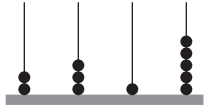


Rethink Mathematics-3

Chapter-1 Numbers

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Counting in thousands, reading and writing a 4 digit number.	Learners will be able to read and write 4 digit numbers.	Create flash cards of 4 digit numbers. Show it to the children and ask them to read the number in words. 2436 1205	Arrange the digits, 2, 7, 8 and 9 to form the number eight thousand seven hundred and eighty nine.
Reading 4-digit numbers on the abacus.		Use the model of an abacus to represent 4 digit numbers.	Read the numbers. 
Working with 4 digit numbers, expanded form, place value and, face value, comparing and ordering of numbers and successor and predecessors.	Learners will be able to work with 4-digit numbers, will be able to identify the place value, face value, compare and order the numbers	Activity worksheets based on place value, face value, successor, predecessor etc be done in class.	_____ is the successor of the predecessor of 4259.

LOOK BACK

Complete the table.

In figure				In Words
Th	H	T	O	
	1	8	9	One hundred and eighty nine
	2	4	6	Two hundred and forty six
	6	3	4	Six hundred and thirty four
	9	7	2	Nine hundred and seventy two
	8	4	5	Eight hundred and forty five

Challenge Corner

Complete the table.

- Two hundred and forty five + six thousand + four thousand and five.
 $= 2445 + 6000 + 4005$
 $= 12450$

Exercise 1.1

1. Read the abacus and write the number in the box.
(a) 1326 (b) 2513 (c) 2329
2. Write the number which comes after.
(a) 3542 (b) 8360 (c) 6433 (d) 7900
3. Write the number which comes before.
(a) 7427 (b) 9999 (c) 8565 (d) 4519
4. Write the numerals for the following.
(a) Four thousand three hundred and fifty eight → 4385
(b) Seven thousand and nineteen → 7019
(c) Eight thousand and six → 8006
(d) Three thousand seven hundred and twelve → 3712
(e) Eight thousand and twenty nine → 8029
5. Write the numbers in words.
(a) 2496 – Two thousand four hundred and ninety six
(b) 8364 – Eight thousand three hundred and sixty four
(c) 2422 – Two thousand four hundred and twenty two
(d) 1238 – One thousand two hundred and thirty eight
(e) 5089 – Five thousand and eighty nine.
6. Counting by thousands, write the numbers starting from
(a) 4365 5365, 6365, 7365, 8365
(b) 2346 3346, 4346, 5346, 6346
(c) 1999 2999, 3999, 4999, 5999
(d) 4247 5247, 6247, 7247, 8247
(e) 998 1998, 2998, 3998, 4998

Exercise 1.2

1. Write the place value of each underlined digit in the following numbers.
(a) Place value of 2 in 82 is **2** (b) Place value of 7 in 374 is **70**
(c) Place value of 5 in 3245 is **5** (d) Place value of 3 in 3756 is **3000**
(e) Place value of 0 in 3600 is **0** (Since $10 \times 0 = 0$) (f) Place value of 9 in 6094 is **90**.
2. Write the place value of 9 in 9423.
Place value of 9 in 9423 is **9000**
3. Find the difference of the place values of two 8 in 7488.
Pv of 8 = 80
Pv of 8 = 8
Difference = 80 – 8 = 72
4. What is the face value of 3 in the following numbers ?
(a) Face value of 3 in 4324 is **3** (b) Face value of 3 in 7483 is **3**

5. Write the following in expanded form.

- (a) $256 = 2 \times 100 + 5 \times 10 + 6 \times 1$
 $= 200 + 50 + 6$
- (c) $7045 = 7 \times 1000 + 0 \times 100 + 4 \times 10 + 5 \times 1$
 $= 7000 + 0 + 40 + 5$
- (c) $3677 = 3 \times 1000 + 6 \times 100 + 7 \times 10 + 7 \times 1$
 $= 3000 + 600 + 70 + 7$
- (d) $9829 = 9 \times 1000 + 8 \times 100 + 2 \times 10 + 9 \times 1$
 $= 9000 + 800 + 20 + 9$

6. Write the short form for the following.

- (a) $2000 + 700 + 60 + 7 = 2767$ (b) $500 + 70 + 9 = 579$
 (c) $4000 + 800 + 00 + 0 = 4800$ (d) $7000 + 9 = 7009$

Exercise 1.3

1. Fill in the boxes with proper sign : $<$, $>$, $=$.

- (a) $7420 \boxed{>} 832$ (b) $344 \boxed{<} 832$ (c) $4344 \boxed{>} 32$
 (d) $742 \boxed{>} 22$ (e) $4399 \boxed{<} 7644$ (f) $834 \boxed{>} 438$
 (g) $242 \boxed{=} 242$ (h) $831 \boxed{<} 8310$

2. A city has 3485 male child and 4611 female child. Which is less in number male child or female child?

Since 3485 is less than 4611, male child is less in number.

