7	4
-	5	⇩
	2	4
-	2	0
	0	4

Q=14 R=4

D) 49 ÷ 3

	1	6
3	4	9
-	3	⇩
	1	9
-	1	8
	0	1

Q= 16 R=1

EXERCISE 5 Q-1(CNTD) PG:99

F) 89 ÷ 8

	1	1
8	8	9
-	8	⇩
	0	9
-		8
		1

H.W.

- Q-1 B,C,E

EXERCISE 5 Q-2 PG:99 (N.B.)

A) 73 ÷ 5

A)	1	4
5	7	3
-	5	⇩
	2	3
-	2	0
	0	3

Q=14 R=3

B) 79 ÷ 4

B)	1	9
4	7	9
-	4	⇩
	3	9
-	3	6
	0	3

Q=19 R=3

Q4)40 EGGS HAVE TO BE PACKED IN BOXES,WITH 6 EGGS IN EACH BOX.HOW MANY BOXES ARE REQUIRED?HOW MANY EGGS WILL BE LEFT OVER? WEEK 3

N.B.

- TOTAL NO OF EGGS=40
- EGGS IN EACH BOX =6
- NO OF BOX=?
- EGGS LEFT OVER =?

		6
6	4	0
-	3	6
	0	4

- Q=6 THEREFORE 6 BOXES ARE REQUIRED
- R=4 THEREFORE 4 EGGS ARE LEFT OVER

- https://youtu.be/4Vg5bdLxfSs **(DIVISION OF A 3 DIGIT NUMBER)**

EXERCISE 6 PG:100 Q-1 (N.B.)

A)	1	4	2
2	2	8	4
-	2		
	0	8	
-		8	
		0	4
-			4
			0

Q= 142 R=0

C)	1	7	4
3	5	2	4
-	3		
	2	2	
-	2	1	
		1	4
	-	1	2
		0	2

Q=174 R =2

EXERCISE 6 Q-2 PG:100(N.B.)

A) 396 ÷ 3

A)	1	3	2
3	3	9	6
-	3		
	0	9	
-		9	
		0	6
	-		6
			0

D) 539 ÷ 7

D)		7	7
7	5	3	9
-	4	9	
		4	9
-		4	9
		0	0

EXERCISE 6 Q-2 PG:100(N.B.)

H) 835 ÷ 5

	1	6	7
5	8	3	5
-	5		
	3	3	
-	3	0	
		3	5
	-	3	5
		0	0

F) 378 ÷ 9

		4	2
9	3	7	8
-	3	6	
	0	1	8
-		1	8
		0	0

Q-2 (b , c ,e , g) H.W.

Q4)In a garden,432 plants are arranged in 8 rows.How many plants are there in each row?

- NO OF PLANTS = 432
- NO OF ROWS = 8
- NO OF PLANTS IN EACH ROW = 432 ÷ 8

		5	4
8	4	3	2
-	4	0	⇩
		3	2
	-	3	2
		0	0

Exercise 7 Q-1 PG:102 (N.B.)

A) 613 ÷5

A)	1	2	2
5	6	1	3
-	5	⇩	⇩
	1	1	
-	1	0	
		1	3
		1	0
			3

C) 720 ÷ 6

C)	1	2	0
6	7	2	0
-	6	⇩	⇩
	1	2	
-	1	2	
		0	0
			0
			0

EXERCISE 7 Q-2 PG:102(N.B.)

B) 880 ÷ 3

	2	9	3
3	8	8	0
-	6	↓	↓
	2	8	
-	2	7	
		1	0
	-		9
			1

C) 597 ÷ 7

		8	5
7	5	9	7
-	5	6	↓
		3	7
		3	5
			2

Q3)The price of 8 pencil boxes is Rs 720.What is the price of 1 pencil box? N.B.

- Price of 8 pencil boxes = Rs 720
- Price of 1 pencil box = 720 ÷ 8

		9	0
8	7	2	0
-	7	2	↓
		0	0
			0
			0

CLASS TEST

- DIVIDE
- A)$54 \div 9$
- B) $42 \div 5$
- C) $73 \div 5$
- D) $646 \div 2$
- E) $805 \div 4$

ANSWERS:

54 ÷ 9

		6
9	5	4
-	5	4
		0

42 ÷ 5

		8
5	4	2
-	4	0
		2

73 ÷ 5

	1	4
5	7	3
-	5	
	2	3
-	2	0
		3

646 ÷ 2

	3	2	3
2	6	4	6
-	6		
	0	4	
-		4	
		0	6
-			6
			0

805÷4

	2	0	1
4	8	0	5
-	8		
	0	0	
-		0	
		0	5
-			4
			1

THANK YOU

DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

TERM-2

CHAPTER- 6

UNDERSTANDING DIVISION

EXERCISE -2 : Q-4 (OMIT)

LEARNING OBJECTIVES (EXPLANATION)

At the end of this chapter you will be able to :

1. divide by using sharing
2. divide by repeated subtraction
3. divide by using tables
4. State the properties of division
5. State the relationship between multiplication and division
6. Solve real life problems using division

What is DIVISION? (EXPLANATION)

- https://youtu.be/q8-Efax54xQ

- Sharing equally, or dividing into equal groups is called DIVISION.
- Division help us to find how many in each group.

✖ Symbol for division is ÷

1. Divide into equal groups .write how many in each group [T.B. pg79]

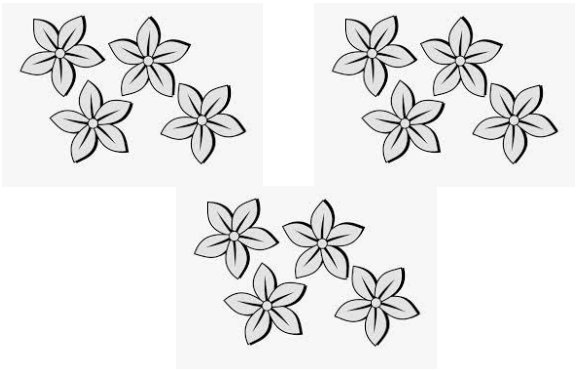
✖ A)12 divided by 3

✖ Total no of flowers=_____

✖ No of groups=____

✖ Each group has ____ flowers.

✖ 12 divided by 3 equals_____



Let's see the answer

A)12 divided by 3

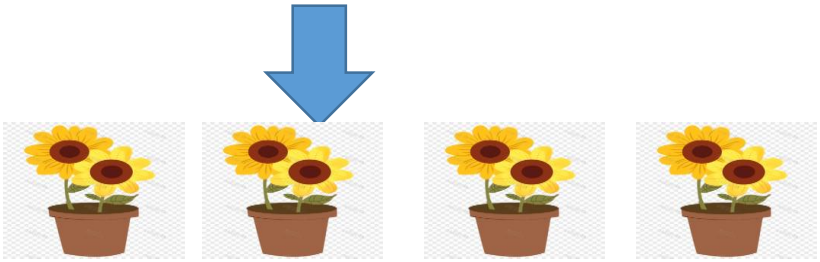
Total no of flowers= 12

No of groups= 3

Each group has 4 flowers.

12 divided by 3 equals 4

2. **Write the division sum:** [T.B. pg79]



_____ divide by ____ equals_____

Practice sums [H.W.]

T.B.

Pg:79 ⇨ Q-1 (b)

Pg:79 ⇨ Q-2 (b)

Practice book

Divide by grouping:

A) 9 divided by 3

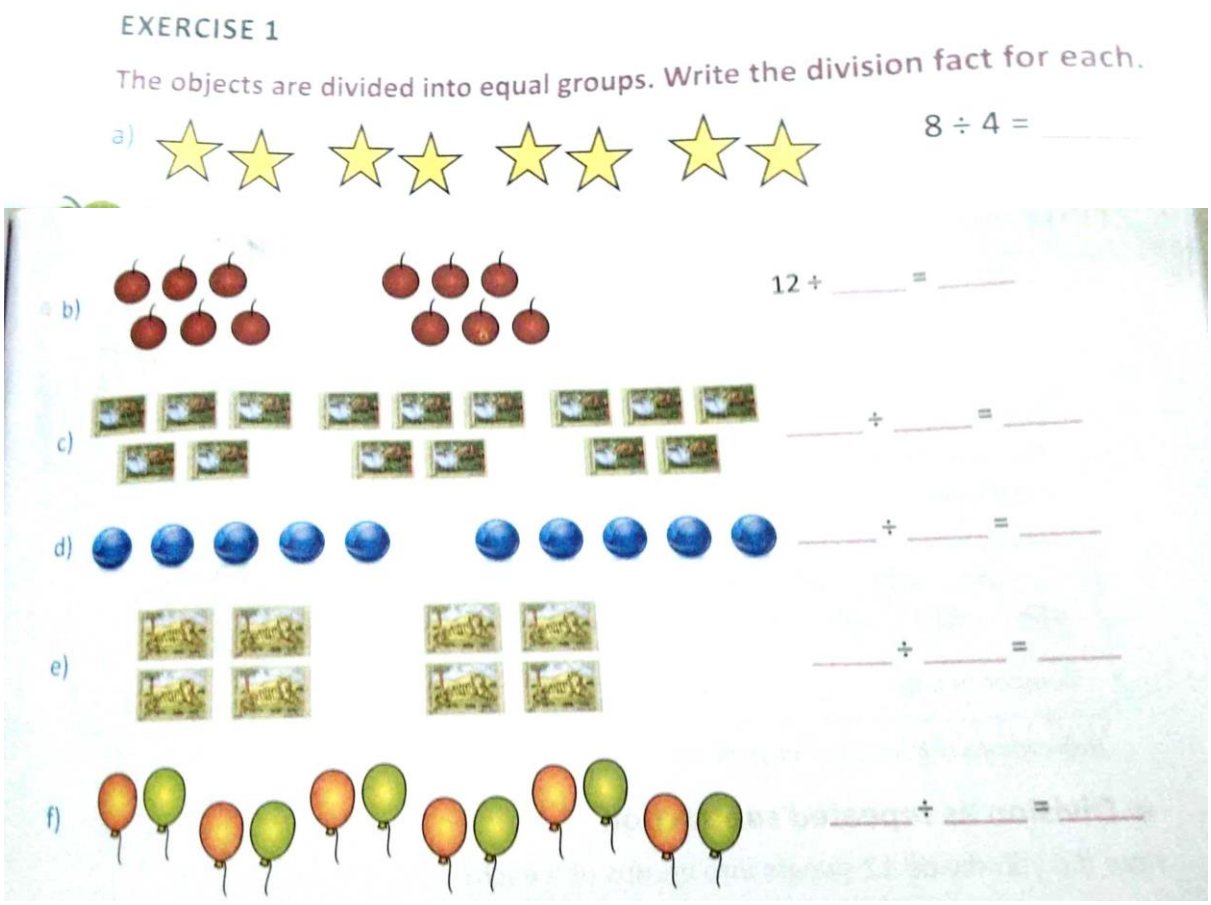
B) 16 divided by 4

C) 25 divided by 5

D) 24 divided by 8

E)12 divided by 3

T.B. PG:80,81(TO BE DONE IN TEXTBOOK ONLY)



TEXTBOOK PG 80,81 EXERCISE 1

ANSWERS:

[HINT: TOTAL NO. OF OBJECTS ÷ NO. OF GROUPS = NO. OF OBJECTS IN EACH GROUP]

A) 8 ÷ 4 = 2

B) 12 ÷ 2 = 6

C) 15 ÷ 3 = 5

D) 10 ÷ 2 = 5

E) 8 ÷ 2 = 4

F) 12 ÷ 6 = 2

DIVISION AS REPEATED SUBTRACTION

T.B. PG:83 (TO BE DONE IN TEXTBOOK ONLY)

EXERCISE 2 **T.B. PG:83**

Q-1 SUBTRACT REPEATEDLY TO GET DIVISION FACT.

A)20 ÷ 5 = 4

20 – 5 = 15 √ 1

15 – 5 = 10 √ 2

10 – 5 = 5 √ 3

5 – 5 = 0 √ 4

✖ **B) 21 ÷ 7 = 3**

21 – 7 = 14 √ 1

14 – 7 = 7 √ 2

7 – 7 = 0 √ 3

Q-2 use repeated subtraction to divide:

✖ **a) 18 ÷ 6 = 3**

18 – 6 =12 √ 1

12 – 6 = 6 √ 2

6 – 6 = 0 √ 3

✖ **b) 14 ÷ 7= 2**

14 – 7 = 7 √ 1

7 – 7 = 0 √ 2

H.W. EXERCISE 2

T.B. PG:83

Q-2

✖ **PRACTICE SUMS:**

✖ Use repeated subtraction to divide:

a) 32 ÷ 8 =

b) 14 ÷ 2 =

c) 28 ÷ 7 =

d) 27 ÷ 9 =

e) 30 ÷ 6=

f) 25 ÷ 5=

Q-3 How many:

a) fives in 25? 5

25 ÷ 5 = 5

b) eights in 16?

16÷8 = 2

Q-3 (c,d) ⇨ **H.W.**

Q-4 Omit

MULTIPLICATION AND DIVISION (EXPLANATION)

There are 3 groups of 4 monkeys each

Therefore, number of monkeys = 3 × 4= 12

Multiplication means putting equal group together.

There are 12 monkeys:

Let us divide them into 3 equal groups

There are 4 monkeys in each group.

Therefore,12÷3 =4

Division means splitting into equal groups.

Therefore we can see multiplication and division are opposite of each other.

THEREFORE,

FOR ONE MULTIPLICATION FACTS:

3 ×4 = 12

WE CAN WRITE TWO DIVISION FACTS:

12 ÷ 3 = 4 12 ÷ 4 =3

EXERCISE – 3 TEXT-BOOK PG:84

Q-1 For each multiplication fact, Write the two division facts

A)	8 × 2 =16	16 ÷ 2 = 8	16 ÷ 8 = 2
B)	9 × 3 = 27	27 ÷ 3 = 9	27 ÷ 9 = 3
C)	6 × 7 = 42	42 ÷ 7 = 6	42 ÷ 6 = 7
D)	4 × 6 = 24	24 ÷ 6 = 4	24 ÷ 4 = 6

Practice sums

✖ **For each multiplication fact, Write the two division facts:**

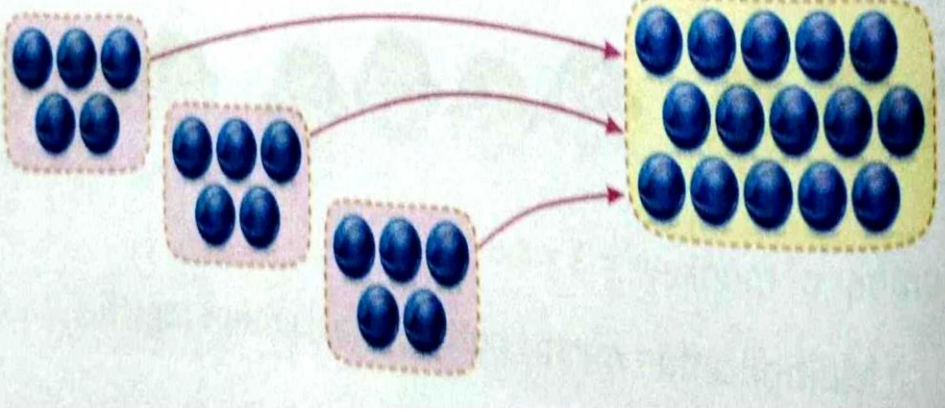
1.	3 × 5 = 15		
2.	4 × 7 = 28		

3.	8 × 6 = 48		
4.	9 × 4 = 36		
5	2 × 4 = 8		

Division using tables

You have seen that:

15 ÷ 5 = 3 means that there are **3 fives in 15.**



Division using tables

- So to divide 14 by 2, you have to divide how many twos are there in 14.
- You can do this by using 2 – times

- 1 × 2 = 2
- 2 × 2 = 4
- 3 × 2 = 6
- 4 × 2 = 8
- 5 × 2 = 10
- 6 × 2 =

TEXT-BOOK

EXERCISE 4

1. Divide using the 2-times table.

a) $20 \div 2 =$ ____ (see the table to find how many twos there are in 20.)

b) $12 \div 2 =$ ____ c) $16 \div 2 =$ ____ d) $8 \div 2 =$ ____

2. Divide using the 5-times table.

a) $20 \div 5 =$ ____ b) $30 \div 5 =$ ____ c) $15 \div 5 =$ ____ d) $50 \div 5 =$ ____

3. Divide using tables.

a) $40 \div 8 =$ ☐ b) $40 \div 5 =$ ☐ c) $10 \div 5 =$ ☐ d) $30 \div 6 =$ ☐

e) $49 \div 7 =$ ☐ f) $32 \div 8 =$ ☐ g) $28 \div 4 =$ ☐ h) $42 \div 6 =$ ☐

i) $27 \div 9 =$ ☐ j) $50 \div 10 =$ ☐ k) $30 \div 3 =$ ☐ l) $63 \div 7 =$ ☐

ANSWERS

1. A)10 B)6 C) 8 D) 4
2. A) 4 B) 6 C)3 D)10
3. A)5 B)8 C)2 D) 5
   E)7 F)4 G)7 H)7
   I)3 J)5 K)10 L) 9

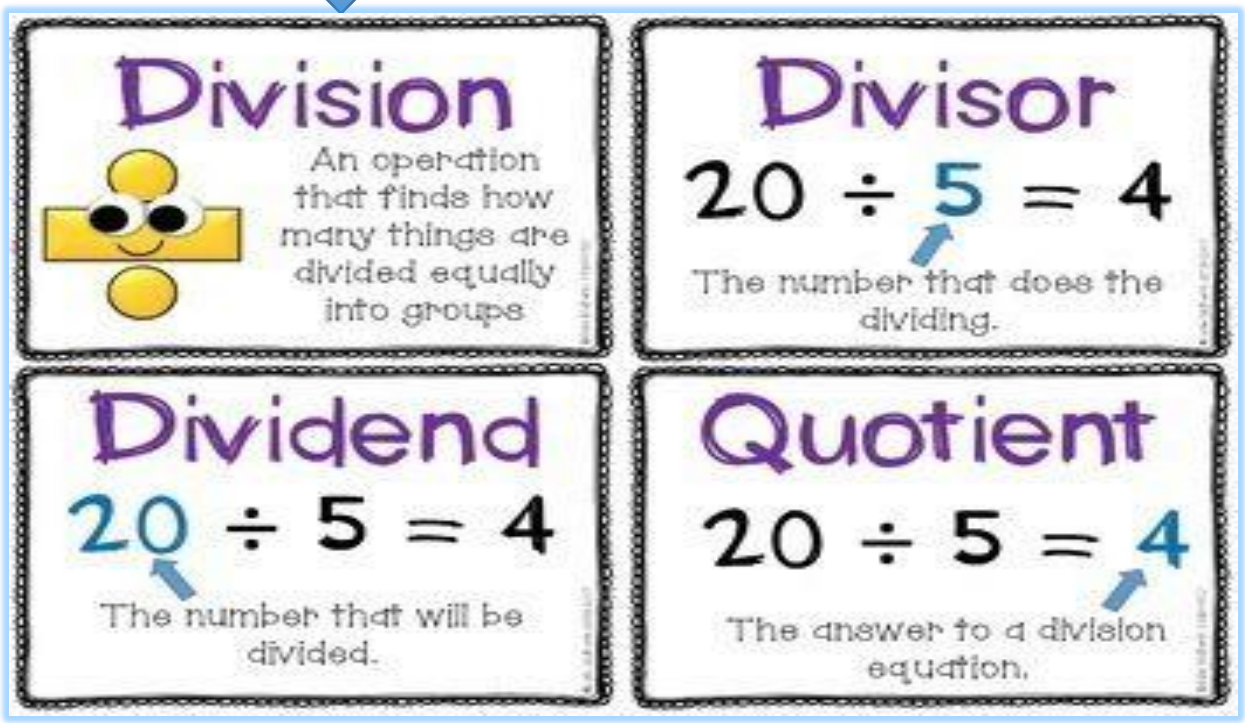
PRACTICE SUMS (H.W.) [In practice n.b.]