3. Rewrite the following numbers in ascending order.

The number is ascending order are :

- (a) 82, 748, 6748, 8432, (b) 3322, 3466, 3476, 3599 (c) 99, 999, 9709, 9990

4. Rewrite the following numbers in descending order.

- (a) 7788, 4244, 621, 341 (b) 8320, 8230, 8032, 832 (c) 8742, 7428, 742, 428

5. Sumit collected 3050 stamps and her sister collected 3005 stamps. Who collected more stamps?

Stamps collected by Sumit = 3050

Stamps collected by his sister = 3005

On comparison we see $3050 > 3005$. So

Sumit collected more stamps.

Exercise 1.4

1. Write the successor and predecessor for the following numbers.

- | | Successor | Predecessor | | Successor | Predecessor |
|----------|-----------|-------------|----------|-----------|-------------|
| (a) 4329 | 4330 | 4328 | (b) 860 | 861 | 859 |
| (c) 4000 | 4001 | 3999 | (d) 7299 | 7300 | 7298 |
| (e) 8000 | 8001 | 7999 | | | |

2. **Form the smallest the greatest 4 digit number using the given digits without repetition of any digit.**

(a) The smallest 4 digit number = 2478, The greatest 4 digit number = 8742

(b) The smallest 4 digit number = 2078, The greatest 4 digit number = 8720

3. **Form the smallest and greatest 4-digit number using the given digits (repetition of digit is allowed).**

Since repetition of digits are allowed, for greatest number we repeat the greater digit, and to form smaller number we repeat the smallest digit.

(a) Smallest number = 6679 Greatest number = 9976

(b) Smallest number = 2008 Greatest number = 8820

4. **Write all 3 digit numbers using all the digits 4, 1, 2 and then arrange them in descending order.**

The numbers formed using 4, 1, 2 are 412, 421, 142, 124, 241, 214

The numbers in descending order are : 421, 412, 241, 214, 142, 124

5. **Find the difference between the successor and predecessor of 2709.**

Successor of 2709 = 2710

Predecessor of 2709 = 2708

$$\begin{array}{r} \text{Difference} = 2710 \\ - 2708 \\ \hline 2 \end{array}$$

6. **Find the difference between the greatest and smallest digit formed with the digits 2, 4, 3, 0.**

Greatest digit = 4320

Smallest = 2034

$$\begin{array}{r} \text{Difference} = 4320 \\ - 2034 \\ \hline 2286 \end{array}$$

SELF ASSESSMENT-1

1. **Write in words.**

(a) Two thousand four hundred and sixty six

(b) Eight thousand four hundred and ninety four

2. **Use correct sign >, < or =.**

(a) 7264 7624 (b) $240 + 5$ $5 + 270$, $\Rightarrow 245$ 275

(c) 6477 647 (d) 126 $126 - 3 + 3$, $\Rightarrow 126$ 126

3. **Arrange the following numbers in ascending order.**

The numbers in ascending order are:

456, 4567, 6457, 7546

4. **Arrange the following numbers in descending order.**

The numbers in descending order

4574, 4547, 635, 63

5. **Form the smallest and greatest 4 digit number without repeating the digits.**

Greatest number = 9740

Smallest number = 4079

6. **Form the smallest and greatest 4 digit number with 7,2,0 (repetition of digits allowed).**

Greatest number = 7720

Smallest number = 2007

7. **Find the difference between the place value and face value of 7 in 2475.**

Place Value of 7 = 70

Face value of 7 = 7

Difference = 63

8. **Write 3782 in expanded form.**

Expanded form = $3000 + 700 + 80 + 2$

9. **Is the face value of 1 greater than its place value in the number 2571?**

No, the place value and face value both are same i.e 1

Chapter-2 Addition

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Addition of 3 and 4 digit number (with and without) regrouping	Students will be able to add 3 and 4 digit numbers.	Worksheets and Practice Sums to be done.	$365 + 492 + 13 = \square$
Properties of Addition	Students will be aware of the order property, and other properties of addition.	Worksheets on Mental calculations involving properties of addition to be done.	$206 + 0 + 1 = \square$ $30 + 1 = \square$
Story sums on real life situations	Students will be able to solve word problems based on real life scenario.	Skit can be enacted based on real life situation involving addition.	A truck carries 245 baskets of fruits and another such trucks, were 146 what is the total count of baskets?

Exercise 2.1

1. **Add the following.**

(a)

H	T	O
6	2	4
+ 1	2	2
7	4	6

(b)

H	T	O
1	2	6
+ 4	1	3
5	3	9

(c)

H	T	O
1	3	6
+ 7	2	2
8	5	8

(d)

Th	H	T	O
	6	6	6
+ 6	2	3	1
6	8	9	7

(e)

Th	H	T	O
5	1	2	3
+ 2	4	5	4
7	5	7	7

(f)

Th	H	T	O
7	4	0	5
+ 1	3	0	1
8	7	0	6

(g)

	H	T	O
	3	2	0
	3	2	6
+	2	4	3
	8	8	9

(h)

	H	T	O
	2	5	7
	1	3	1
+	4	1	1
	7	9	9

(i)

	H	T	O
	3	0	5
		3	1
+	2	0	0
	5	3	6

2. Write in columns and add.

(a)

	Th	H	T	O
	2	2	7	4
			2	5
+		6	0	0
	2	8	9	9

(b)

	H	T	O
	6	1	4
	2	0	2
+	1	7	3
	9	8	9

(c)

	H	T	O
	1	3	5
	2	0	1
+	4	2	3
	7	5	9

(d)

	Th	H	T	O
	2	0	1	3
	1	8	1	1
+			4	5
	3	8	6	9

Exercise 2.2

1. Find the sum.

(a)

	H	T	O
		①	
	2	8	4
+	6	8	5
	9	6	9

(d)

	Th	H	T	O
		6	3	4
+		8	6	5
	1	4	9	9

(c)

	H	T	O
		①	
	2	4	9
+	3	4	7
	5	9	6

(d)

	H	T	O
	①	①	
	3	7	5
+	4	9	5
	8	7	0

(e)

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

(f)

	H	T	O
		①	
	4	0	5
+		2	5
	4	3	0

(g)

	H	T	O
		①	
	8	3	9
+		8	7
	9	2	6

(h)

	Th	H	T	O
		①	①	
		6	8	7
+		3	4	5
	1	0	3	2

(i)

	Th	H	T	O
	①	①	①	
		7	2	8
+		3	8	9
	1	1	1	7

2. Add the following using column method.

(a)

	Th	H	T	O
			①	
		8	0	9
+		6	4	2
	1	4	5	1

(b)

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

(b)

	H	T	O
		①	
	3	1	6
+	6	1	4
	9	3	0

3. Add the following:

(a)

H	T	O
①	①	
4	2	5
	1	8
+ 3	6	2
8	0	5

(b)

H	T	O
	①	
2	0	0
1	3	5
+ 2	5	5
5	9	0

(c)

H	T	O
①	①	
2	3	5
3	8	5
+ 1	2	1
7	4	1

(a)

Th	H	T	O
①	①	①	
	1	6	5
	8	6	3
+	2	2	5
1	2	5	3

(e)

Th	H	T	O
②	①	①	
	2	2	2
	8	6	5
+	9	1	9
2	0	0	6

(f)

H	T	O
①	①	
4	6	5
1	3	2
+ 2	4	5
8	4	2

4. Add the following:

(a)

Th	H	T	O
①	①	①	
1	4	5	9
+ 2	7	9	9
4	1	5	8

(b)

TTh	Th	H	T	O
①	①	①	①	
	7	9	3	2
+	8	2	6	9
1	6	2	0	1

(c)

TTh	Th	H	T	O
①	①	①		
	8	2	7	7
+	7	7	8	2
1	6	0	5	9

Exercise 2.3

1. Fill in the blanks without actually adding.

a. $862 + 13 = 13 + \mathbf{862}$

c. $514 + 600 + 400 = 400 + \mathbf{514} + 600$

e. $1265 + 0 = \mathbf{1265}$

b. $13 + 180 + 12 = 12 + 180 + \mathbf{13}$

d. $702 + 281 + \mathbf{620} = 281 + 620 + 702$

e. $1356 + 1 = \mathbf{1357}$

2. Add:

①		
2	5	2
+	1	8
2	7	0

①		
1		8
2	5	2
2	7	0

Yes, the sum in both cases are same.

3. Add $24 + 63 + 6$ and show the associative property of addition.

①	
2	4
6	3
+	6
9	3

①	
6	3
2	4
+	6
9	3

①	6
2	4
+	6
9	3

We see that if we add in any order of the addends, the answer is same.

Thus associative property is true.