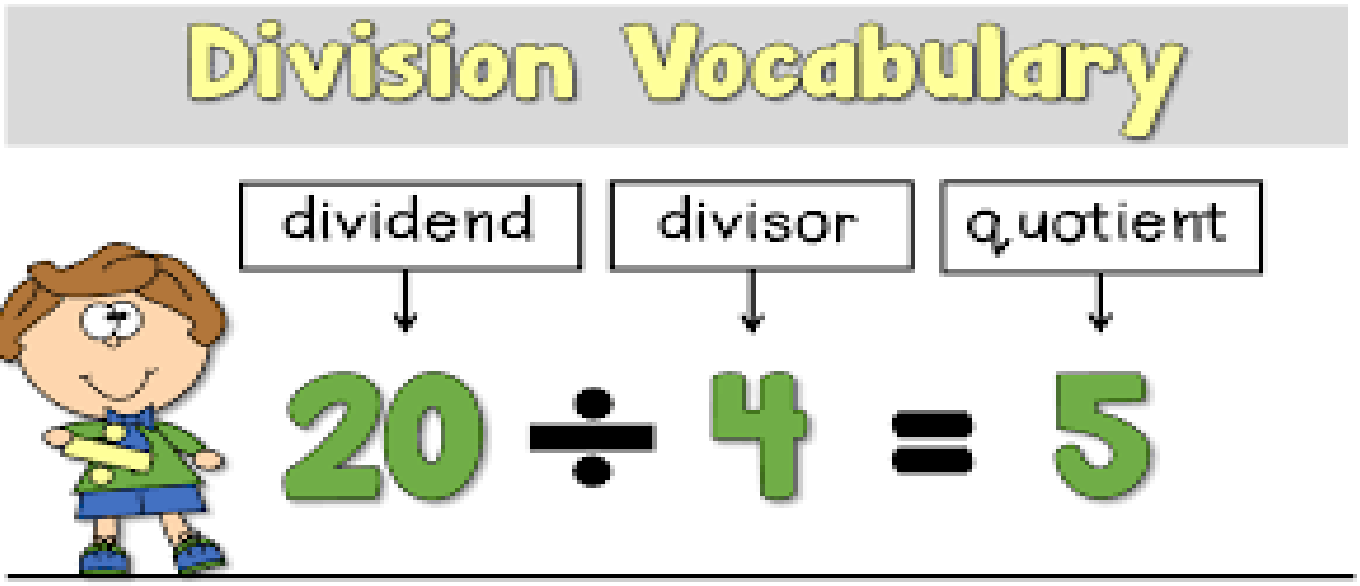
4. Divide using tables.

a) $14 \div 7 =$ ☐
b) $48 \div 8 =$ ☐
c) $54 \div 9 =$ ☐
d) $20 \div 4 =$ ☐
e) $35 \div 7 =$ ☐
f) $28 \div 4 =$ ☐
g) $12 \div 2 =$ ☐
h) $15 \div 3 =$ ☐
i) $35 \div 5 =$ ☐
j) $70 \div 10 =$ ☐
k) $18 \div 9 =$ ☐
l) $48 \div 6 =$ ☐
m) $56 \div 7 =$ ☐
n) $36 \div 4 =$ ☐
o) $64 \div 8 =$ ☐
p) $81 \div 9 =$ ☐
q) $63 \div 7 =$ ☐
r) $72 \div 8 =$ ☐
s) $72 \div 9 =$ ☐
t) $27 \div 3 =$ ☐

EXPLANATION

In the division:





Properties of division pg:85

((EXPLANATION)

- ✖ https://youtu.be/PIF3RcS8F6k

MARK IN TEXT-BOOK PAGE-85

Properties of Division

1. Division by 1 Property: If we divide a number by 1 the quotient is the number itself.
For example: 7542 ÷ 1 = 7542

2. Division by itself Property: If we divide a number by the number itself, the quotient is 1.
For example: 275 ÷ 275 = 1

3. Division any Number by 0 Property: Division of a number by 0 is meaningless.
For example: 35 ÷ 0 = no meaning

4. Division of 0 by any Number Property: 0 divided by a number gives 0 as the quotient.
For example: 0 ÷ 25 = 0

EXERCISE 5

TEXT - BOOK

Fill in the blanks, using the properties of division.

a) 0 ÷ 2 = ☐ b) 9 ÷ 1 = ☐ c) 16 ÷ 16 = ☐ d) 0 ÷ 10 = ☐

e) 10 ÷ 1 = ☐ f) 0 ÷ 6 = ☐ g) 6 ÷ 6 = ☐ h) 0 ÷ 1 = ☐

i) 9 ÷ 9 = ☐ j) 15 ÷ 1 = ☐ k) 20 ÷ 1 = ☐ l) 10 ÷ 10 = ☐

ANSWERS:

A) 0 B) 9 C) 1 D)0 E)10

F)0 G)1 H)0 I)1 J) 15

K)20 L)1

PRACTICE SUMS [IN N.B.] H.W.

Divide using properties of division:

a) 29 ÷ 1 =

b) 30 ÷ 30 =

c) 0 ÷ 25 =

d) 63 ÷ 1 =

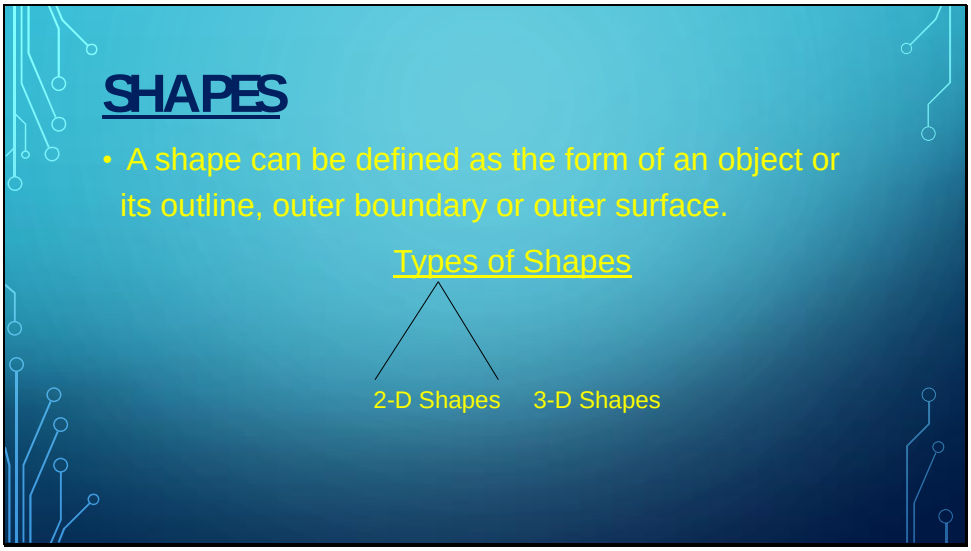
e) 0 ÷ 5 =

f) 7 ÷ 7 =

DELHI PUBLIC SCHOOL, GANDHINAGAR

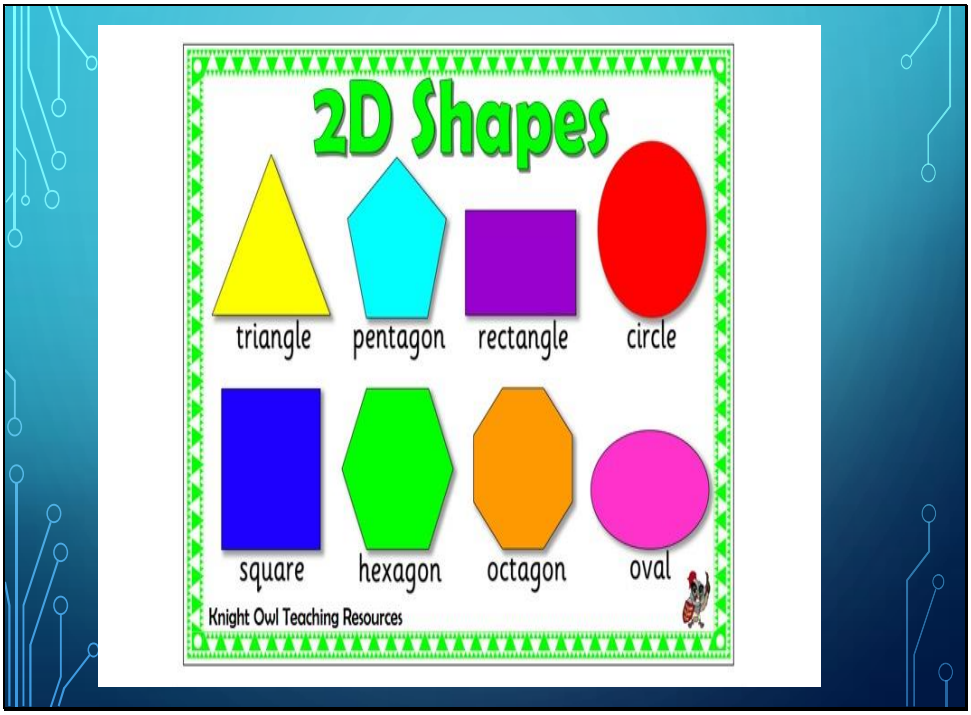
CLASS: 3 **SUBJECT: MATHS**

Academic Session 2020-21



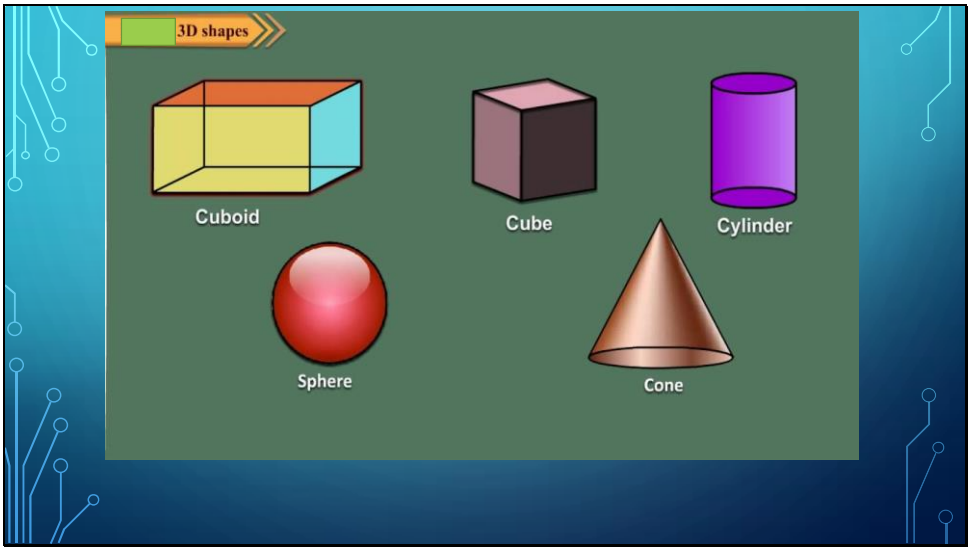
DEFINITION OF 2-D SHAPES

- A **2D shape** or a two-dimensional shape can be defined as a flat plane figure or a shape that has two dimensions – length and width.
- Two-dimensional or 2-D shapes do not have any thickness and can be measured in only two faces.



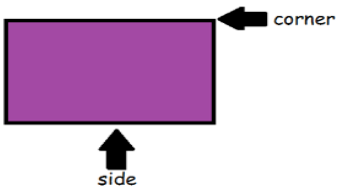
DEFINITION OF 3-D SHAPES

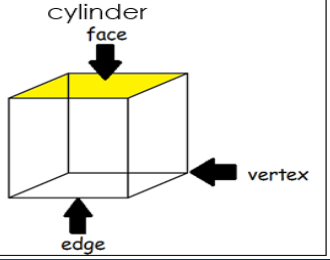
3D shapes are known as **three-dimensional shapes or solids**. 3D shapes have three different measures such as length, width, and height as its dimensions. They occupy space. The only difference between 2D shape and 3D shapes is that 3D shapes have a thickness or depth.

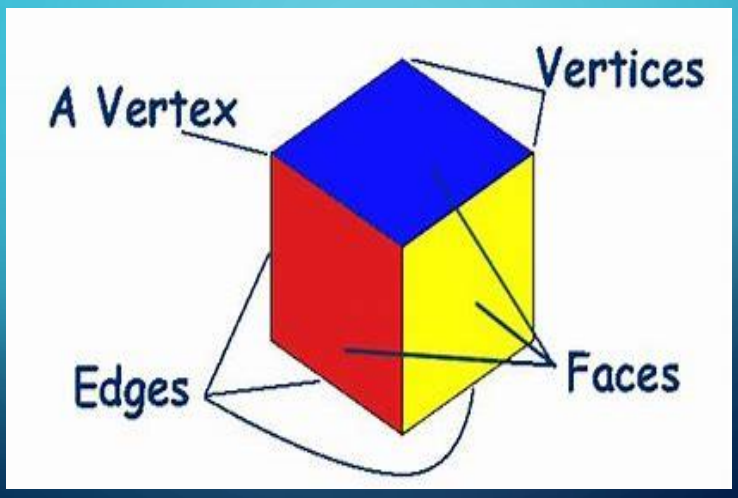


Let's take a look at the difference between 2D shapes and 3D shapes:

2D Shapes	3D Shapes
- are flat - corners - sides - ex. Circle, square, rhombus	- are not flat - vertices or 1 vertex - edges - faces - ex. Sphere, cone, cylinder





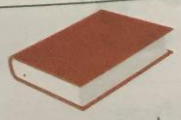


EXERCISE-1

EXERCISE 1

1. What shapes do these objects have? Count and write the number of faces, edges and corners each has.

a)



Shape:	Cuboid
Straight faces:	6
Curved faces:	0
Straight edges:	12
Curved edges:	0
Corners:	8

b)

Shape:	Cone
Straight faces:	0
Curved faces:	1
Straight edges:	0
Curved edges:	1
Corners:	1

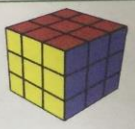
c)

Shape:	Sphere
Straight faces:	0
Curved faces:	1
Straight edges:	0
Curved edges:	0
Corners:	0

d)

Shape:	Cylinder
Straight faces:	2
Curved faces:	1
Straight edges:	0
Curved edges:	2
Corners:	0

e)



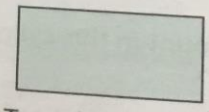
Shape:	cube
Straight faces:	6
Curved faces:	0
Straight edges:	12
Curved edges:	0
Corners:	8

f)

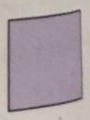
Shape:	Sphere
Straight faces:	0
Curved faces:	1
Straight edges:	0
Curved edges:	0
Corners:	0

2. Which solid shape do these flat shapes belong to?

a) Top of a cylinder



b) Top of a cuboid



c) Top of a cube

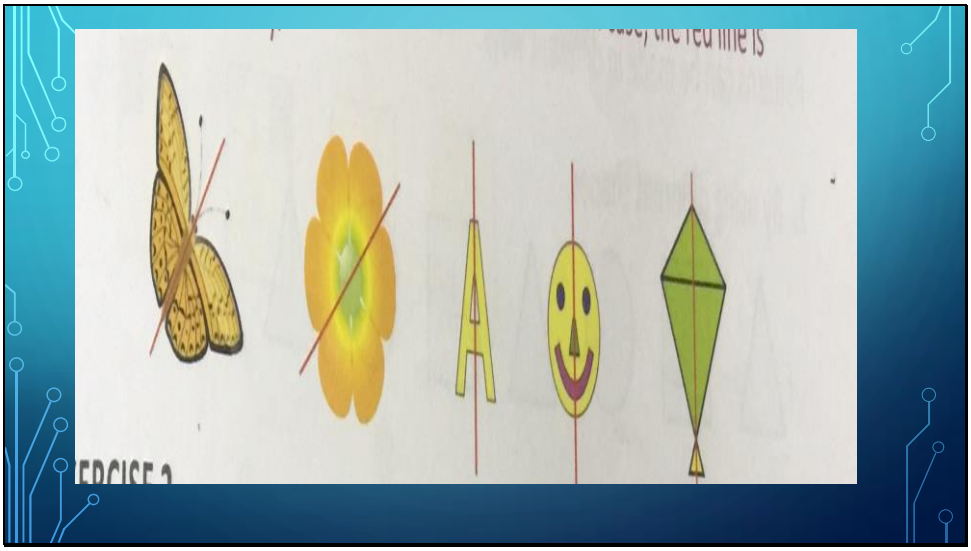
d) Which solid shape looks like  from the bottom and  from the side?

e) Which solid shape looks like  when seen from the top, bottom or from any side? Sphere

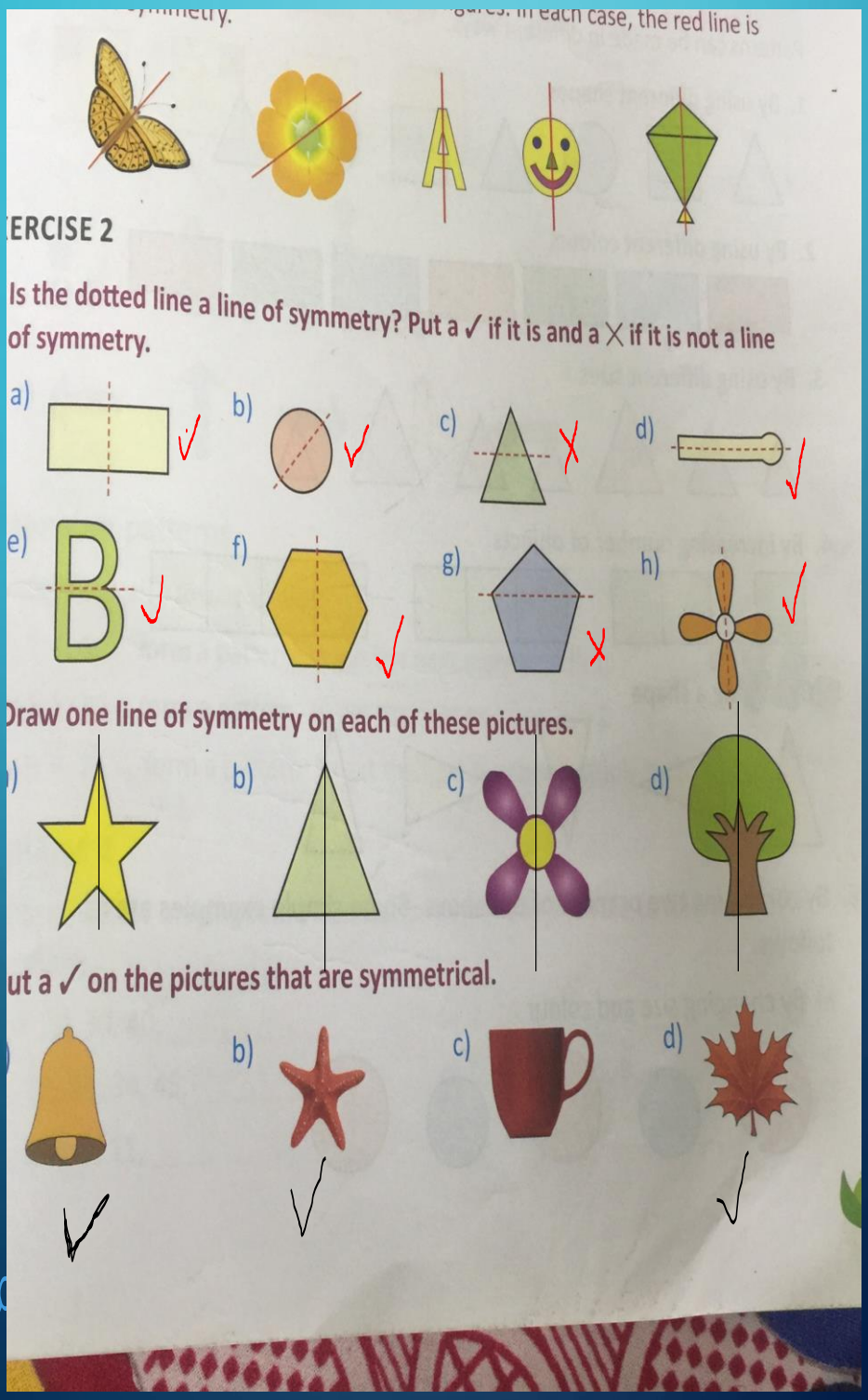
SYMMETRY

- The line that divides a symmetrical figure into two parts that are exactly the same is called the line of symmetry.

Example



EXERCISE - 2



...metry.