Exercise 2.4

1. In a baseball game, 258 adult tickets and 125 children tickets were sold. How many tickets were sold altogether?

$$\begin{array}{rcl} \text{No. of adult tickets sold} & = & 258 \\ \text{No of child tickets sold} & = & +125 \\ \hline \text{Total tickets sold} & = & 383 \end{array}$$

Therefore, 383 tickets were sold in all.

2. Jasmine counts 151 cars while going to school. She counts 231 cars while coming back home. How many cars does she count in total?

$$\begin{array}{rcl} \text{Number of cares counted by Jasmine while going} & = & 151 \\ \text{Number of cars counted by Jasmine while returning} & = & +231 \\ \hline \text{Total no. of cars counted} & = & 382 \end{array}$$

Therefore, 382 cars were counted in total.

3. There are 2452 fish in one pond and 1742 fish in another pond. How many fish are there in total?

$$\begin{array}{rcl} \text{Number of fish in one pond} & = & \overset{\textcircled{1}}{2} \ 4 \ 5 \ 2 \\ \text{Number of fish in another pond} & = & +1 \ 7 \ 4 \ 2 \\ \hline \text{Total number of fish} & = & 4 \ 1 \ 9 \ 4 \end{array}$$

Therefore, there are 4194 fish in both ponds.

4. Ann and Sam have a spider catching contest. Ann catches 476 spiders and Sam catches 349 spiders. How many spiders have they caught altogether?

$$\begin{array}{rcl} \text{Ann catches} & = & \overset{\textcircled{1}}{4} \ \overset{\textcircled{1}}{7} \ 6 \ \text{Spiders} \\ \text{Sam catches} & = & +3 \ 4 \ 9 \ \text{Spiders} \\ \hline \text{Total spiders caught} & = & 8 \ 2 \ 5 \end{array}$$

Therefore, Ann and Sam caught 825 spiders.

5. A school library has 2730 books in French, 2531 books in English and 368 books in other languages. How many books are there in the library?

$$\begin{array}{rcl} \text{No. of French books in the library} & = & \overset{\textcircled{1}}{2} \ \overset{\textcircled{1}}{7} \ 3 \ 0 \\ \text{No. of English books in the library} & = & 2 \ 5 \ 3 \ 1 \\ \text{No. of other languages books.} & & +3 \ 6 \ 8 \\ \hline \text{Total number of books} & = & 5 \ 6 \ 2 \ 9 \end{array}$$

Therefore, there are 5629 books in the library.

6. In a parking lot, there are 236 white cars, 182 red cars and 182 grey coloured cars. How many cars are there in the parking lot?

$$\begin{array}{r}
 \text{No. of white cars} = \begin{array}{r} \textcircled{2} \textcircled{1} \\ 2 \ 3 \ 6 \end{array} \\
 \text{No. of red cars} = \begin{array}{r} 1 \ 8 \ 2 \end{array} \\
 \text{No. of grey cars} = + \begin{array}{r} 1 \ 8 \ 2 \end{array} \\
 \hline
 \text{Total cars in parking lot} = \begin{array}{r} 6 \ 0 \ 0 \end{array}
 \end{array}$$

7. A garden has 625 mango trees and 238 jamun trees. How many trees are there in the garden?

$$\begin{array}{r}
 \text{No. of mango trees} = \begin{array}{r} \textcircled{1} \\ 6 \ 2 \ 5 \end{array} \\
 \text{No. of Jamun trees} = + \begin{array}{r} 2 \ 3 \ 8 \end{array} \\
 \hline
 \text{Total no. of trees in the garden} = \begin{array}{r} 8 \ 6 \ 3 \end{array}
 \end{array}$$

Therefore, there are 863 trees in the garden.

Challenge Corner

A number was obtained by adding 82 to the sum of 37 and 470. What is the number ?

$$\begin{array}{r}
 (37 + 470) + 82 \quad \begin{array}{r} \textcircled{1} \\ 3 \ 7 \end{array} \\
 \quad \quad \quad \begin{array}{r} 4 \ 7 \ 0 \end{array} \\
 + \quad \begin{array}{r} 8 \ 2 \end{array} \\
 \hline
 \quad \quad \begin{array}{r} 5 \ 8 \ 9 \end{array}
 \end{array}$$

589 is the number.