...ures. In each case, the red line is

ERCISE 2

Is the dotted line a line of symmetry? Put a ✓ if it is and a ✗ if it is not a line of symmetry.

a) ✓ b) ✓ c) ✗ d) ✓

e) ✓ f) ✓ g) ✗ h) ✓

Draw one line of symmetry on each of these pictures.

a) b) c) d)

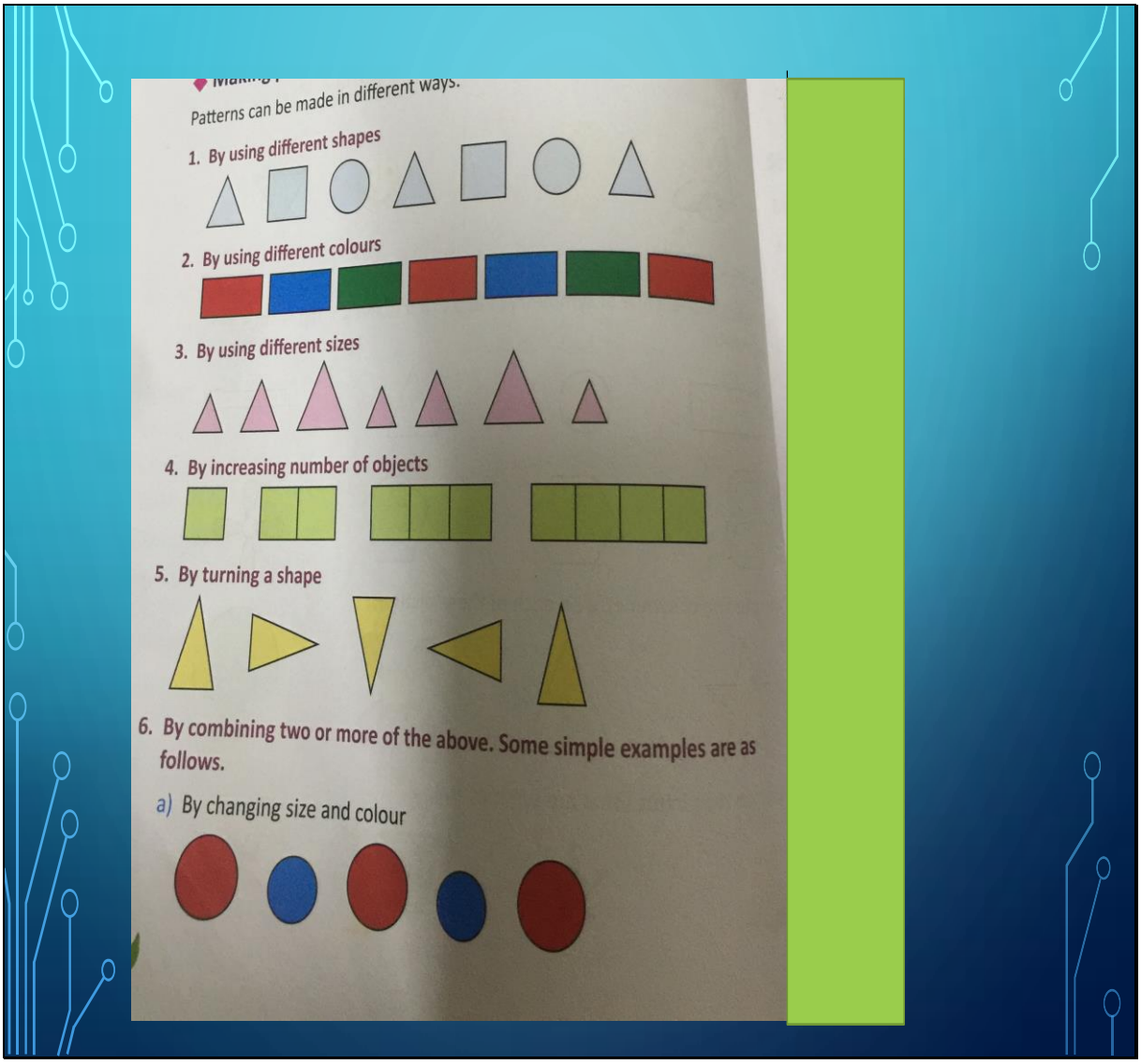
ut a ✓ on the pictures that are symmetrical.

a) ✓ b) ✓ c) d) ✓

PATTERNS

Repeating shapes make a pattern.

Patterns make things look beautiful.



Patterns can be made in different ways.

1. By using different shapes

2. By using different colours

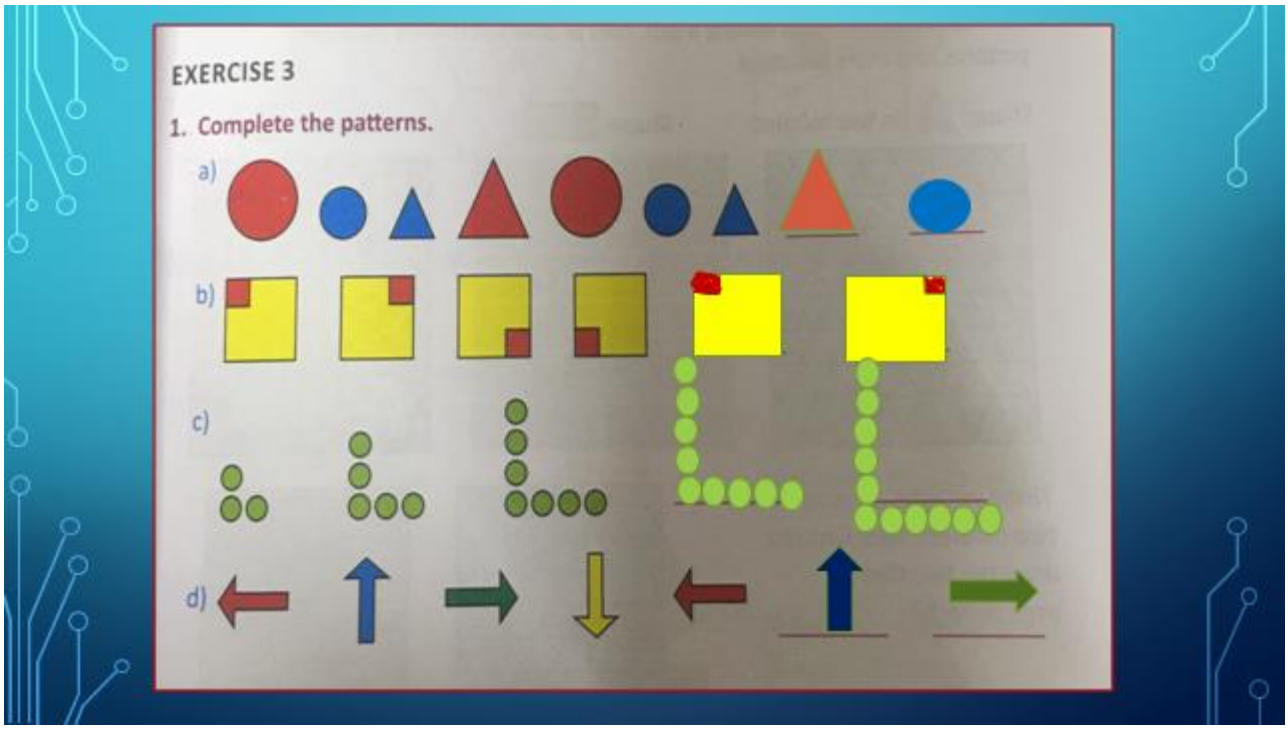
3. By using different sizes

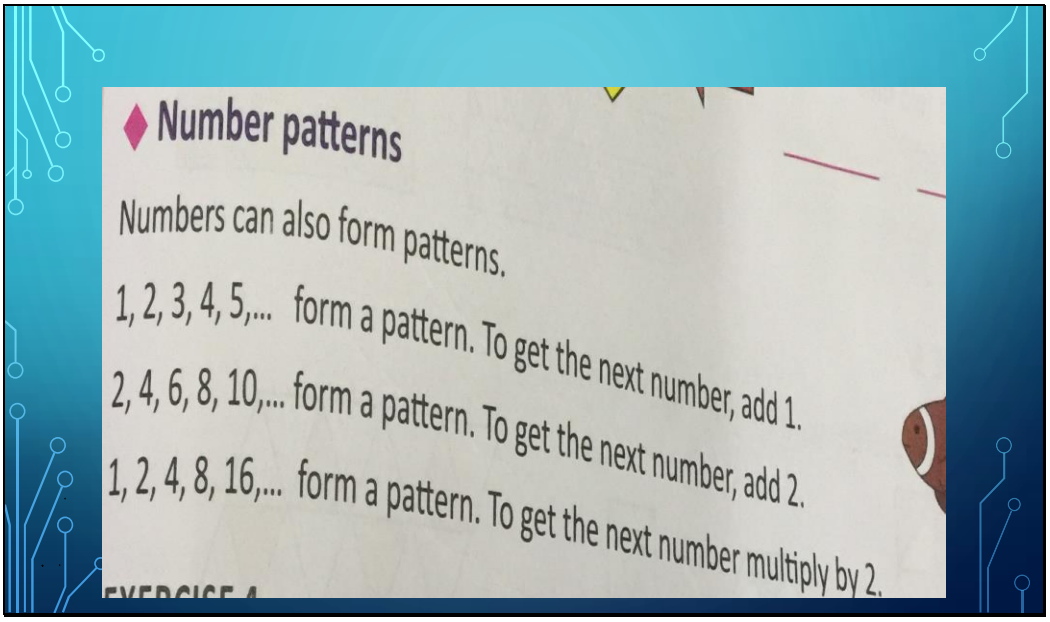
4. By increasing number of objects

5. By turning a shape

6. By combining two or more of the above. Some simple examples are as follows.

a) By changing size and colour


EXERCISE 3
1. Complete the patterns.
a)
b)
c)
d)


Number patterns
Numbers can also form patterns.
1, 2, 3, 4, 5,... form a pattern. To get the next number, add 1.
2, 4, 6, 8, 10,... form a pattern. To get the next number, add 2.
1, 2, 4, 8, 16,... form a pattern. To get the next number multiply by 2.

EXERCISE 4

Find the rule for making these number patterns. Use the rule to find the next 3 numbers.

a) 10, 20, 30, 40, 50, 60, 70

b) 3, 10, 17, 24, 31, 38, 45, 52

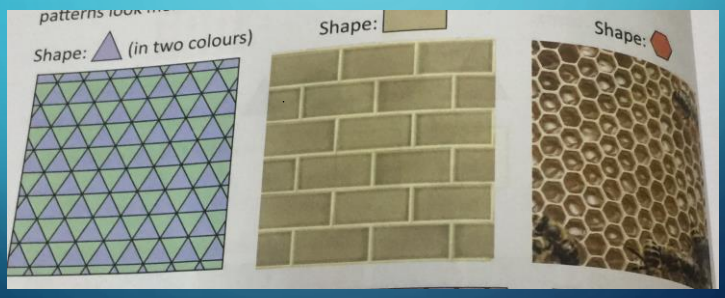
c) 1, 12, 23, 34, 45, 56, 67, 78

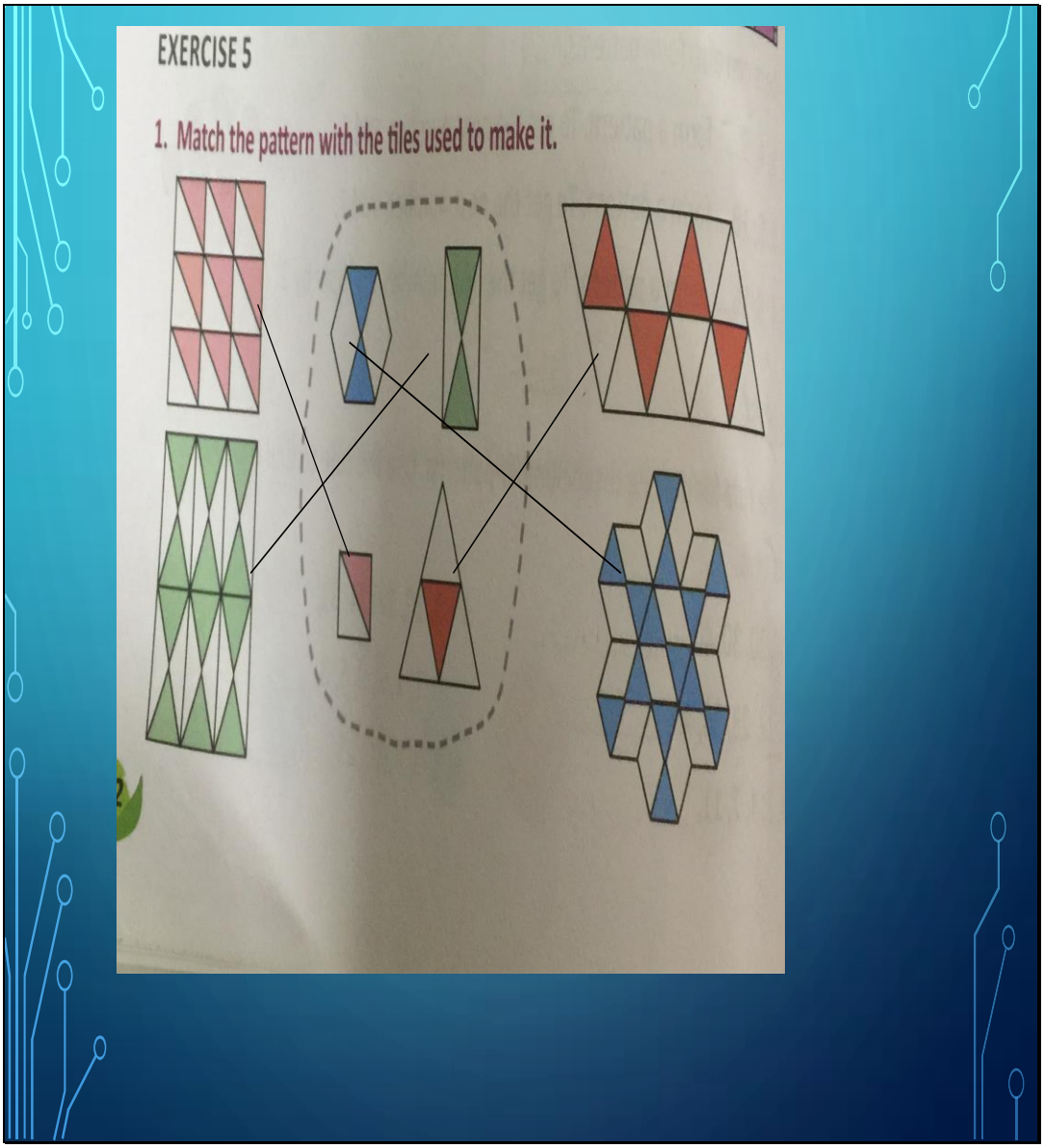
d) 0, 1, 1, 2, 3, 5, 8, 13, 21, 34

e) 1, 2, 4, 7, 11, 16, 22, 29

f) 1, 3, 6, 10, 15, 21, 28, 36

TILING PATTERNS

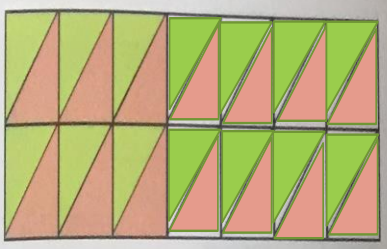



EXERCISE 5
1. Match the pattern with the tiles used to make it.

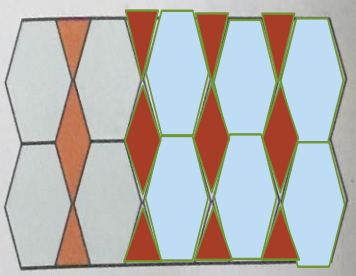
CONTINUED

2. Colour to complete the tiling patterns.

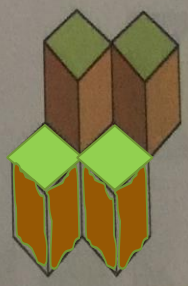
a)



b)



c)



SKILLS SECTION (calculation, application and analysing skills)

Mixed Bag

1. Match the solid shapes to their properties.

a) 6 flat faces, 12 edges, 8 corners; all edges are equal

b) 1 flat face, 1 curved face, 1 curved edge, 1 corner

c) 6 flat faces, 12 edges, 8 corners; opposite edges are equal

d) 0 flat faces, 1 curved face, 0 edges, 0 corners

e) 2 flat faces, 1 curved face, 2 curved edges, 0 corners

2. Put a ✓ on shapes that can be used to tile.

a) ✓

b) ✗

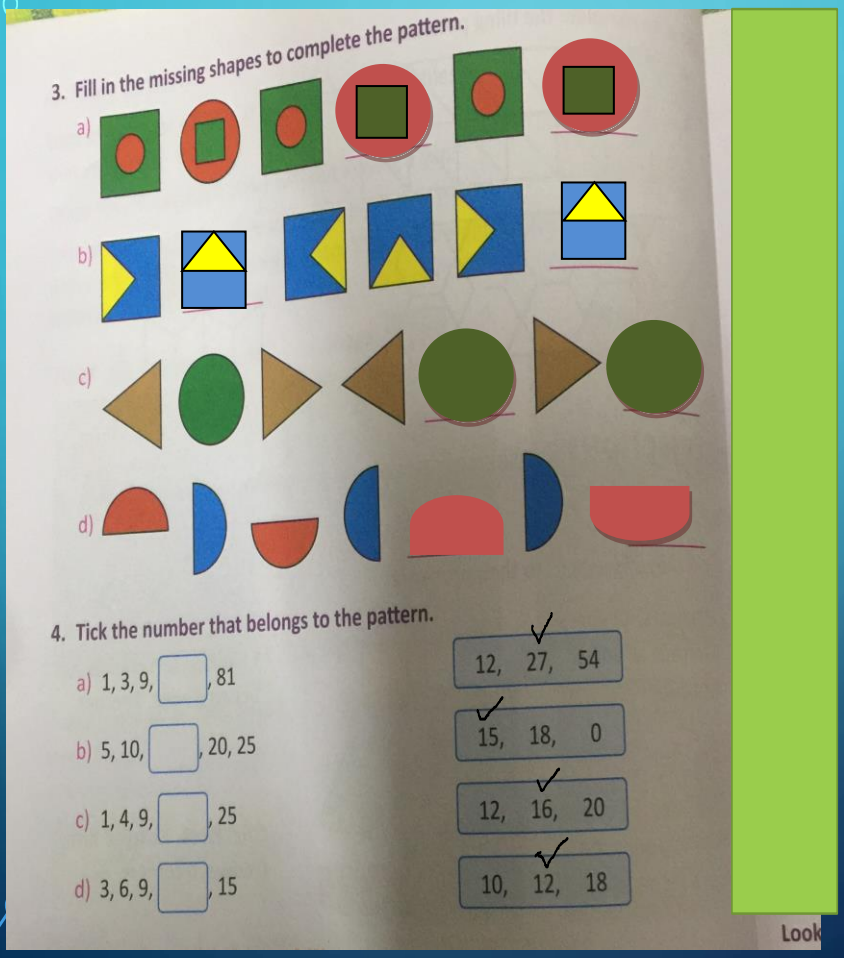
c) ✓

d) ✗

e) ✓

f) ✓

CONTINUED



3. Fill in the missing shapes to complete the pattern.

a)

b)

c)

d)

4. Tick the number that belongs to the pattern.

a) 1, 3, 9, ☐, 81

b) 5, 10, ☐, 20, 25

c) 1, 4, 9, ☐, 25

d) 3, 6, 9, ☐, 15

✓ 12, 27, 54

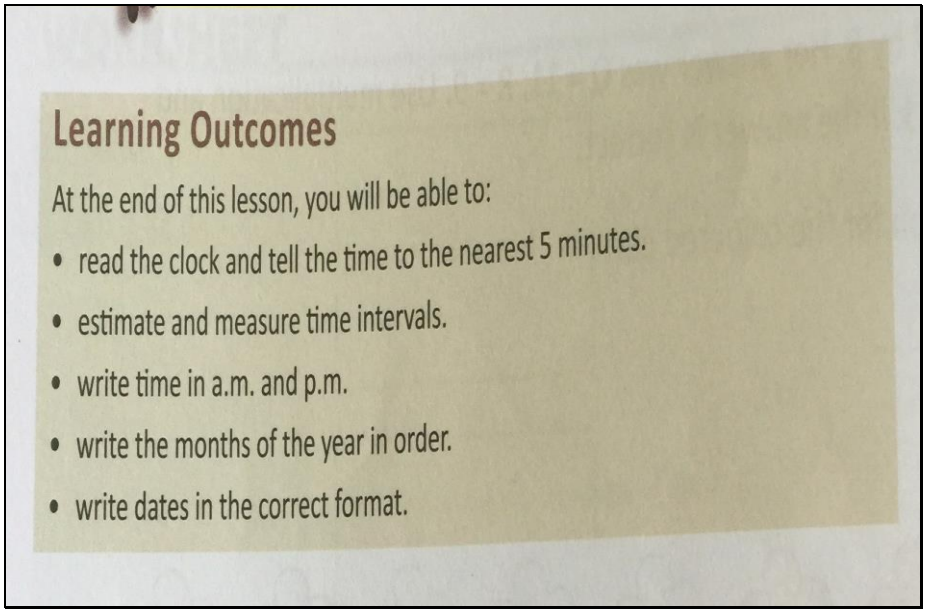
✓ 15, 18, 0

✓ 12, 16, 20

✓ 10, 12, 18

Look

Chapter:10
Time



Define Time:

Time is the ongoing sequence of events taking place. The past, present and future. The basic unit of **time** is the second. There are also minutes, hours, days, weeks, months and years. We can measure **time** using clocks.