SELF ASSESSMENT-2

1. Complete the following additions.

(a)

	H	T	O
	1	2	3
	2	1	6
+	3	6	0
	6	9	9

(b)

	Th	H	T	O
	$\textcircled{1}$		$\textcircled{1}$	
		4	0	0
		6	2	5
+		1	3	5
	1	1	6	0

(c)

	H	T	O
	$\textcircled{2}$	$\textcircled{1}$	
	1	7	6
	4	8	3
+	2	5	9
	9	1	8

(d)

	H	T	O
	$\textcircled{1}$	$\textcircled{1}$	
	1	8	3
		2	9
+	2	6	4
	4	7	6

2. What is the sum of 123 + 234?

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

Answer : (c)

3. Fill in the missing digit in the addition.

$$\begin{array}{r}
 2 \ 1 \ 3 \\
 5 \ 2 \ \boxed{6} \\
 \hline
 \boxed{7} \ 3 \ 9
 \end{array}$$

4. Nandini was arranging her collection of stamps. Her younger brother gave her 37 stamps. If she had 729 stamps, how much does she have now?

$$\begin{array}{rcl}
 \text{Nandini had} & = & \overset{\textcircled{1}}{7} \ 2 \ 9 \quad \text{stamps} \\
 \text{Her brother gave} & = & + \ 3 \ 7 \quad \text{stamps} \\
 \text{Total} & = & \underline{7 \ 6 \ 6} \quad \text{stamps}
 \end{array}$$

There fore, Nandini collected 766 stamps.

Chapter-3 Subtraction

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Subtraction of 3 and 4 digit numbers.	The students will be able to subtract 3 and 4 digits number with abacus, without grouping and with grouping	Use video or ppt to explain subtraction Worksheets to be done	Subtract the following 1) $652 - 413 = \square$ 2) $132 - 13 - 10 = \square$
Solving of word problems	The students will be able to solve word problems related to subtraction.	Questions based on day to day. life experiences can be framed and asked to solve	In a hospital 259 people were tested for malaria out of which 133 were infected. How many were not infected?

Exercise 3.1

1. Subtract.

(a)

	H	T	O
	4	7	7
–	2	0	3
	2	7	4

(b)

	H	T	O
	7	3	0
–	6	1	0
	1	2	0

(c)

	H	T	O
	7	9	7
–	2	6	2
	5	3	5

(d)

	H	T	O
	3	8	3
–	2	8	0
	1	0	3

(e)

	H	T	O
	4	5	9
–	1	4	5
	3	1	4

(f)

	H	T	O
	2	0	5
–	1	0	0
	1	0	5

(g)

H	T	O
3	8	5
—	3	3
3	5	2

(h)

H	T	O
8	1	1
—	4	1
4	0	1

(i)

H	T	O
2	7	1
—	5	0
2	2	1

(j)

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

(k)

Th	H	T	O
5	9	3	6
—	2	5	3
3	4	0	1

(l)

Th	H	T	O
9	8	1	4
—	7	6	0
2	2	1	1

2. Arrange in columns and find the difference.

(a)

H	T	O
6	8	9
—	2	4
4	4	2

(b)

H	T	O
8	5	0
—	7	2
1	3	0

(c)

Th	H	T	O
7	6	9	9
—	3	4	7
4	2	2	2

3. Subtract 201 from 369.

H	T	O
3	6	9
—	2	0
1	6	8

4. Find the difference of 579 and 235.

H	T	O
5	7	9
—	2	3
3	4	4

Exercise 3.2

1. Subtract the following:

(a)

H	T	O
7	⁽⁴⁾ 5	⁽¹⁸⁾ 8
—	1	3
6	1	9

(b)

H	T	O
3	⁽²⁾ 3	⁽¹²⁾ 2
—	1	1
2	1	7

(c)

H	T	O
5	8	7
—	4	7
5	4	0

(d)

H	T	O
⁽⁵⁾ 6	⁽¹⁶⁾ 7	⁽¹⁰⁾ 0
—	2	7
3	9	5

(e)

H	T	O
2	6	8
—	3	5
2	3	3

(f)

H	T	O
6	⁽⁴⁾ 5	⁽¹¹⁾ 1
—	2	1
4	3	5

(g)

	H	T	O
		2	11
	1	3	1
-	1	2	5
	0	0	6

(h)

	H	T	O
		2	15
	4	3	5
-	1	0	7
	3	2	8

(i)

	H	T	O
		4	12
	4	5	2
-	2	3	6
	2	1	6

(j)

	Th	H	T	O
			6	12
	5	5	7	2
-	2	3	4	6
	3	2	2	6

(k)

	Th	H	T	O
	9	2	5	7
-	7	1	3	4
	2	1	2	3

(l)

	Th	H	T	O
			1	17
	7	4	5	7
-	2	3	2	9
	5	1	2	8

2. Subtract:

(a)

	H	T	O
		3	15
	4	4	5
-	2	2	6
	2	1	9

(b)