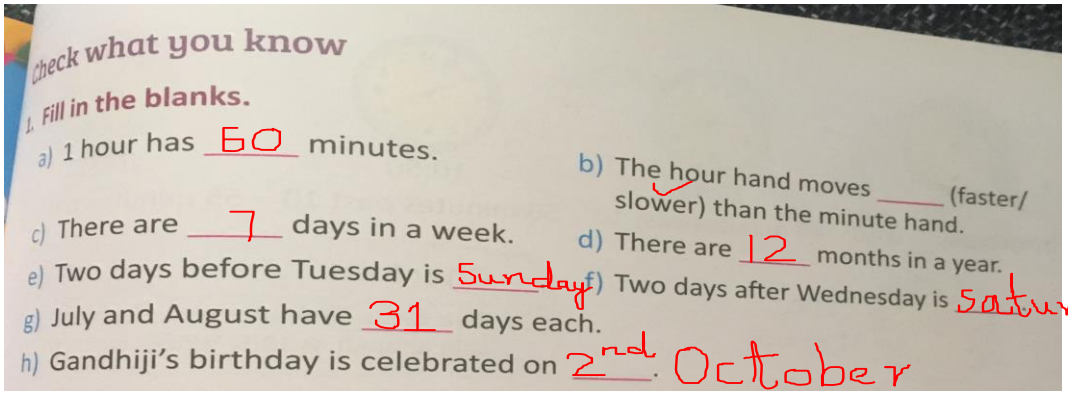
Terms used in Time:

1) The short hand in the clock is called Hour hand .

2) The long hand of the clock is called minute hand.

3) The difference between two consecutive numbers in the clock is equal to 5 minutes.

Check what you know



Check what you know

1. Fill in the blanks.

a) 1 hour has 60 minutes.

b) The hour hand moves _____ (faster/ slower) than the minute hand.

c) There are 7 days in a week.

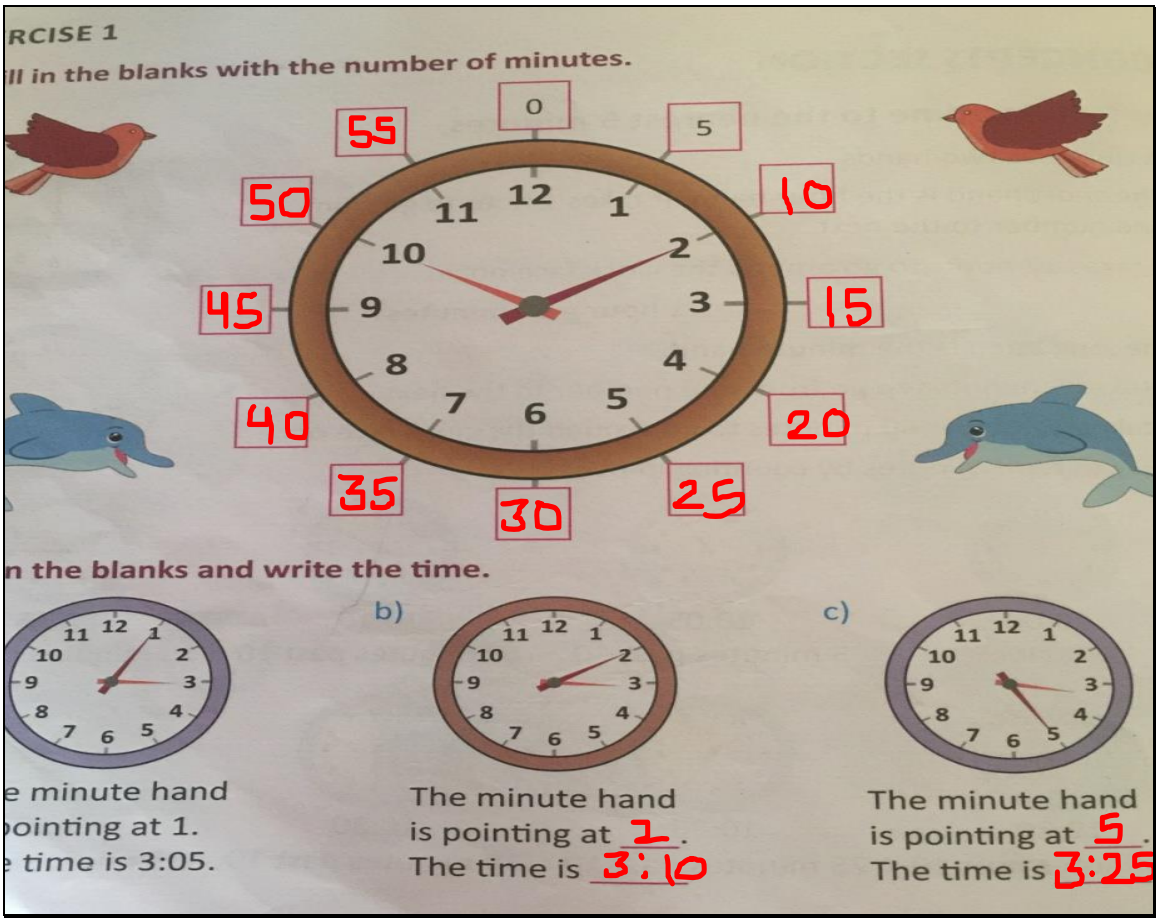
d) There are 12 months in a year.

e) Two days before Tuesday is Sunday.

f) Two days after Wednesday is Saturday.

g) July and August have 31 days each.

h) Gandhiji's birthday is celebrated on 2nd October.



RCISE 1

ll in the blanks with the number of minutes.

0 5 10 15 20 25 30 35 40 45 50 55

n the blanks and write the time.

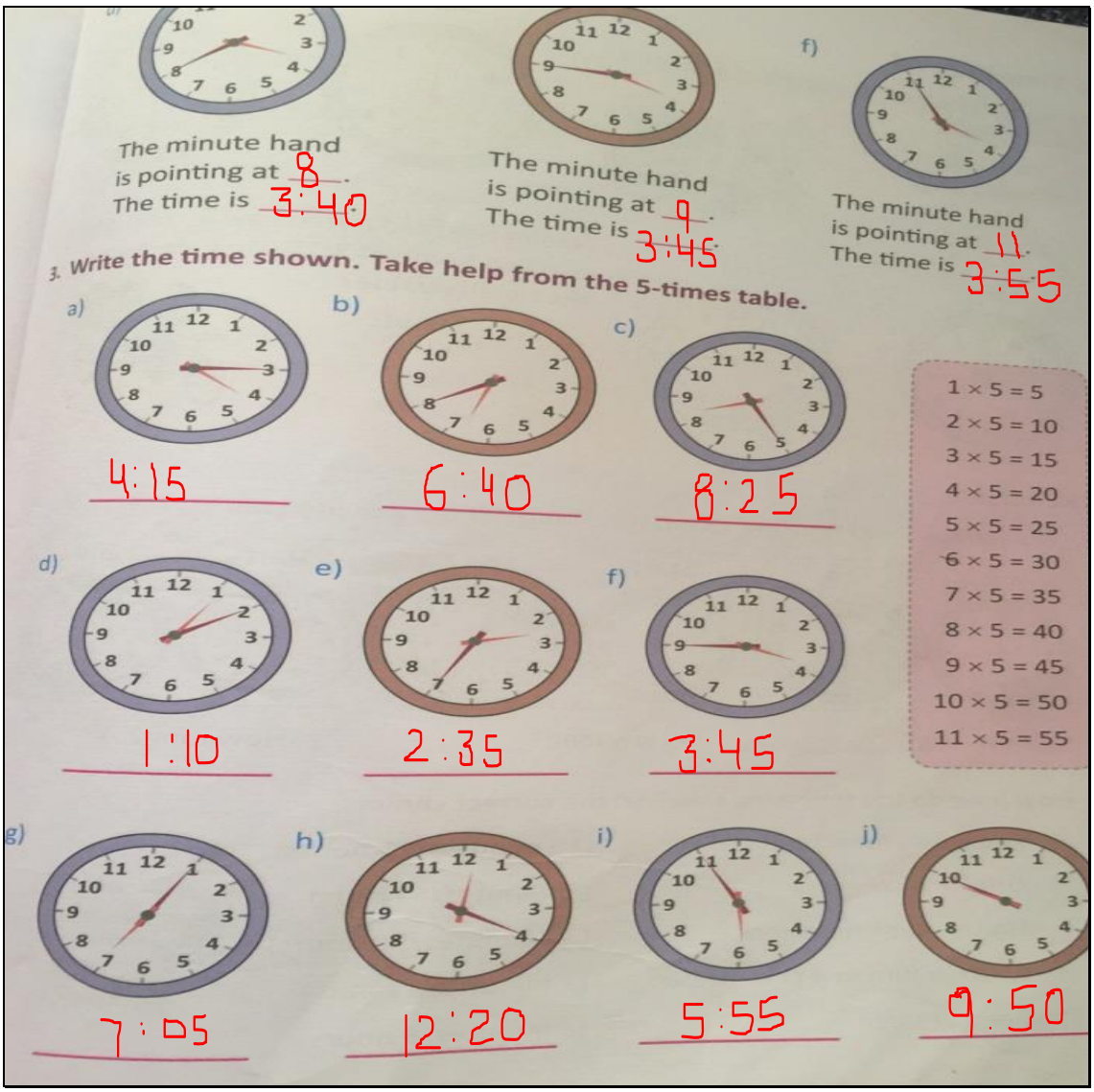
e minute hand
pointing at 1.
e time is 3:05.

b)

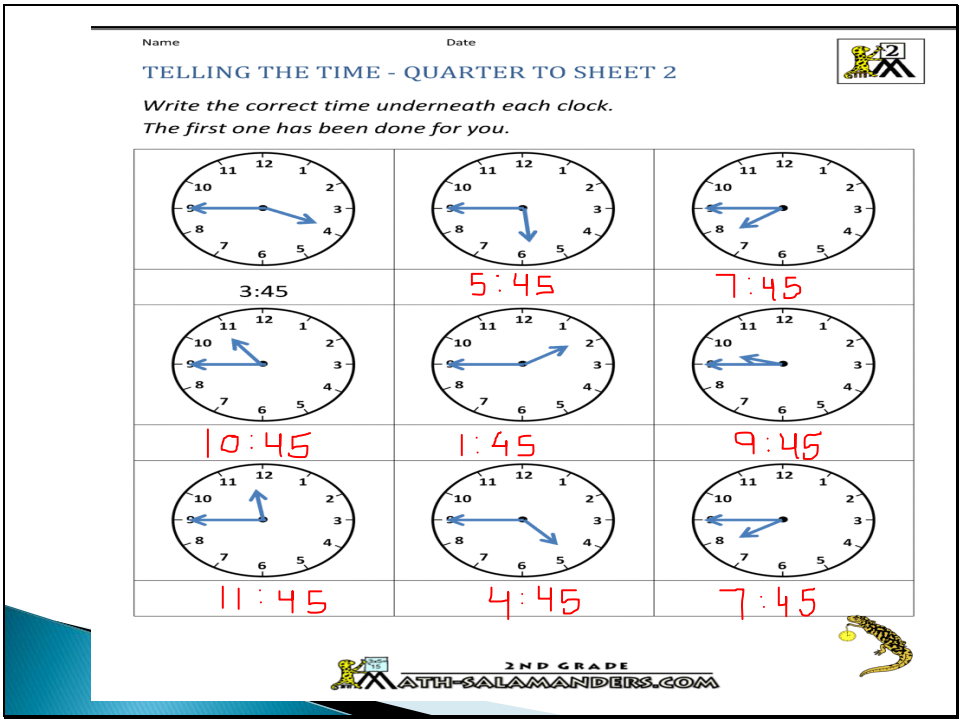
The minute hand is pointing at 2.
The time is 3:10

c)

The minute hand is pointing at 5.
The time is 3:25


The minute hand is pointing at 8.
The time is 3:40
The minute hand is pointing at 9.
The time is 3:45
f)
The minute hand is pointing at 11.
The time is 3:55
3. Write the time shown. Take help from the 5-times table.
a)
4:15
b)
6:40
c)
8:25
1 × 5 = 5
2 × 5 = 10
3 × 5 = 15
4 × 5 = 20
5 × 5 = 25
6 × 5 = 30
7 × 5 = 35
8 × 5 = 40
9 × 5 = 45
10 × 5 = 50
11 × 5 = 55
d)
1:10
e)
2:35
f)
3:45
g)
7:05
h)
12:20
i)
5:55
j)
9:50

Practice Worksheet



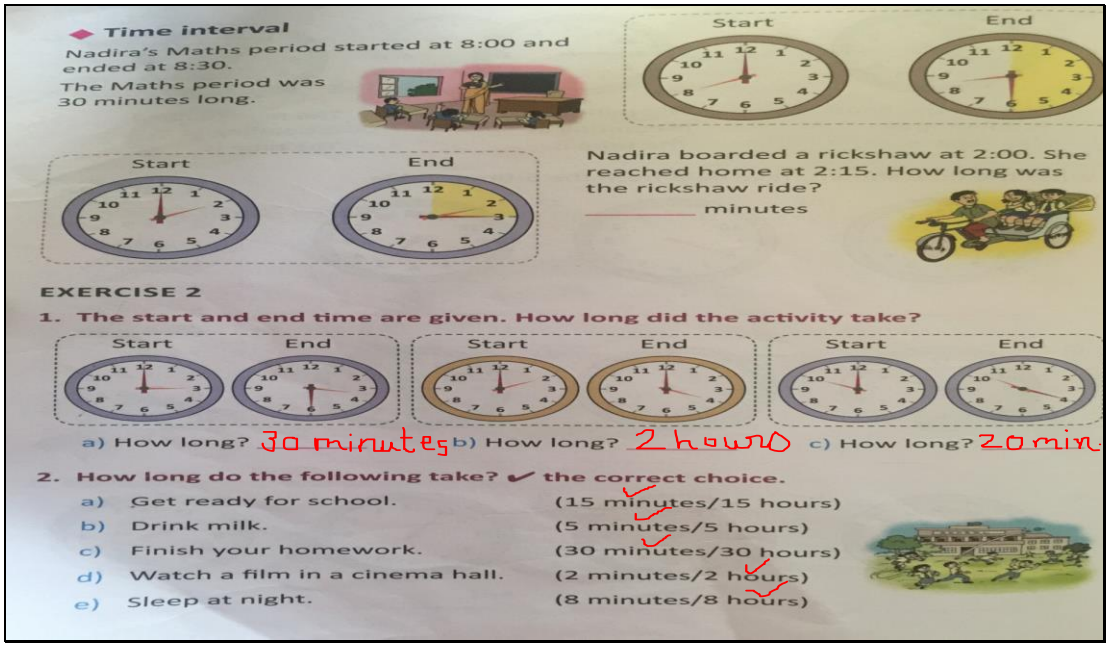
Name Date

TELLING THE TIME - QUARTER TO SHEET 2

Write the correct time underneath each clock.
The first one has been done for you.

3:45	5:45	7:45
10:45	1:45	9:45
11:45	4:45	7:45

2ND GRADE MATH-SALAMANDERS.COM



Time interval

Nadira's Maths period started at 8:00 and ended at 8:30.
The Maths period was 30 minutes long.

Start End

Start End

Nadira boarded a rickshaw at 2:00. She reached home at 2:15. How long was the rickshaw ride?
_____ minutes

EXERCISE 2

1. The start and end time are given. How long did the activity take?

Start End Start End Start End

a) How long? 30 minutes b) How long? 2 hours c) How long? 20 min

2. How long do the following take? ✔ the correct choice.

a) Get ready for school. (15 minutes/15 hours)
b) Drink milk. (5 minutes/5 hours)
c) Finish your homework. (30 minutes/30 hours)
d) Watch a film in a cinema hall. (2 minutes/2 hours)
e) Sleep at night. (8 minutes/8 hours)

Exercise :3

Q1. What is the time?

a) 1hour after 8:00 =
8:00 + 1 hour = 9:00

b) 1 hour before 4:30=
4:30 – 1:00 hour= 3:30

c) 2 hour after 2:10=
2:10 + 2 hour= 4:10

d) 2 hours before 5:00 ?
5:00 – 2 hours = 3:00

e) 30 minutes before 12:00 ?
12:00 –30 minutes=
(1 hour = 60 minutes)
11:60
– :30
11:30

f) 30 minutes before 9:30?
9:30 – 30 minutes=9:00

Q3 Aditi's flight from Delhi to London will take off from Delhi airport at 11:15. Since it is an international flight, she has to report at the airport 3 hours before the departure time. At what time should she reach the airport?

Solution:

Time of flight to take off = 11:15

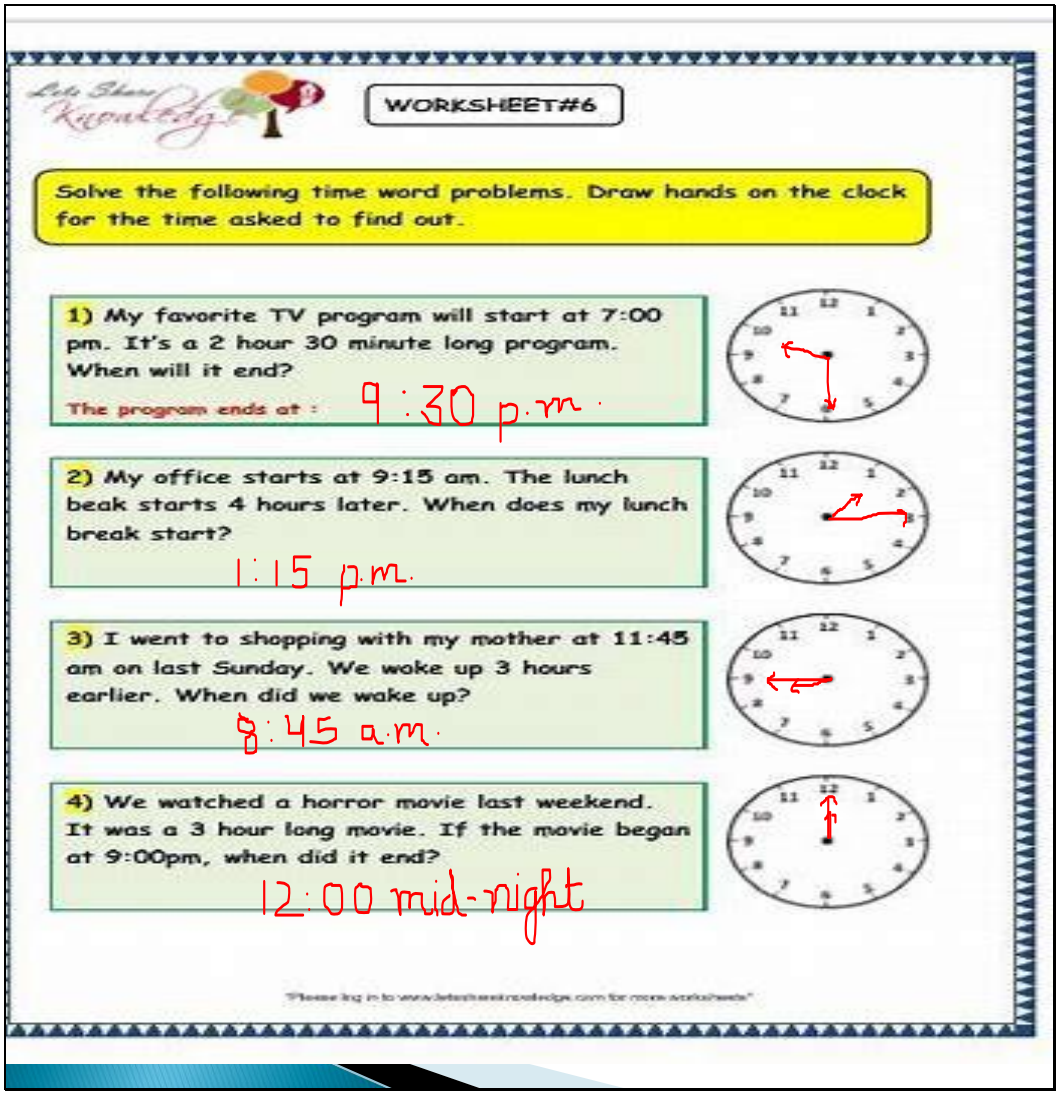
Reporting time before =3 hours

Time she should reach the airport=?

11:15 +3 hours= 8:15

She should reach the airport at 8:15

Worksheet



WORKSHEET#6

Solve the following time word problems. Draw hands on the clock for the time asked to find out.

1) My favorite TV program will start at 7:00 pm. It's a 2 hour 30 minute long program. When will it end?

The program ends at : 9:30 p.m.

2) My office starts at 9:15 am. The lunch beak starts 4 hours later. When does my lunch break start?

1:15 p.m.

3) I went to shopping with my mother at 11:45 am on last Sunday. We woke up 3 hours earlier. When did we wake up?

8:45 a.m.

4) We watched a horror movie last weekend. It was a 3 hour long movie. If the movie began at 9:00pm, when did it end?

12:00 mid-night

Use of a.m. and p.m.

If I say it is 9:00, how will you know if it is 9:00 in the morning or 9:00 at night? is why we use a.m. and p.m.

Ishaan gets up at 6:00 in the morning.

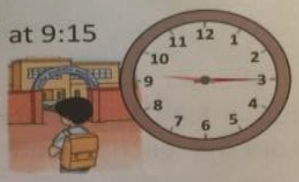
He gets up at **6 a.m.**

He has breakfast at 8:30 in the morning.

He has breakfast at **8:30 a.m.**

He reaches school at 9:15 in the morning.

He reaches school at **9:15 a.m.**



He has lunch in school at 12:00.

He has lunch at **12 noon.**

He returns home at 2:30 in the afternoon.

He returns home at **2:30 p.m.**

He goes to play at 4:20 in the afternoon.

He goes to play at **4:20 p.m.**

He goes to sleep at 9:10 at night.

He goes to sleep at **9:10 p.m.**

It is **12:00 midnight.** Ishaan is sleeping.

It is 4:25 in the morning. It is **4:25 a.m.**

Ishaan is still sleeping.

We write **a.m.** for time from 12:00 midnight to 12:00 noon.

We write **p.m.** for time from 12:00 noon to 12:00 midnight.

EXERCISE 4

1. **Write the time using a.m. and p.m.**

a) 9:00 morning: 9:00 a.m.

b) 5:30 morning: 5:30 a.m

c) 7:15 evening: 7:15 p.m.

d) 11:55 night: 11:55 p.m.

e) 2:10 night: 2:10 a.m.

f) 12:10 night: 12:10 a.m.

Worksheet

Let's Show Knowledge

WORKSHEET#4

Read the event and write the time with A.M. or P.M. for it accordingly.

1) My friend told me that we will go home at 3:00 in the afternoon. → p.m.

2) I went outside to see the full moon at 11:00. → p.m.

3) There was a strong thunderstorm yesterday night which started at 2:00 and lasted for 5 hours. → a.m.

4) I have booked an appointsment with my doctor at 3:00 after lunch tomorrow. → p.m.

5) Jimmy started doing his homework at 6:00 in the evening. → p.m.

6) I went for grocery shopping right after having my breakfast. It was exactly 9:30 at the clock when I left home. → a.m.

To find if a particular year is a leap year divide the last 2 digits of the year by 4.

- If it is divisible without a remainder, it is a leap year, e.g. 2004, 2028.
- If the division leaves a remainder, it is not a leap year, e.g. 2005, 2030.
- If the last two digits are 00, remove the 00 and divide the remaining number by 4. If there is no remainder it is a leap year. If there is a remainder it is not a leap year.

2000 was a leap year since 20 is divisible by 4. 1900 was not a leap year since 19 is not divisible by 4. 2100 will not be a leap year.

Put a ✔ on the leap years.

2012	2013	2014	2015	2016	2017	2018	2019	2020

XERCISE 5

Will you measure the time in hours, days, weeks, months or years? Put a ✓ on the right choice.

a) Time you spend in school in a day. (hours/weeks)
b) Growing up from a child to an adult. (months/years)
c) Summer vacations. (hours/months)
d) Doing daily homework. (hours/weeks)
e) For a building to be constructed. (weeks/months)
f) Growth of a small plant into a tree. (weeks/years)

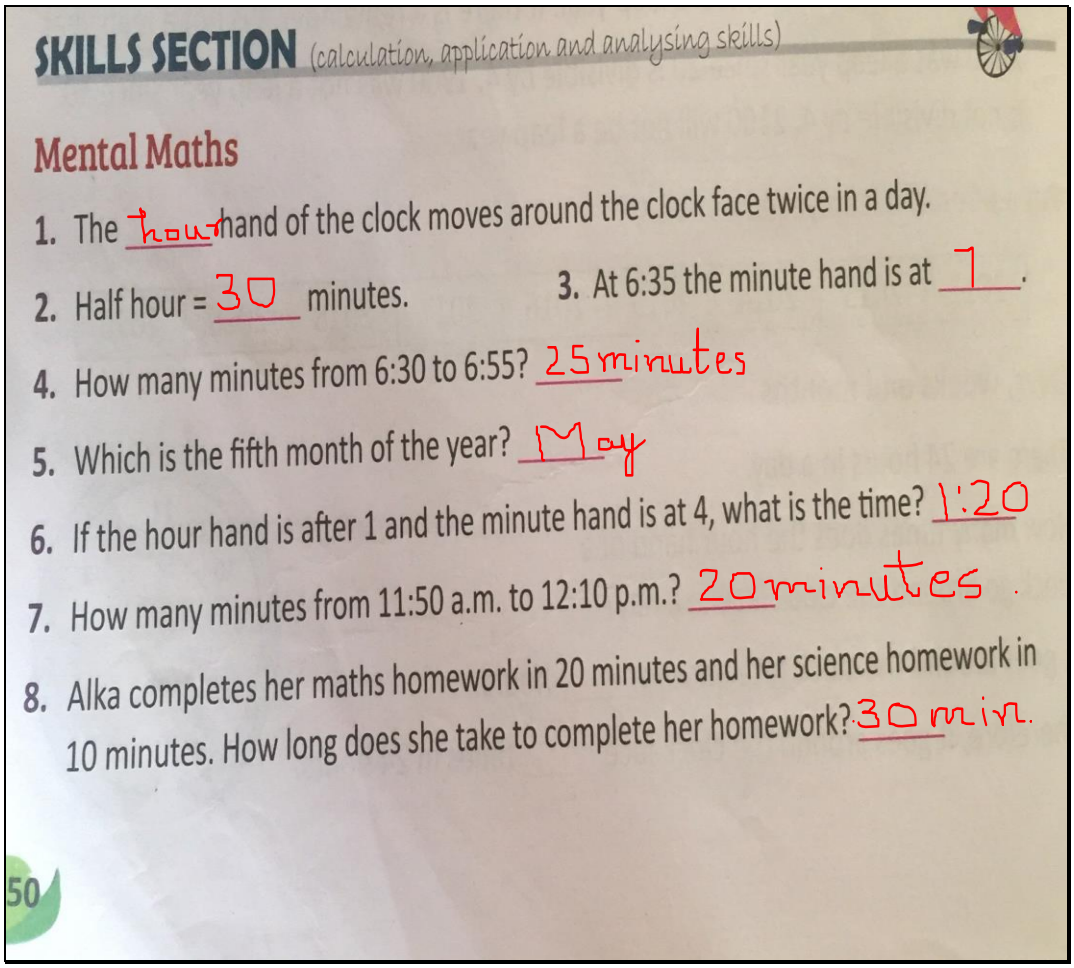
Write your date of birth in three different ways.

Exercise –5

Q2. Write your date of birth in three different ways:

Solution

i) 20/08/2011
ii) 20th August 2011
iii) 20–08–2011



SKILLS SECTION (calculation, application and analysing skills)

Mental Maths

1. The hour hand of the clock moves around the clock face twice in a day.
2. Half hour = 30 minutes.
3. At 6:35 the minute hand is at 7.
4. How many minutes from 6:30 to 6:55? 25 minutes
5. Which is the fifth month of the year? May
6. If the hour hand is after 1 and the minute hand is at 4, what is the time? 1:20
7. How many minutes from 11:50 a.m. to 12:10 p.m.? 20 minutes.
8. Alka completes her maths homework in 20 minutes and her science homework in 10 minutes. How long does she take to complete her homework? 30 min.

50

Chapter-4 Multiplication

DEFINITION OF MULTIPLICATION

DEFINITION OF MULTIPLICATION

- **Multiplication means to add equal groups. In other words multiplication is repeated addition.**

Introduction To Multiplication

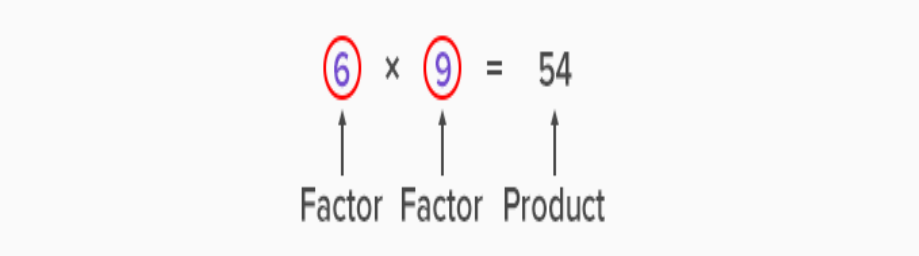
Number of ears = 2 + 2 + 2 + 2 = 8 OR

= 4 Twos = 4 times 2 = 4 x 2 = 8!

For example,

$6 \times 9 = 54$

The numbers 6 and 9 are the factors, while the number 54 is the product.



Check what you know

1. Write the multiplication facts:

c) Groups of 4 coins each= ___ × ___ = ____
e) 4+4+4+4+4+4+4+4 =32
8 fours=___ × ___ = ____
f) 10+10+10+10+10= 50
5 tens= ___ × ____ = ____

2. Learn the tables:2-12

Continued

3. Multiply:

c)	3	
	1	7
X		5
	8	5

d)		
	6	2
X		4
2	4	8

f)	2	
	5	7
X		4
2	2	8

Word Problem

Q4 b)Ten chocolates are packed in a box. Manish bought 10 boxes for his birthday. How many chocolates did he buy?

Solution:

Number of chocolates in 1 box = 10

Number of boxes = × 10

100

Therefore, Manish bought 100 chocolates.

Exercise –1 Answers

Q2. Multiply using the tables:

c) 6 × 9 = 54

d) 3 × 8 =24

f) 7 × 7 =49

j) 9 × 7 =63

m) 9 × 8 =72

n) 7 × 10=70

p) 8 × 7 =56

Q3© There are 7 days in a week.How many days are there in a 5 week

- Solution:
- No. of days in 1 week = 7
- No. of days in 5 weeks= 7×5
  $= 35$

So,there are 35 days in 5 week.

Q3.d)A tailor stitches 9 buttons on a shirt. How many buttons will he need for 6 shirts?

Solution:

Number of buttons in 1 shirt= 9

Number of buttons in 6 shirts= 9×6
$= 54$

Therefore , he will need 54 buttons on 6 shirts.

EXERCISE 2

Multiplication of 3 digit by 1 digit(Without regrouping)

A)	1	3	2
×			3
	3	9	6

C)	1	1	0
×			5
	5	5	0

E)	1	0	1
×			6
	6	0	6

Multiplying with regrouping once and twice:

EXERCISE 3

Q1 MULTIPLY (REGROUP ONCE)

A)		1	
	3	0	4
×			3
	9	1	2

C)		3	
	1	1	8
×			4
	4	7	2

E)		2	
	1	1	3
×			7
	7	9	1

Q2 MULTIPLY (REGROUP TWICE)

A)	2	1	
	2	8	4
×			3
	8	5	2

C)	1	3	
	2	4	8
×			4
	9	9	2

E)	1	2	
	1	2	3
×			8
	9	8	4

Q 3. Solve:

a) The price of one maths book is Rs. 275. What is the price of 5 maths books?

Solution:

Price of 1 maths book = 2 7 5

Price of 5 maths book = 275 × 5

$$\begin{array}{r} 2\ 7\ 5 \\ \times\ \ 5 \\ \hline 1\ 3\ \ 7\ \ 5 \end{array}$$

Therefore , price of 5 maths book is Rs. 1375

Multiplying by tens and hundreds

- Explanation

Eg:

$9 \times 10 = 90$

$15 \times 10 = 150$

$9 \times 100 = 900$

$15 \times 100 = 1500$

$7 \times 20 = 140$

$7 \times 300 = 2100$

Exercise –4

ANSWERS

Q1. Multiply:

b) $8 \times 20 = 160$

c) $5 \times 40 = 200$

e) $7 \times 100 = 700$

f) $200 \times 8 = 1600$

i) $56 \times 10 = 560$

k) $12 \times 20 = 240$

EXERCISE 5
Multiplying by a 2 digit number (without regrouping):

	A)		
		4	2
	×	2	2
	1	8	4
+	8	4	0
	9	2	4

	C)		
		3	3
	×	1	2
		6	6
+	3	3	0
	3	9	6

Multiplying with regrouping

- Explanation:

$$\begin{array}{r} {\scriptstyle 1\ \ \ \ } \\ {\scriptstyle 2\ \ \ \ } \\ 3\ 7 \\ \times\ 2\ 3 \\ \hline 1\ 1\ \ 1 \\ +\ 7\ 4\ \ 0 \\ \hline 8\ 5\ \ 1 \end{array}$$

Exercise 6
Multiplying with regrouping

a)		1	
		2	
		3	7
	×	2	4
	1	4	8
+	7	4	0
	8	8	8

d)				
			6	3
		×	3	3
	1	1		
		1	8	9
+	1	8	9	0
	2	0	7	9

Exercise 6 (cntd)

f)			3	
			2	
			2	6
		×	5	4
		1	0	4
+	1	3	0	0
	1	4	0	4

Mental Maths:

Q1. Use the 11 –times table to multiply:

a) $5 \times 11 = 55$
d) $6 \times 11 = 66$

Q2. Multiply mentally and fill in the blanks:

a) $30 \times 7 = 210$
e) $10 \times 57 = 570$
i) $8 \times 800 = 6400$
k) $6 \times \_\_ = 42$ (7)

CLASS TEST

MULTIPLY

A) 23×3
B) 64×8
C) 209×9
D) 8×400
E) 36×10
F) 25×23

John bought 6 packets of biscuits. Each packet has 40 biscuits. How many biscuits did john have?

THANK YOU

DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

CHAPTER- 3

Subtraction

DEFINITION

Subtraction is taking one number away from another.

5 ⇨ **Minuend**
−2 ⇨ **Subtrahend**
3 ⇨ **Difference**

The symbol of subtraction is (−).

Terms Used In Subtraction are take away , left , how many more than , how many more are needed , remained , difference , give away .

SUBTRACTION OF 4-DIGIT NUMBER WITHOUT REGROUPING

Concept Section:

Subtracting four digit number is like 3-digit numbers only. First arrange the number in columns one below the other, according to their places. The greater number should be above the smaller number.

For example: **4698 – 2346**

Th	H	T	O	
4	6	9	8	**Minuend**
− 2	3	4	6	**Subtrahend**
2	3	5	2	**Difference**

Subtraction of 4- digit numbers without regrouping

Exercise-1

b)

Th	H	T	O
5	5	4	8
− 4	0	3	7
1	5	1	1

c)

Th	H	T	O
9	8	3	6
− 5	2	0	4
4	6	3	2

f)

Th	H	T	O
3	8	2	9
−		1	8
3	8	1	1

h)

Th	H	T	O
9	9	9	9
−7	7	7	7
2	2	2	2

EX-1 Word Problem:

J) A farmer collected 2568 mangoes from his mango orchard. He sold 1235 mangoes. How many mangoes are left?

Solution:

- No. of mangoes collected = 2568
- No. of mangoes sold= 1235
- No. of mangoes left=?

	TH	H	T	O
	2	5	6	8
–	1	2	3	5
	1	3	3	3

- 1333 **Mangoes are left.**

Subtraction of 4-digit numbers with regrouping:

Exercise-2

b)	TH	H	T	O
		7	15	
	6	~~8~~	~~5~~	3
–	1	5	6	2
	5	2	9	1

c)	TH	H	T	O
		8	11	15
	9	~~9~~	2	~~5~~
–	6	8	5	7
	3	0	6	8

e)	TH	H	T	O
	3	11	10	16
	~~4~~	~~2~~	~~1~~	~~6~~
–	1	8	3	9
	2	3	7	7

g)	TH	H	T	O
	1	18	14	17
	~~2~~	~~9~~	~~5~~	~~7~~
–	1	9	6	9
	0	9	8	8

Word Problem:

J)Jane has 2655stamps.Simi has 3560stamps.Who has more stamps? How many more?

N.B.

- j)No. of stamps with Jane=2655
  No. of stamps with Simi=3560

Here,

3560 >2655

So, Simi has more number of stamps.

	TH	H	T	O
	2	15	5	10
	~~3~~	~~5~~	~~6~~	~~0~~
–	2	6	5	5
	0	9	0	5

There are 905 more number of stamps with Simi.

PRACTICE SUM (Practice N.B.)

- i) There are 3050 houses in a town . 1505 houses are painted red. How many houses are not painted red?

Ans

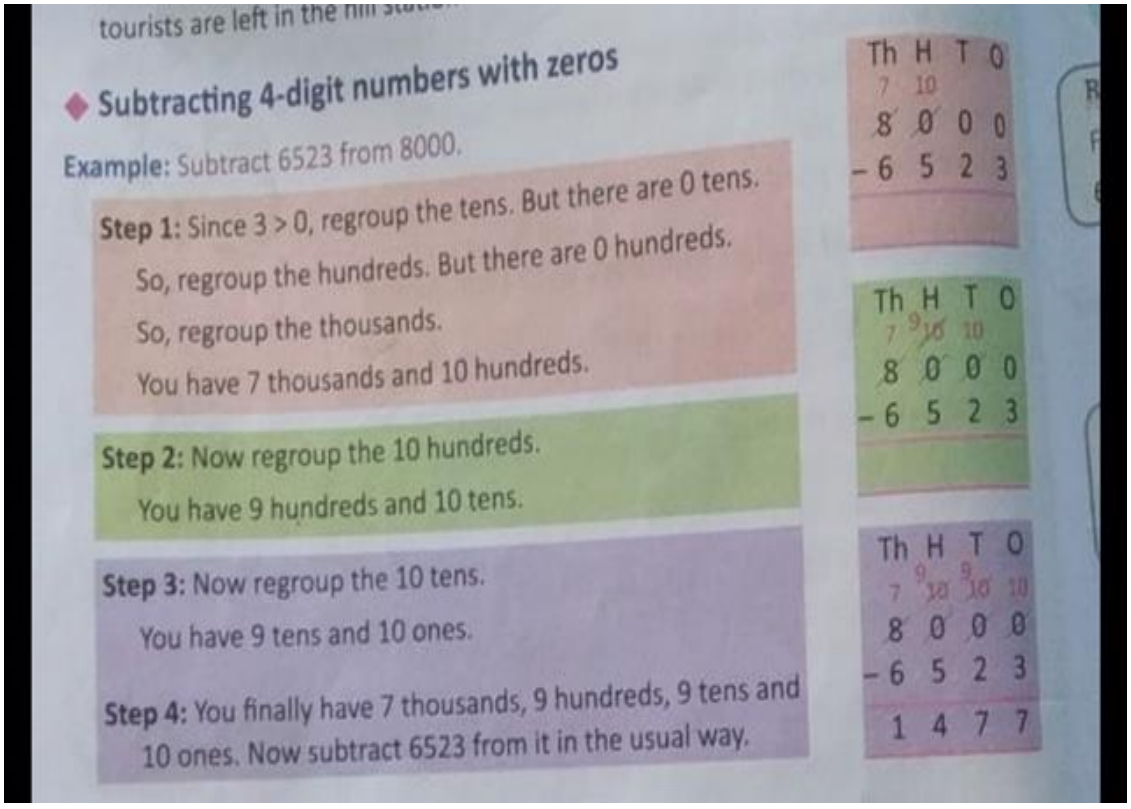
Total houses in a town are = 3 0 5 0

Number of houses painted red=(−)1 5 0 5

Number of houses not painted red=1 5 4 5

There are 1,545 houses which are not painted red.