	H	T	O
	7	5	0
-	2	3	0
	5	2	0

(c)

	Th	H	T	O
	5	0	1	14
	6	1	2	4
-	2	5	9	7
	3	5	2	7

(d)

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

(e)

	Th	H	T	O
	6	13	13	
	7	4	3	2
-	6	4	9	1
		9	4	1

(f)

	H	T	O
	5	14	10
	6	5	0
-	4	8	9
	1	6	1

3. Find the difference between 5425 and 3326.

	Th	H	T	O
		3	11	15
	5	4	2	5
-	3	3	2	6
	2	0	9	9

4. Subtract 475 from 822.

	H	T	O
	7	11	12
	8	2	2
-	4	7	5
	3	4	7

Activity Worksheet

Across

1. $\begin{array}{r} 7007 \\ -3586 \\ \hline 3421 \end{array}$	3. $\begin{array}{r} 9622 \\ -2719 \\ \hline 6903 \end{array}$
6. $\begin{array}{r} 5743 \\ -3153 \\ \hline 2590 \end{array}$	8. $\begin{array}{r} 8744 \\ -1008 \\ \hline 7736 \end{array}$
9. $\begin{array}{r} 2442 \\ -1840 \\ \hline 6028 \end{array}$	11. $\begin{array}{r} 9981 \\ -7134 \\ \hline 2847 \end{array}$
12. $\begin{array}{r} 8757 \\ -5789 \\ \hline 2968 \end{array}$	13. $\begin{array}{r} 5069 \\ -3368 \\ \hline 1701 \end{array}$
14. $\begin{array}{r} 9379 \\ 3804 \\ \hline 5575 \end{array}$	

					1. 3	2. 4	2	1
		3. 6	9	0	4. 3		2	
					0	5		
5. 1				6. 2	5	9	0	7. 5
8. 7	7	3	6		0			0
9				9. 6	0	11. 2	10. 8	4
2		12. 2	9	6	8		2	4
		8		6			7	
		4		13. 1	7	0	1	
14. 5	5	7	5					

Down

2. $\begin{array}{r} 6335 \\ -2075 \\ \hline 4250 \end{array}$	4. $\begin{array}{r} 9034 \\ -5984 \\ \hline 3050 \end{array}$	5. $\begin{array}{r} 9799 \\ -8007 \\ \hline 1792 \end{array}$	6. $\begin{array}{r} 1770 \\ -1564 \\ \hline 206 \end{array}$
7. $\begin{array}{r} 8753 \\ -3679 \\ \hline 5074 \end{array}$	9. $\begin{array}{r} 9263 \\ -2642 \\ \hline 6621 \end{array}$	10. $\begin{array}{r} 8798 \\ -527 \\ \hline 8271 \end{array}$	12. $\begin{array}{r} 4082 \\ -1235 \\ \hline 2847 \end{array}$

Exercise 3.3

1. Tina read 433 pages of her book. If there are 873 pages, how many more pages should she read to complete the book ?

$$\begin{array}{rcl}
 \text{Total number of pages in the book} & = & 873 \\
 \text{No. of pages read by Tina} & = & -433 \\
 \text{No. of pages left} & = & \underline{440}
 \end{array}$$

Therefore, Tina needs to read 440 more pages.

2. **Alva had 377 candles. She used 240 of them. How many candles does she have now?**

$$\begin{array}{rcl} \text{Total number of candles} & = & 377 \\ \text{No. of Candles used} & = & - 240 \\ \hline \text{No. of Candles left} & = & 137 \end{array}$$

Therefore, 137 candles are left.

3. **Asha keeps collecting pokemon stickers. She collected 963 pokemon stickers but 641 got stolen. How many pokemon is she left with?**

$$\begin{array}{rcl} \text{No. of stickers collected} & = & 963 \\ \text{No. of stickers stolen} & = & - 641 \\ \hline \text{No. of stickers left} & = & 322 \end{array}$$

Therefore, there are 322 stickers left.

4. **Suzie and Michelle are reading a book. Suzie read 642 pages and Michelle read 485 pages. Who read more pages and by how much ?**

$$\begin{array}{rcl} \text{No. of pages read by Suzie} & = & \begin{array}{r} \textcircled{5} \textcircled{13} \textcircled{1} \\ 642 \end{array} \\ \text{No. of pages read by Michelle} & = & \begin{array}{r} - 485 \\ \hline 157 \end{array} \end{array}$$

Therefore, Suzie read more 157 pages than Michelle.

5. **Anju bought 562 sweets on her birthday. She distributed 326 sweets among her friends. How many sweets are left with her?**

$$\begin{array}{rcl} \text{No. of sweets bought by Anju} & = & \begin{array}{r} \textcircled{5} \textcircled{1} \\ 562 \end{array} \\ \text{No. of sweets distributed} & = & - 326 \\ \hline \text{No. of sweets left} & = & 236 \end{array}$$

Therefore, 236 sweets are left.

6. **There are 330 seats in a cinema hall. On one day, 85 seats were found vacant. How many people were seated?**

$$\begin{array}{rcl} \text{No. of seats in the cinema hall} & = & \begin{array}{r} \textcircled{2} \textcircled{12} \textcircled{1} \\ 330 \end{array} \\ \text{No. of seats vacant} & = & - 85 \\ \hline \text{No. of seats occupied} & = & 245 \end{array}$$

Therefore, 245 seats are occupied

7. **Shayan bought 768 shirts in a month for his shop. On the last day of the month, he had 373 shirts left. How many shirts did he sell in that month?**

$$\begin{array}{rcl} \text{Total number of shirts bought} & = & \begin{array}{r} \textcircled{6} \textcircled{16} \\ 768 \end{array} \\ \text{No. of shirts left} & = & - 373 \\ \hline \text{No. of shirts sold} & = & 395 \end{array}$$

Therefore, shayan sold 395 shirts.

8. What must be added to 625 to get 930?

$$\begin{array}{r} \textcircled{8} \textcircled{2} \textcircled{1} \\ 4 \cancel{9} \cancel{3} 0 \\ - 4 \ 6 \ 2 \ 5 \\ \hline 3 \ 0 \ 5 \end{array}$$

Therefore, 305 should be added to 625 to get 930.

ACTIVITY WORKSHEET

Rohit went to a restaurant. The menu card is given alongside.

Rohit ordered a plate of rice, 1 roti and 1 chicken curry. What will be his total bill?

$$\begin{array}{rcl} \text{Price of rice} & = & 1 \ 0 \ 0 \\ \text{Price of curry} & = & 1 \ 0 \ 0 \\ \text{Price of roti} & = & + \ 5 \ 5 \\ & & \hline & & 2 \ 5 \ 5 \end{array}$$

Total bill = ₹255

Exercise 3.4

1. Solve:

(a)
$$\begin{array}{r} \text{H} \ \text{T} \ \text{O} \\ 6 \ 4 \ 2 \\ - 1 \ 3 \ 2 \\ \hline 5 \ 1 \ 0 \end{array}$$

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

Answer : 523

(b)
$$\begin{array}{r} \text{H} \ \text{T} \ \text{O} \\ \quad 1 \ 3 \\ + 6 \ 5 \ 1 \\ \hline 6 \ 6 \ 4 \end{array}$$

$$\begin{array}{r} \text{H} \ \text{T} \ \text{O} \\ 6 \ 6 \ 4 \\ - 1 \ 3 \ 0 \\ \hline 5 \ 3 \ 4 \end{array}$$

Answer : 534

(c)
$$\begin{array}{r} \text{H} \ \text{T} \ \text{O} \\ \textcircled{6} \ \textcircled{13} \ \textcircled{12} \\ \cancel{7} \ \cancel{4} \ \cancel{2} \\ - 2 \ 8 \ 5 \\ \hline 4 \ 5 \ 7 \end{array}$$

$$\begin{array}{r} \text{H} \ \text{T} \ \text{O} \\ \quad \textcircled{1} \\ 4 \ 5 \ 7 \\ + 6 \ 3 \ 5 \\ \hline 10 \ 9 \ 2 \end{array}$$

Answer : 1092

2. Simplify the following.

(a) $36 - 18 + 32 - 4$

(b) $535 - 360 - 40 + 220$

(c) $4300 - 4152 - 425$

(a)
$$\begin{array}{r} 3 \ 6 \\ + 3 \ 2 \\ \hline 6 \ 8 \end{array}$$

$$\begin{array}{r} 1 \ 8 \\ + 4 \\ \hline 2 \ 2 \end{array}$$

$$\begin{array}{r} 6 \ 8 \\ - 2 \ 2 \\ \hline 4 \ 6 \end{array}$$

Answer : 46

(b)
$$\begin{array}{r} 5 \ 3 \ 5 \\ + 2 \ 2 \ 0 \\ \hline 7 \ 5 \ 5 \end{array}$$

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

$$\begin{array}{r} 7 \ 5 \ 5 \\ - 4 \ 0 \ 0 \\ \hline 3 \ 5 \ 5 \end{array}$$

Answer : 335

(c)

$$\begin{array}{r} 4152 \\ + 25 \\ \hline 4177 \end{array}$$

$$\begin{array}{r} 4300 \\ - 4177 \\ \hline 123 \end{array}$$

Answer : 123

3. Arinkrit had ₹ 892 in his piggy bank. He added ₹ 181 on Monday. He took out ₹ 165 on Tuesday to buy a book. How much money does he have in his piggy bank now?