Subtracting 4 digit numbers with zero:



j) There are 6000 roses and 356 lilies in a flower shop. How many more roses than lilies are there? **N.B**

Solution:

5 9 9 10

Number of roses in a flower shop = 6 0 0 0

Number of lilies in a flower shop = (–) 3 5 6

Number of roses more than lilies are = 5 6 4 4

5644 roses are more than lilies.

PROPERTIES OF SUBTRACTION:

a) When a number is subtracted from itself, the difference is always 0.

Example: 6242 – 6242 = 0

4000 – 4000 = 0

b) When 0 is subtracted from a number, the difference is the number itself.

Example: 9204 – 0 = 9204

8888 – 0 = 8888

COMBINING ADDITION AND SUBTRACTION:

Exercise : 4 N.B.

b) 365 – 112 + 234

Step1:

First add the numbers with (+) sign before it.

	3	6	5
+	2	3	4
	5	9	9

→ Sum

Step 2:

Now from the sum, subtract the number with (–) sign before it .

	5	9	9
–	1	1	2
	4	8	7

→ Difference

Ans : 365 – 112 + 234 = 487

c)896 −223 + 416=

Step1:
First add the numbers with (+) sign before it.

	8	9	6
+	4	1	6
1	3	1	2

Sum

Step 2:
Now from the sum, subtract the number with (−) sign before it .

	1	3	1	2
−		2	2	3
	1	0	8	9

Ans : 896 −223 + 416= 1089

Word Problem

N.B

(f) Nalin had ₹ 500 at the beginning of the month. During the month he spent ₹ 345. His mother gave him ₹ 150 more. How much money is left with Nalin at the end of the month?

- Amount with Nalin = ₹ 500
- He spent ₹ 345
- Amount left with Nalin =₹ (500 – 345)= ₹ 155

	4	9	10
	~~5~~	~~0~~	~~0~~
–	3	4	5
	1	5	5

His mother gave him ₹ 150
He is left with ₹ 155
Total money with Nalin at the end of the month= ₹ (150+155)
= ₹ 305

PRACTICE WORK(PRACTICE NB)

e) Samir had an album with 465 stickers in it. He added 135 new stickers and removed 68 damaged stickers . How many stickers does the album now have?

- Solution:
- 465 + 135 – 68

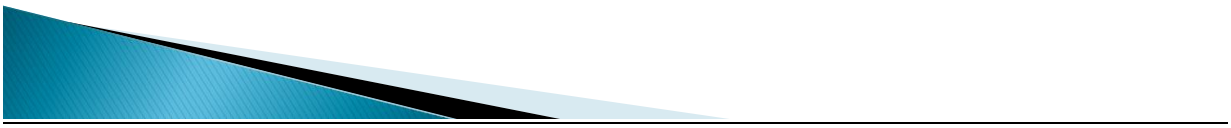
Step 1: Add the numbers with the (+) sign before it.

$$\begin{array}{r} 4\ 6\ 5 \\ +\ 1\ 3\ 5 \\ \hline 6\ 0\ 0 \end{array}$$

Step 2: Now from the sum , subtract the number with (–) sign before it.

$$\begin{array}{r} 6\ 0\ 0 \\ -\ \ 6\ 8 \\ \hline 5\ 3\ 2 \end{array}$$

Therefore, now the album has 532 stickers.



Relation between addition and subtraction:

Addition means to put together.

Subtraction means to take away.

Therefore addition and subtraction are opposite of each other.

We can check the answer of addition with the help of subtraction and vice-versa.

Example:

Add the numbers and then check your answer with subtraction:

For Example:

$$\begin{array}{r} \text{Th H T O} \\ 3\ 4\ 5\ 1 \\ +1\ 3\ 2\ 0 \\ \hline 4\ 7\ 7\ 1 \end{array}$$

Check:

Th	H	T	0		Th	H	T	0
	4	7	7	1		4	7	7	1
−	1	3	2	0	−	3	4	5	1
	3	4	5	1		1	3	2	0

OR

Mental Maths:

a) To subtract 9, first subtract 10 and then add 1,

147 – 9 =

First subtract 10 and then add 1

147-10=137

137+1=138

b) To subtract 8, first subtract 10 and then add 2,

2137-8=

First subtract 10 and then add 2

2137-10=2127

2127+2=2129

Mental Maths

Q1. Work out mentally:

a) 244-9= 235 c) 326-8 =318
g) 281-19=262 l) 2135-17=2118

Q2. Work out mentally:

b)500-300=200 e)1600-600 =1000
g) 10 less than 881=871
h)100 less than 4568=4468
j) 299-100=199

CLASS 3

CHAPTER-2

ADDITION

DEFINITION OF ADDITION

- Addition is taking two or more numbers and adding them together, that is, it is the total sum of 2 or more numbers.

How many apples are there in all?

There are 7 apples in one basket and 4 apples in the other.
So, we add 7 and 4 to find the total number of apples.
To add 7 and 4, we can count forward 4 steps from 7
The symbol used to indicate Addition is + (plus symbol).
So, 7 and 4 can be written as 7 + 4 =11

WHAT ARE ADDENDS?

The numbers which are added are called **Addends.**

For Example:

The number 7 and 8 are addends and the sum is **15**

7 (addend)
\+ 8 (addend)
15 (sum)

- The answer of addition is called **sum**.
- The symbol of addition is +

Check what you know

1. Add (without regrouping).

a) 342 + 237 = ____

b) 137 + 602 = ____

c) 203 + 234 + 151 = ____

2. Add (regrouping of ones).

a) 426 + 137 = ____

b) 507 + 318 = ____

c) 333 + 248 = ____

3. Add (regrouping of tens and ones).

a) 638 + 274 = ____

b) 298 + 347 = ____

c) 586 + 198 + 176 = ____

4. Will you add or subtract to get the answer? Solve the problems where you have to add.

a) 265 people attended a music show on Saturday. 331 people attended it on Sunday. How many people in all attended the show? Add / Subtract

b) Minto read two books in the holidays. One book had 236 pages. The other book had 164 pages. How many pages did he read in all? Add / Subtract

c) There were 567 people on a train. 234 people got down at a station. How many people are there on the train now? Add / Subtract

d) Bijoy and Bina counted the flowers in their school garden. There were 254 roses and 436 lilies. How many flowers were there in all? Add / Subtract

Check what you know

1. Add (without regrouping).

a) 342 + 237 = 579

b) 137 + 602 = 739

c) 203 + 234 + 151 = 588

2. Add (regrouping of ones).

a) 426 + 137 = 563

b) 507 + 318 = 825

c) 333 + 248 = 581

3. Add (regrouping of tens and ones).

a) 638 + 274 = 912

b) 298 + 347 = 645

c) 586 + 198 + 176 = 960

4. Will you add or subtract to get the answer? Solve the problems where you have to add.

a) 265 people attended a music show on Saturday. 331 people attended it on Sunday. How many people in all attended the show? Add / Subtract

b) Minto read two books in the holidays. One book had 236 pages. The other book had 164 pages. How many pages did he read in all? Add / Subtract

c) There were 567 people on a train. 234 people got down at a station. How many people are there on the train now? Add / Subtract

d) Bijoy and Bina counted the flowers in their school garden. There were 254 roses and 436 lilies. How many flowers were there in all? Add / Subtract

ADDITION OF FOUR DIGIT NUMBERS WITHOUT REGROUPING.

- Add 3325 and 2231

❖Adding 4-digit numbers is just like adding 3-digit numbers.

❖Arrange the numbers one below other according to their places and then add.

❖Always start from the ones.

CONCEPT SECTION

- Step-1 Add the ones.
- Step-2 Add the tens.
- Step-3 Add the hundreds.
- Step-4 Add the thousands.

	Th	H	T	O
	3	3	2	5
+	2	2	3	1
	5	5	5	6

EXERCISE 1 : ADD

- a) 2463 + 1324
- b) 4065 + 2831
- e) 4208 + 3651
- g) 2145 + 7854

ANSWERS

a) 2463
+1324
• 3787

b) 4065
+ 2831
6896

• e) 4208
+3651
7859

g) 2145
+ 7854
9999

WORD PROBLEM

• j) Aarti has two stamp albums. One album has 2306 stamps. The other album has 3143 stamps. How many stamps does Aarti have in all?

- Solution:

Number of stamps in one album: 2 3 0 6

Number of stamps in other abum: 3 1 4 3

Total Stamps Aarti have= 2306 + 3143

$$\begin{array}{r} 2306 \\ +\ 3143 \\ \hline 5449 \end{array}$$

Ans: Aarti has 5449 stamps in all.

ADDING 3-DIGIT NUMBERS WITH REGROUPING

- **Example: Add 643 and 576**
- **Step-1 Add the ones . (3 + 6 =9)**
- **Step-2 Add the tens and regroup : (4 + 7 =11)**

11 tens = 1 hundred +1 ten

- **Step-3 Add the hundreds and regroup : (1+ 6+ 5 =12)**

12 hundreds =1thousand + 2 hundred

Th	H	T	O
	(1)		
	6	4	3
+	5	7	6
1	2	1	9

EXERCISE 2 : ADD

- a) 3 4 9 + 8 3 8

- c) 5 3 6 + 6 0 7

- f) 8 8 8 + 2 2 2

- h) 4 9 1 + 9 0 9

EXERCISE 2 : ANSWER KEY

- a) 1 3 4 9 + 8 3 8 = 1 1 8 7

- c) 1 5 3 6 + 6 0 7 = 1 1 4 3

- f) 1 1 8 8 8 + 2 2 2 = 1 1 1 0

- h) 1 1 4 9 1 + 9 0 9 = 1 4 0 0

EXERCISE 2 : WORD PROBLEM

- There are 663 horses and 527 cows in a farm. How many animals are there in the farm?

Solution :

Number of horses in a farm = 6 6 3

Number of cows in a farm = + 5 2 7

Total number of animals in a farm = 1 1 9 0

Ans : There are 1190 animals in a farm.

ADDING 4-DIGIT NUMBERS WITH REGROUPING.

❖ **Example: Add 2808 and 4267**

- **Step-1 Add the ones. 8 + 7 = 15 (15 ones = 1 ten + 5 ones)**
- **Step-2 Add the tens. 1 + 0 + 6 =7**
- **Step-3 Add the hundreds. 8 + 2 = 10 (10 hundreds =1 thousand)**
- **Step-4 Add the thousands. 1 + 2 + 4 = 7**

Th	H	T	O
(1)		(1)	
2	8	0	8
+ 4	2	6	7
7	0	7	5

EXERCISE 3 : ADD

- a)

Th	H	T	O
	1	3	2 3
+	4	9	6 8

- c)

Th	H	T	O
	3	4	1 5
+	3	8	7 9

- f)

Th	H	T	O
	6	7	0 2
+	1	4	3 9

- h)

Th	H	T	O
	5	1	8 4
+	4	3	6 5

EXERCISE 3 : ANSWER KEY

- a)

	(1)	(1)	
	1	3	2 3
+	4	9	6 8
	6	2	9 1

- c)

	(1)	(1)	
	3	4	1 5
+	3	8	7 9
	7	2	9 4

- f)

	(1)	(1)	
	6	7	0 2
+	1	4	3 9
	8	1	4 1

- h)

		(1)	
	5	1	8 4
+	4	3	6 5
	9	5	4 9

EXERCISE 3 : WORD PROBLEM

(i) In a train, there are 1570 first-class seats and 2550 second-class seats. How many people can sit in the train?

Solution :

Number of first-class seats in the train =	1 5 7 0
Number of second-class seats in the train = +	2 5 5 0
Total number of people can sit in the train =	4 1 2 0

Ans : **There are 4120 people can sit in the train.**

EXERCISE 4 : (CONTINUE)

Th H T O	Th H T O
• a) 2 1 4 3	c) 7 0 4 3
1 5 4 1	1 3 2
+2 0 1 4	+ 2 2 3
Th H T O	Th H T O
f) 2 3 4 6	h) 3 6 0 0
1 1 0 8	9 9 4
+6 4 5 3	+ 2 2 2 2

EXERCISE 4 : ANSWER KEY

• a) 2 1 4 3	c) 7 0 4 3
1 5 4 1	1 3 2
+ 2 0 1 4	+ 2 2 3
5 6 9 8	7 3 9 8
(1 1)	(1 1)
• f) 2 3 4 6	h) 3 6 0 0
1 1 0 8	9 9 4
+6 4 5 3	+ 2 2 2 2
9 9 0 7	6 8 1 6

TEST (TOTAL-11 MARKS)

Q.1. ADD. (8 MARKS)

	Th	H	T	O
a)	1	2	1	3
	3	4	4	0
	+ 3	1	0	1

	Th	H	T	O
b)	7	1	5	4
		1	7	2	0
	+		1	2	6

	Th	H	T	O
c)		9	3	2
	1	4	7	5
	+ 3	8	3	6

	Th	H	T	O
d)	3	4	3	2
		2	9	8	0
	+		2	3	1

Q.2. 2559 PEOPLE VISITED THE TRADE FAIR IN DELHI ON SATURDAY. ON SUNDAY, 3405 MORE PEOPLE THAN SATURDAY VISITED THE TRADE FAIR. HOW MANY PEOPLE VISITED THE TRADE FAIR ON SUNDAY? (3 MARKS)

TEST (TOTAL-11 MARKS)

Q.1. Add. (8 MARKS) ANSWERKEY

(a) 7,754 (2 marks)

(b) 9,000 (2 marks)

(c) 6,243 (2 marks)

(d) 6,643 (2 marks)

Q.2. 2559 PEOPLE VISITED THE TRADE FAIR IN DELHI ON SATURDAY. ON SUNDAY, 3405 MORE PEOPLE THAN SATURDAY VISITED THE TRADE FAIR. HOW MANY PEOPLE VISITED THE TRADE FAIR ON SUNDAY? (3 MARKS)

Solution:

Number of people visited the Trade Fair on Saturday = 2,559

Number of people visited the Trade Fair on Sunday= 2,559 + 3,405

= 5,964

Ans: 5,964 more people visited the Trade Fair on Sunday.

MARKS DISTRIBUTION:

1 MARK FOR CORRECT STATEMENTS

2 MARKS FOR CORRECT ANSWER

PROPERTIES OF ADDITION

- Order property : Two numbers can be added in any order .Their sum remains the same .

3 0 4 3 + 2 6 5 2 = 5 6 9 5

OR

2 6 5 2 + 3 0 4 3 = 5 6 9 5

7 + 3 = 10

OR

3 + 7 = 10

- Grouping property : Three numbers can be added in any order.Their sum remains the same.

(3 4 2 6 + 2 0 4 1) + 1 2 3 1 = 6 6 9 8

OR

(2 0 4 1 + 3 4 2 6) + 1 2 3 1 = 6 6 9 8

OR

(1 2 3 1 + 2 0 4 1) + 3 4 2 6 = 6 6 98

(2 + 5) + 3 = 10

OR

2 + (5 + 3) = 10

PROPERTIES OF ADDITION

- Zero property : When zero is added to a number , or when a number is added to 0 , the sum is the number itself.
- 2 4 3 2 + 0 = 2 4 3 2

OR

- 0 + 2 4 3 2 = 2 4 3 2

EXERCISE 5 : USE THE PROPERTIES OF ADDITION TO ADD A NSWERS

a) 4 6 0 3 + 2 1 1 2 = ___ 2112 _____ + 4 6 0 3

b) 8 0 8 0 + 1 0 10 _____ = 1 0 1 0 + 8 0 8 0

c) 3 1 1 8 + 2 6 0 + 1 2 1 2 = 1 2 1 2 + 3 1 1 8 + __ 2 6 0 _____

d) 0 + 1 1 6 = 1 1 6 + __ 0 _____

e) 8 1 8 1 + 0 = __ 8181 _____

f) 0 + 2 0 9 0 = _____ 2090 ____

g) 3 4 8 9 + 1 = 3 4 9 0

h) 2 6 0 0 + 1 = 2 6 0 1

i) ____ 0 ____ + 2 0 6 7 = 2 0 6 7

j) ____ 1 ____ + 4 1 1 9 = 4 1 2 0

MENTAL MATHS

- **Work these out mentally.**

1. 82 + 8 = 90
2. 5000 + 40 = 5040
3. 48 + 12 = 60
4. 53 + 47 = 100
5. 609 + 10 = 619
6. 299 + 100 = 399

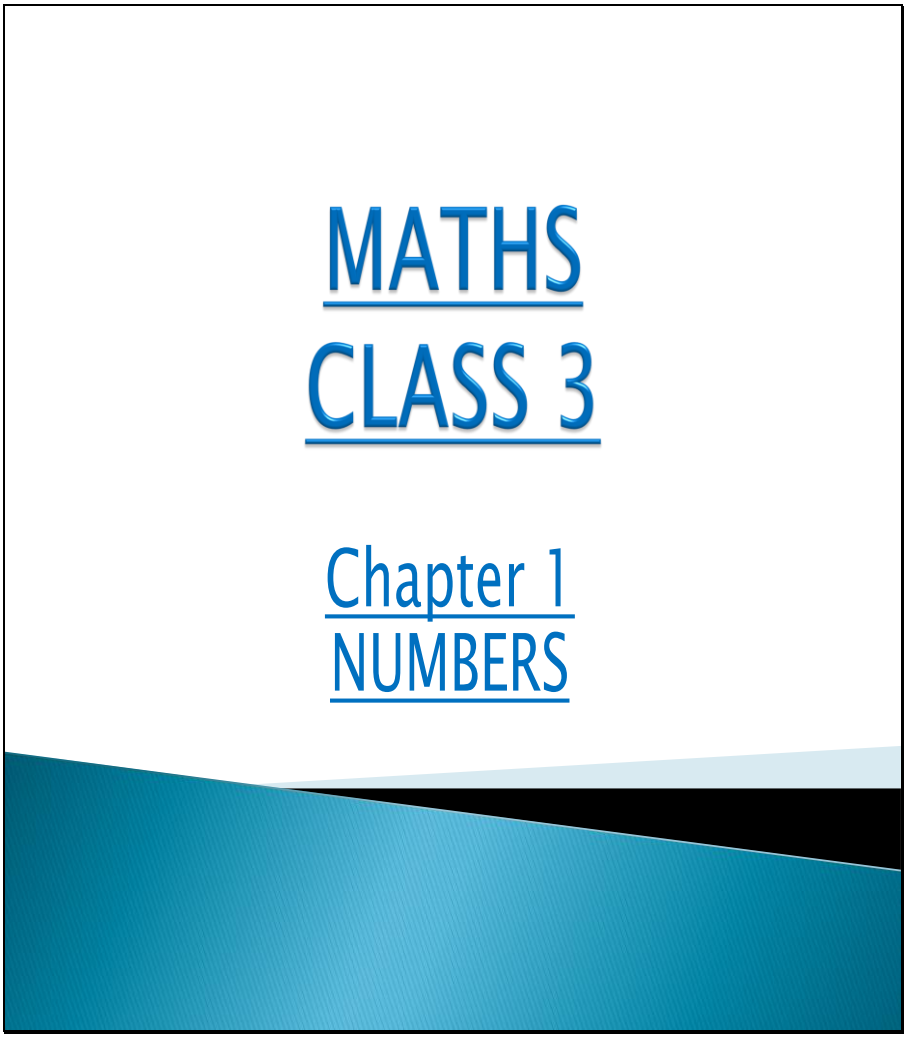
DELHI PUBLIC SCHOOL, GANDHINAGAR

CLASS : 3 **SUBJECT: MATHS**

Academic Session 2021-22

CHAPTER- 1

LARGE NUMBERS



LOOKING BACK

- 0,1,2,3,4,5,6,7,8 and 9 are called digits.

- We use digits and place value to read and write numbers.

  For example:

  H T O

  6 3 4

  Here in this number 6, 3, 4 are called digits.

  And the place values will help us in reading and writing the number.

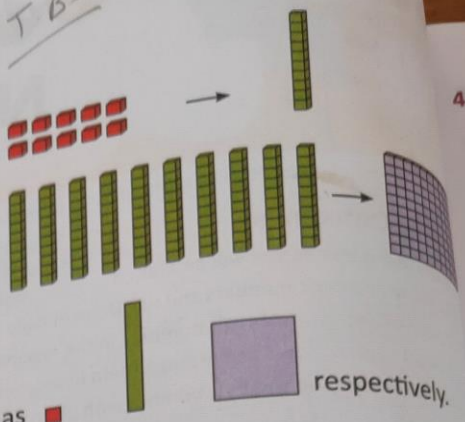
  Six hundred thirty four.

Check what you know

1. **Fill in the blanks.**

a) 10 ones make 1 _____

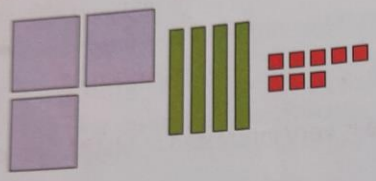
b) 10 tens make 1 _____



Let us represent ones, tens and hundreds as ■ ■ ■ respectively.

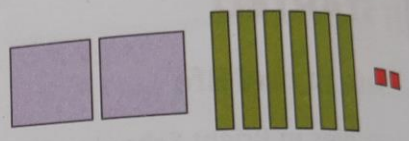
2. **Write the number and number name.**

a)



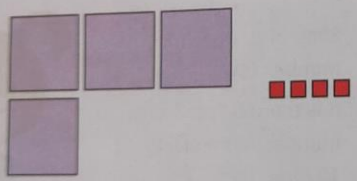
_____

b)



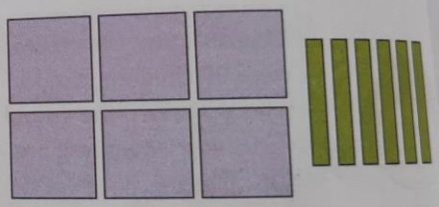
_____

c)



_____

d)



_____

3. **Write the number and number name.**

a) 6 hundreds + 7 tens + 5 ones = ☐ _____

b) 4 hundreds + 8 tens = ☐ _____

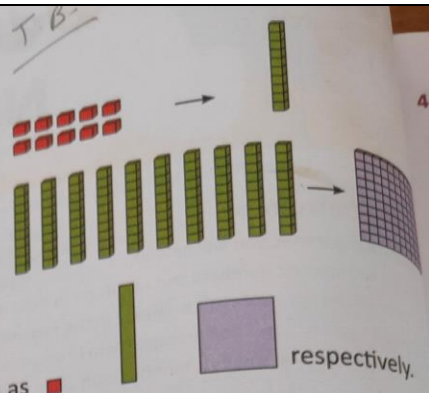
c) 7 hundreds + 9 ones = ☐ _____

Check what you know

1. Fill in the blanks.

a) 10 ones make 1 tens

b) 10 tens make 1 hundred



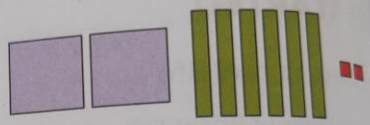
Let us represent ones, tens and hundreds as ■ ▬ ■ respectively.

2. Write the number and number name.

a)

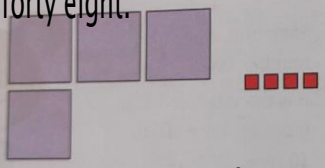
348=Three hundred forty eight.

b)



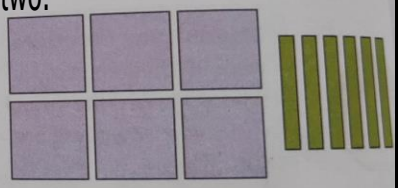
262= Two hundred sixty-two.

c)



404=Four hundred four.

d)



660= Six hundred sixty.

3. Write the number and number name.

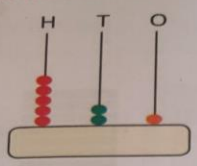
a) 6 hundreds + 7 tens + 5 ones = 675 Six hundred seventy fiv

b) 4 hundreds + 8 tens = 480 Four hundred eighty.

c) 7 hundreds + 9 ones = 709 Seven hundred nine.

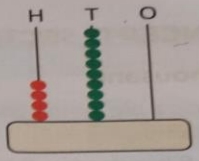
4. Write the number shown on each abacus.

a) H T O



b) H T O

c) H T O



5. Write the expanded form.

a) 555 = _____ + _____ + _____

b) 990 =

c) 403 =

d) 800 =

6. Write the face value and the place value of the digit in red.

		Face value	Place value			Face value	Place value
a)	295			b)	240		
c)	601			d)	560		

7. Fill in the ◯ with >, < or =.

a) 176 ◯ 167 b) 485 ◯ 496 c) 990 ◯ 99

d) 708 ◯ 780 e) 650 ◯ 650 f) 123 ◯ 321

8. Write the numbers in ascending (increasing) order.

a) 272, 384, 96, 504

b) 634, 291, 388, 275

c) 405, 400, 419, 401

9. Write the numbers in descending (decreasing) order.

a) 184, 289, 753, 99

b) 738, 138, 384, 761

c) 95, 91, 109, 99, 100

4. Write the number shown on each abacus.

a) H T O — 5 2 1

b) H T O — 3 0 3

c) H T O — 4 9 0

5. Write the expanded form.

a) 555 = 500 + 50 + 5

b) 990 = 900 + 90 + 0

c) 403 = 400 + 0 + 3

d) 800 = 800 + 0 + 0

6. Write the face value and the place value of the digit in red.

		Face value	Place value			Face value	Place value
a)	295	9	90	b)	240	0	0
c)	601	6	600	d)	560	6	60

7. Fill in the ◯ with >, < or =.

a) 176 > 167 b) 485 < 496 c) 990 > 99

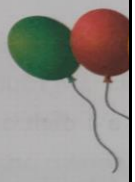
d) 708 < 780 e) 650 = 650 f) 123 < 321

8. Write the numbers in ascending (increasing) order.

a) 272, 384, 96, 504 — 96 | 272 | 384 | 504

HW b) 634, 291, 388, 275

HW c) 405, 400, 419, 401



9. Write the numbers in descending (decreasing) order.

a) 184, 289, 753, 99 — 753 , 289 , 184 , 99

b) 738, 138, 384, 761 — 761 , 738 , 384 , 138

HW c) 95, 91, 109, 99, 100

DEFINITION OF THOUSAND

- A number equal to 10 times 100 can be defined as 1000.

  1 thousand =10 hundreds

EXERCISE 1 Text book

1. Fill in the blanks and the table.

a)

4 thousands 2 hundreds 3 tens 1 one

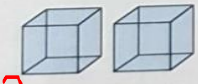
Number	Number name	Abacus
Th H T O 4 2 3 1	Four thousand two hundred thirty-one.	Th H T O

b)

1 thousand 3 hundreds 0 tens 3 ones

Number	Number name	Abacus
Th H T O	One thousand three hundred three.	Th H T O

c)



2 thousands 0 hundreds 3 tens 0 ones

Number	Number name	Abacus
Th H T O 2 0 3 0	Two thousand thirty.	Th H T O

2. Write the number names.

a) 3711 = _____

b) 8094 = _____

c) The tiger population in India in the year 2015 was **2226**. Write the number of tigers as a number name. _____

d) The Nile River in Egypt is the longest river in the world. It is **6650** km long. Write its length as a number name. _____

3. Write the numbers.

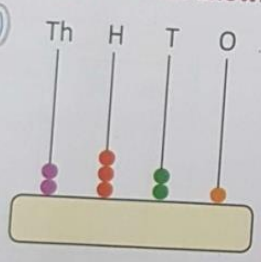
a) One thousand four hundred twenty = _____

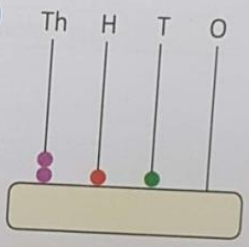
b) Nine thousand seventy-one = _____

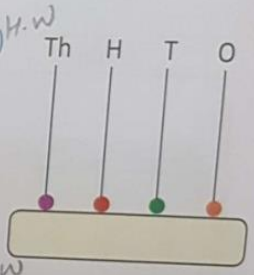
c) The leopard population in India in the year 2015 was **seven thousand seven hundred and one**. Write this as a number. _____

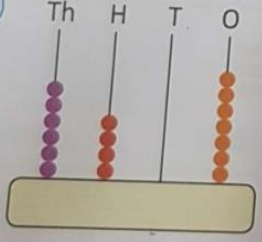
d) Chennai is at the level of the sea. Shimla is high up in the mountains. Shimla is higher than Chennai by **two thousand two hundred seventy-six metres**. Write this as a number. _____

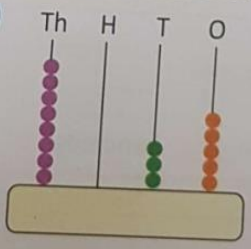
4. Write the number shown on each abacus.

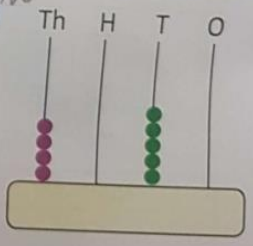
a) 

b) 

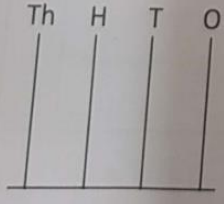
c) 

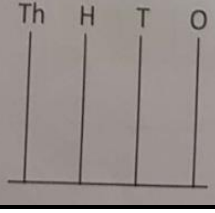
d) 

e) 

f) 

5. Show the number on the abacus.

a) 2314 

b) 6203 

c) 5430

Th	H	T	O

d) 2000

Th	H	T	O

6. Fill in the numbers in order.

a) 1087, 1088, 1089, _____, _____, _____, _____

b) 4198, _____, _____, _____, _____, _____, _____

c) 9829, _____, _____, _____, _____, _____, _____

d) 5050, _____, _____, _____, _____, _____, _____

e) 6104, _____, _____, _____, _____, _____, _____

Face value and place value

8276 is a 4-digit number.

8 is in the thousands place.

Its place value in 8276 is 8 thousands or 8000.

Its face value in 8276 is 8.

2 is in the hundreds place.

Its place value in 8276 is 2 hundreds or 200.

Its face value in 8276 is 2.

7 is in the tens place.

Its place value in 8276 is 7 tens or 70.

Its face value in 8276 is 7.

6 is in the ones place.

Its place value in 8276 is 6 ones or 6.

Its face value in 8276 is 6.

Th	H	T	O
8	2	7	6

The **place value** depends on the place of the digit in the number.

The **face value** of a digit is the number itself. It remains the same in all places.

EXERCISE-1

Q2. Write the number names:

a) 3711 = Three thousand seven hundred eleven.

b) 8094 = Eight thousand ninety four.

- Q. 3 Write the numbers.

b) Nine thousand seventy-one.

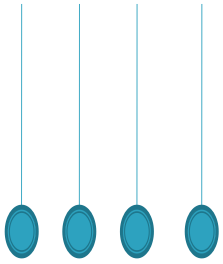
thousands	Hundreds	tens	ones
9	0	7	1

c) The Leopard population in India in the year 2015 as seven thousand seven hundred and one. Write this as a number.

thousands	hundreds	tens	ones
7	7	0	1

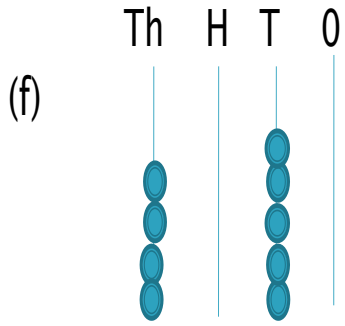
- Q4. Write the number on abacus.

(c)



1 1 1 1

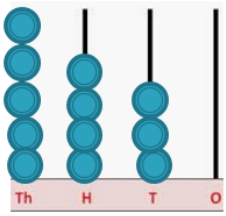
(f)



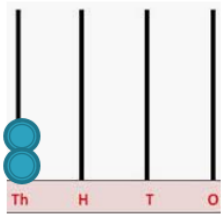
4 0 5 0

Q.5 Show the number on the abacus.

(c) 5430



(d) 2000



Q6. Fill in the numbers in order:

b) 4198 , 4199 , 4200 , 4201 , 4202 ,4203 , 4204 .

d) 5050 , 5051 , 5052 , 5053 , 5054 , 5055, 5056.

FINDING THE PLACE VALUE OF A NUMBER

- 5,647 = 6hundreds
  or 600

But if in this case, if you are writing the place value as 100 instead of 600 it will be a wrong answer.

PLACE VALUE CHART			
Thousands	Hundreds	Tens	Ones
1,000s	100s	10s	1s
5,	6	4	7

Concept of face value

- The Face Value is the value of the digit in a number. We know every number has a digit.
- For example:

9451 = 5

7502 = 7

Face Value and Place Value

NUMBER	PLACE VALUE	FACE VALUE
6 9 2 5	20	2
8 4 3 2	400	4
1 2 0 6	0	0

EXERCISE 2

1. Fill in the place values.

a) 6 3 4 8

8
40
300
6000

b) 1 7 8 3

c) 5 4 2 6

d) 3 6 0 4

2. Write the numeral.

a)

4
30
300
8000

b)

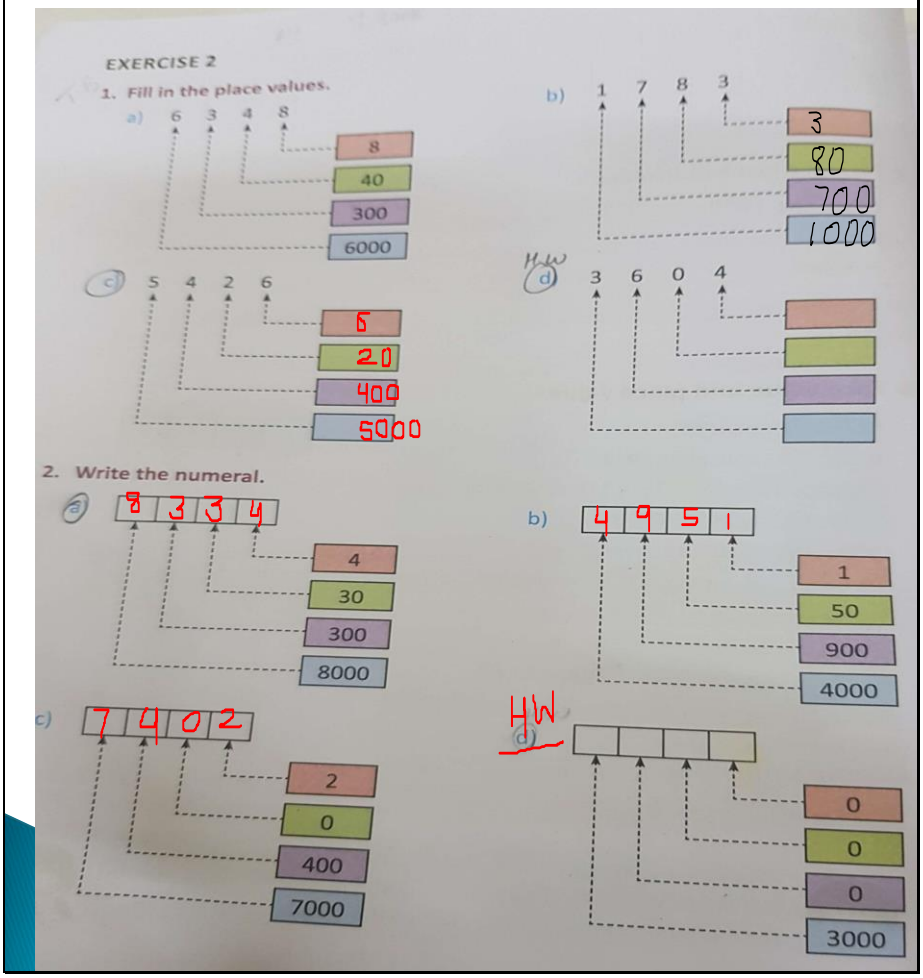
1
50
900
4000

c)

2
0
400
7000

d)

0
0
0
3000



EXERCISE 2

1. Fill in the place values.

a) 6 3 4 8

8
40
300
6000

b) 1 7 8 3

3
80
700
1000

c) 5 4 2 6

6
20
400
5000

HW

d) 3 6 0 4

2. Write the numeral.

a) 8 3 3 4

4
30
300
8000

b) 4 9 5 1

1
50
900
4000

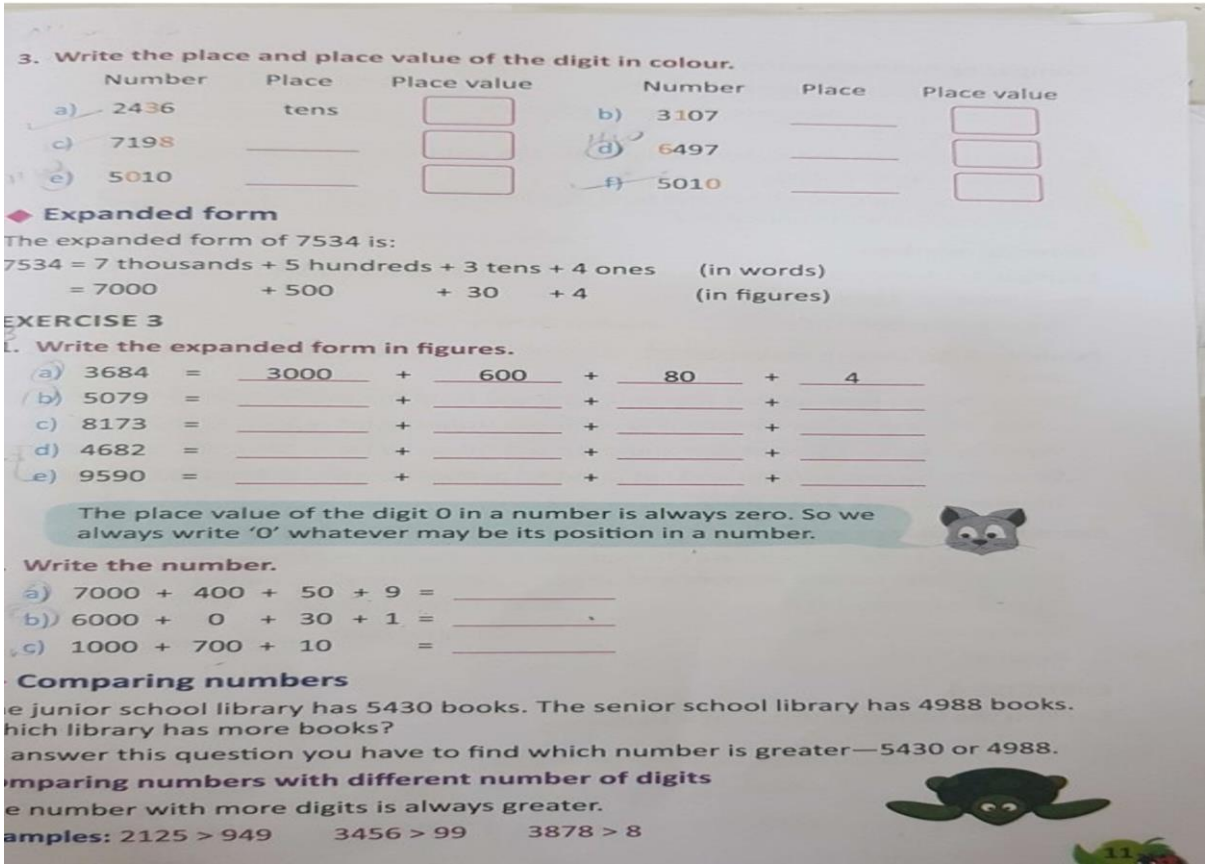
c) 7 4 0 2

2
0
400
7000

HW

d)

0
0
0
3000



3. Write the place and place value of the digit in colour.

	Number	Place	Place value		Number	Place	Place value
a)	2436	tens		b)	3107		
c)	7198			d)	6497		
e)	5010			f)	5010		

Expanded form

The expanded form of 7534 is:

7534 = 7 thousands + 5 hundreds + 3 tens + 4 ones (in words)

= 7000 + 500 + 30 + 4 (in figures)

EXERCISE 3

1. Write the expanded form in figures.

a) 3684 = 3000 + 600 + 80 + 4

b) 5079 = ____ + ____ + ____ + ____

c) 8173 = ____ + ____ + ____ + ____

d) 4682 = ____ + ____ + ____ + ____

e) 9590 = ____ + ____ + ____ + ____

The place value of the digit 0 in a number is always zero. So we always write '0' whatever may be its position in a number.

Write the number.

a) 7000 + 400 + 50 + 9 = ____

b) 6000 + 0 + 30 + 1 = ____

c) 1000 + 700 + 10 = ____

Comparing numbers

e junior school library has 5430 books. The senior school library has 4988 books.
hich library has more books?
answer this question you have to find which number is greater—5430 or 4988.
mparing numbers with different number of digits
e number with more digits is always greater.
amples: 2125 > 949 3456 > 99 3878 > 8

11

Q.3 Write the place and place value of the coloured digit.

	Number	Place	Place value
a)	2436	tens	30
d)	6497	thousands	6000
f)	5 010	hundreds	0

EXPANDED FORM:

- When we expand a number to show the value of each of its digit , it is the expanded form of the number.

  For example:

  a) 3684 = 3000+600+80+4

  b) 5079 = 5000+0+70+9 or 5000+70+9

Exercise – 3

Q.1 Write the expanded form in figures.

b) 5079 = 5000 + 0 + 70 + 9

c) 8173 = 8000 +100 + 70 + 3

e) 9590 = 9000+500+90+0

or

9000+500+90

Exercise- 3

Q.2 Write the number.

a) 7000+400+50+9 = 7459

c) 1000+700+10 = 1710

Surprise test

1. Write the place value and face value of the underlined digit: 6589
2. Write the number name of the given number: 7506
3. Write the number:
   four thousand three hundred two
4. Write the expanded form: 4012

Answer key

1. Write the place value and face value of the underlined digit: 6589
   Place value= 6000, Face value = 6
2. Write the number name of the given number: 7506
   Seven thousand five hundred six
3. Write the number:
   four thousand three hundred two = 4302
4. Write the expanded form: 4012

Ans. 4000+0+10+2 or 4000+10+2

COMPARE 4-DIGIT NUMBERS

A) Comparing numbers with different number of digits

The number with more digits is always greater

e.g 948 < 5,430

(three digit number) (four digit number)

B) Comparing numbers with same number of digits

1. First compare the digit at thousands place

   5,394 > 4,289

   As 5 > 4

Therefore 5,394 > 4,289

EXERCISE-4

Q1. Fill in blanks using the signs <,> or =

b) 999 ____ 1000

d) 5910 ____ 5911

f) 8544 ____ 8544

Q2. Circle the greatest number:

a) 813, 1001, 9990,270.

d) 98 , 1020 , 786 , 999

Q3. Circle the smallest number.

a) 296 , 8532 , 100 , 1795

d) 9305,953,1999,9315

EXERCISE-4 ANSWER KEY

Q1. Fill in blanks using the signs <,> or =

b) 999 < 1000

d) 5910 < 5911

f) 8544 = 8544

Q2. Circle the greatest number:

a) 813, 1001, 9990,270.

Ans: 9990

d) 98 , 1020 , 786 , 999

Ans: 1020

3. Circle the smallest number.

a) 296 , 8532 , 100 , 1795

Ans: 100

d) 9305,953,1999,9315

Ans: 953

Exercise- 4

Q.4 Arrange the numbers in ascending order.

a) 3747 1674 9542

Ans. 1674 3747 9542

d) 7582 , 7959 , 7166 , 7745.

Ans. 7166 , 7582 , 7745 , 7959

Q.5 Arrange the numbers in descending order.

a) 2143, 4782 , 5365

Ans: 5365 , 4782 , 2143

c) 5321 , 5877 , 5108 , 5233

Ans: 5877 , 5321 , 5233 , 5108

FORMING GREATEST NUMBER WITH THE GIVEN DIGITS.

- Form the 4-digit greatest number using the given digits:

  a) 7 , 6 , 9 , 5

  Greatest 4-digit number is 9765.

  b) 0 , 3 , 7 , 1

  Greatest 4-digit number is 7310

FORMING SMALLEST NUMBER WITH THE GIVEN DIGITS.

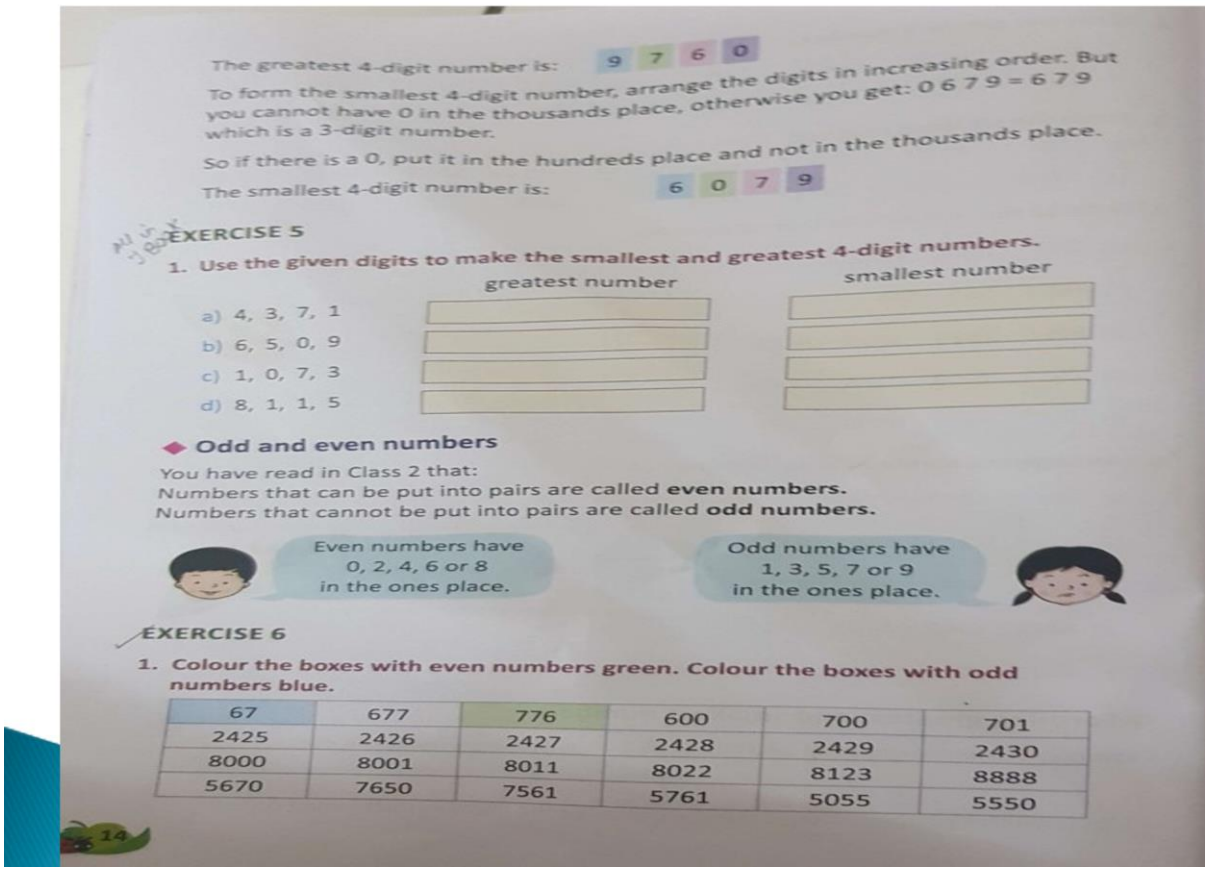
- Form the 4-digit smallest number using the digits:

  a) 6 , 9 , 0 , 7

  Smallest 4-digit number is 6079

  b) 4 , 8 , 9 , 1

  Smallest 4-digit number is 1489



The greatest 4-digit number is: 9 7 6 0

To form the smallest 4-digit number, arrange the digits in increasing order. But you cannot have 0 in the thousands place, otherwise you get: 0 6 7 9 = 6 7 9 which is a 3-digit number.

So if there is a 0, put it in the hundreds place and not in the thousands place.

The smallest 4-digit number is: 6 0 7 9

EXERCISE 5

1. Use the given digits to make the smallest and greatest 4-digit numbers.

	greatest number	smallest number
a) 4, 3, 7, 1		
b) 6, 5, 0, 9		
c) 1, 0, 7, 3		
d) 8, 1, 1, 5		

Odd and even numbers

You have read in Class 2 that:
Numbers that can be put into pairs are called **even numbers.**
Numbers that cannot be put into pairs are called **odd numbers.**

Even numbers have 0, 2, 4, 6 or 8 in the ones place.

Odd numbers have 1, 3, 5, 7 or 9 in the ones place.

EXERCISE 6

1. Colour the boxes with even numbers green. Colour the boxes with odd numbers blue.

67	677	776	600	700	701
2425	2426	2427	2428	2429	2430
8000	8001	8011	8022	8123	8888
5670	7650	7561	5761	5055	5550

14

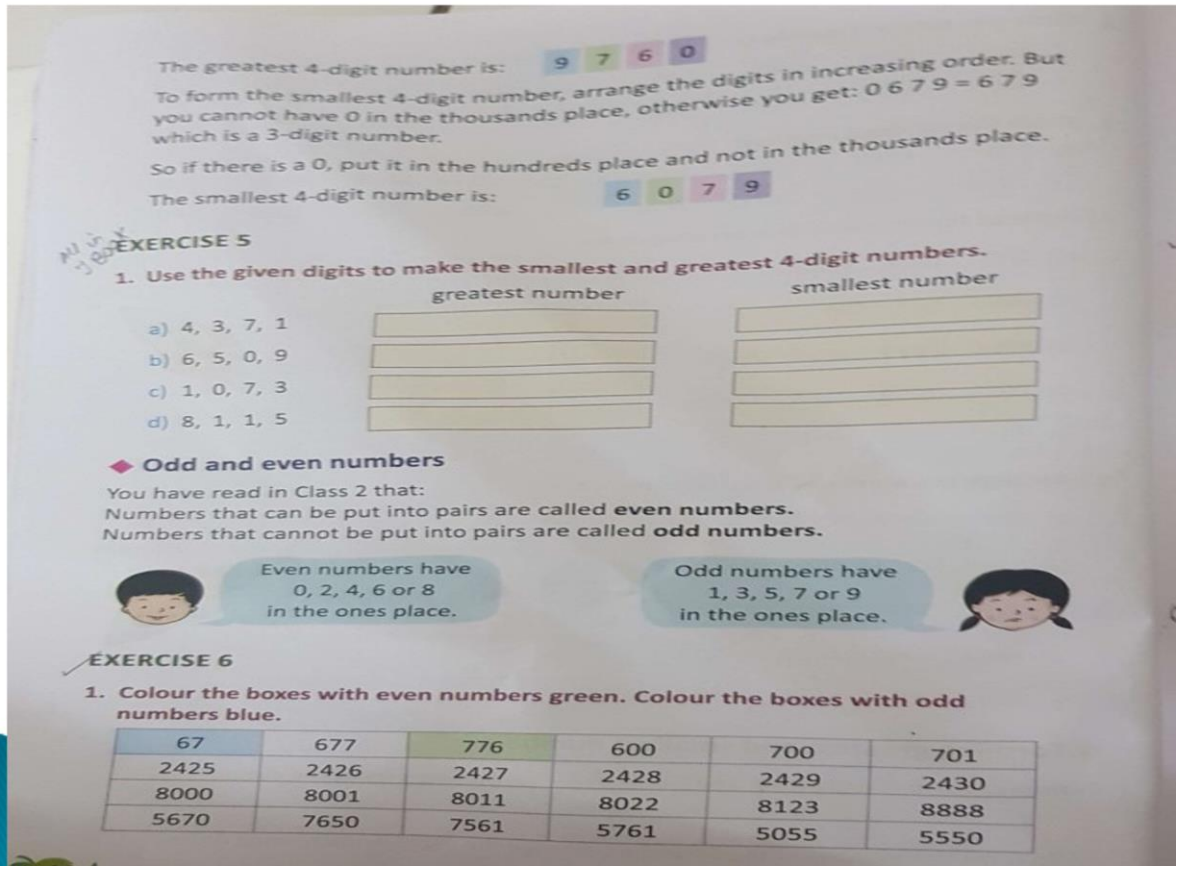
Exercise- 5

- 1. Use the given digits to make the smallest and greatest 4-digit numbers.

Number	Greatest number	Smallest number
a) 4 , 3 , 7 , 1	7431	1347
d) 8,1,1,5	8511	1158

EVEN AND ODD NUMBER

- An **even number** is a **number** that can be divided into two equal groups.
- **Even numbers** end in 2, 4, 6, 8 and 0 regardless of how many digits they have (we know the **number** 5,917,624 is **even** because it ends in 4!).
- An **odd number** is a **number** that cannot be divided into two equal groups.
- **Odd numbers** end in 1, 3, 5, 7, 9.



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To form the smallest 4-digit number, arrange the digits in increasing order. But you cannot have 0 in the thousands place, otherwise you get: 0 6 7 9 = 6 7 9 which is a 3-digit number.

So if there is a 0, put it in the hundreds place and not in the thousands place.

The smallest 4-digit number is: 6 0 7 9

EXERCISE 5

1. Use the given digits to make the smallest and greatest 4-digit numbers.

	greatest number	smallest number
a) 4, 3, 7, 1		
b) 6, 5, 0, 9		
c) 1, 0, 7, 3		
d) 8, 1, 1, 5		

Odd and even numbers

You have read in Class 2 that:
Numbers that can be put into pairs are called **even numbers.**
Numbers that cannot be put into pairs are called **odd numbers.**

Even numbers have 0, 2, 4, 6 or 8 in the ones place.

Odd numbers have 1, 3, 5, 7 or 9 in the ones place.

EXERCISE 6

1. Colour the boxes with even numbers green. Colour the boxes with odd numbers blue.

67	677	776	600	700	701
2425	2426	2427	2428	2429	2430
8000	8001	8011	8022	8123	8888
5670	7650	7561	5761	5055	5550

Exercise – 6

Q. Identify the number as even or odd.

a) 600 – even
b) 5532 – even
c) 8011 – odd
d) 677 – odd
e) 5670 – even
f) 8001 – odd

EXERCISE :7

- Fill in the blanks:

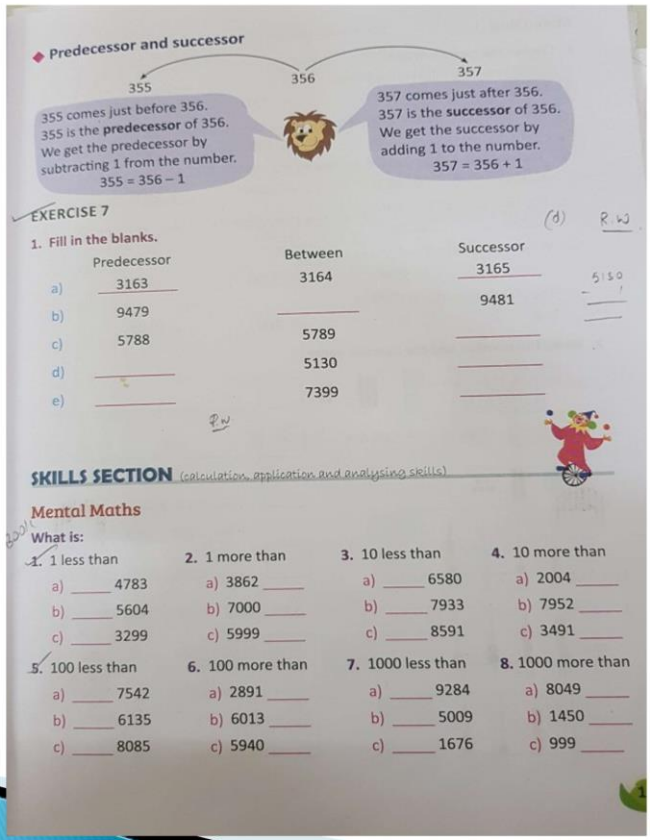
  Predecessor between Successor

a) _____ 3164 _____
d) _____ 5130 _____
e) _____ 7399 _____

ANSWER KEY

- Fill in the blanks:

	Predecessor	between	Successor
a)	3163	3164	3165
d)	5129	5130	5131
e)	7398	7399	7400



◆ **Predecessor and successor**

355 356 357

355 comes just before 356.
355 is the **predecessor** of 356.
We get the predecessor by subtracting 1 from the number.
355 = 356 – 1

357 comes just after 356.
357 is the **successor** of 356.
We get the successor by adding 1 to the number.
357 = 356 + 1

EXERCISE 7

1. Fill in the blanks.

	Predecessor	Between	Successor
a)	3163	3164	3165
b)	9479		9481
c)	5788	5789	
d)		5130	
e)		7399	

SKILLS SECTION (calculation, application and analysing skills)

Mental Maths

What is:

1. 1 less than
   a) 4783
   b) 5604
   c) 3299
2. 1 more than
   a) 3862
   b) 7000
   c) 5999
3. 10 less than
   a) 6580
   b) 7933
   c) 8591
4. 10 more than
   a) 2004
   b) 7952
   c) 3491
5. 100 less than
   a) 7542
   b) 6135
   c) 8085
6. 100 more than
   a) 2891
   b) 6013
   c) 5940
7. 1000 less than
   a) 9284
   b) 5009
   c) 1676
8. 1000 more than
   a) 8049
   b) 1450
   c) 999

Mental Maths

What is:

I. 1 less than

a) 4782 4783

b) 56035604

2. 1 more than

a) 7000 7001

b) 5999 6000

3. 10 less than

a) 6570 6580

b) 7923 7933

4. 10 more than

a) 2004 2014

b) 3491 3501

5. 100 less than
a) 7442 7542
b) 7985 8085

6. 100 more than
a) 2891 2991
b) 6013 6113

7. 1000 less than
a) 8284 9284
b) 676 1676

8. 1000 more than
a) 999 1999
b) 1450 2450

7. 1000 less than
a) 8284 9284
b) 676 1676

8. 1000 more than
a) 999 1999
b) 1450 2450

Surprise test

1. Face value of 6 in 4562 is _____
2. Place value of 0 in 5023 is _____.
3. Write the number name of 7329.
4. 479 is an even or odd.
5. Smallest 4–digit number formed with 2, 6, 0, 3

CHAPTER-2

ADDITION

DEFINITION OF ADDITION

Addition is taking two or more numbers and adding them together, that is, it is the total sum of 2 or more numbers.

How many apples are there in all?

There are 7 apples in one basket and 4 apples in the other.

So, we add 7 and 4 to find the total number of apples.

To add 7 and 4, we can count forward 4 steps from 7

The symbol used to indicate Addition is + (plus symbol).

So, 7 and 4 can be written as 7 + 4 =11

What are addends?

The numbers which are added are called Addends.

For Example:

The number 7 and 8 are addends and the sum is 15

7 (addend)

+ 8 (addend)

15 (sum)

The answer of addition is called sum.

The symbol of addition is +

EXERCISE 1 : Add

a) **2 4 6 3**
+ 1 3 2 4
3 7 8 7

b) **4 0 6 5**
+ 2 8 3 1
6 8 9 6

e) **4 2 0 8**
+ 3 6 5 1
7 8 5 9

g) **2 1 4 5**
+ 7 8 5 4
9 9 9 9