Money in piggy bank =

8 9 2

Money added on Monday =

+ 1 8 1

$$\begin{array}{r} 1073 \end{array}$$

Money withdraw on Tuesday = 1073 – 165

= 908

$$\begin{array}{r} \textcircled{6} \textcircled{13} \\ 10\cancel{7}\cancel{3} \\ - 165 \\ \hline 908 \end{array}$$

Therefore, Arinkrit has ₹ 908 in his piggy bank.

4. A train had 2812 passengers. At New Delhi station, 2180 passengers got down and 108 new passengers boarded the train. How many passengers are there in the train now?

No. of passengers in the train =

2 8 1 2

No. of passengers got down at Delhi =

– 2 1 8 0

$$\begin{array}{r} 632 \end{array}$$

No. of passengers boarded at Delhi

$$\begin{array}{r} \textcircled{1} \\ 632 \\ + 108 \\ \hline 740 \end{array}$$

Therefore, there are 740 passengers in the train now.

5. Ravi collected 640 stamps. Out of these 22 got lost and he gave 18 stamps to his friend. How many stamps are left with Ravi?

Total no. of stamps Ravi had =

$$\begin{array}{r} \textcircled{3} \\ 6\cancel{4}0 \end{array}$$

No. of stamps lost =

$$\begin{array}{r} - 22 \\ \hline 618 \end{array}$$

No. of stamps given to his friend =

6 1 8

No. of stamps left =

$$\begin{array}{r} - 18 \\ \hline 438 \end{array}$$

Therefore, Ravi has 438 stamps now.

Self Assessment-3

1. Subtract :

(a)

	H	T	O
	3	4	7
-	2	1	5
	1	3	2

(b)

	H	T	O
	8	⁽⁵⁾ 6	5
-	4	2	7
	4	3	8

(c)

	Th	H	T	O
		⁽⁴⁾ 5	⁽¹²⁾ 3	⁽¹⁷⁾ 7
-		1	5	9
		3	7	8

(d)

	Th	H	T	O
		⁽⁰⁾ 1	⁽⁹⁾ 0	⁽¹⁰⁾ 0
-		0	2	5
			7	5

2. Subtract the difference of 245 and 100 from 700.

	H	T	O
	2	4	5
-	1	0	0
	1	4	5

	H	T	O
	7	0	0
-	1	4	5
	5	5	5

3. Surbhi had ₹645 in her pocket. She went to the market and bought a T-shirt worth ₹190 and a slipper worth ₹100. How much did she spend and how much is left with her?

Money spent =

	H	T	O
	1	9	0
+	1	0	0
	2	9	0

Money left =

	H	T	O
	⁽⁵⁾ 6	⁽¹⁴⁾ 4	5
-	3	9	0
	2	5	5

Therefore, Surbhi spend ₹290 and ₹355 is left.

Chapter-4 Multiplication

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots												
Conceptual understanding of multiplication (grouping and multiplication as repeated addition) Multiplication on a number line Multiplication tables 1 to 10	students will be able to write repeated addition as multiplication Students will be able to answer multiplication tables randomly	Group activity Ask children to form 3 groups of 4. Explain $3 \text{ times } 4 = 3 \times 4 = 12$ Dodging of tables.	If there are 4 cross how many legs can you see? Complete the grid by multiplying												
Multiplication of 3 digit by 1 digit and 2 digit by 2 digit.	Students will be able to multiply $3d \times 1d$ and $2d \times 2d$	Worksheets to be done	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>\times</td><td>7</td><td>6</td><td>3</td></tr> <tr> <td>2</td><td></td><td></td><td></td></tr> <tr> <td>8</td><td></td><td></td><td></td></tr> </table>	\times	7	6	3	2				8			
\times	7	6	3												
2															
8															
Multiplication by 1, 0, 10, 100 and multiples of 10 and 100.	Students will be able to estimate the product by 1, 0, 10 and 100	Worksheet on Estimation by multiplication of 10,000 Practice exercise to be done													
Story sums related to day to day experience	Students will be able to solve daily life problems involving multiplication	Group activity a small skit of artificial shopping and calculation of bill.	A truck has 12 wheels. How many wheels are there in 11 such trucks?												

Exercise 4.1

1.

①
3 7
$\times 5$
1 8 5

2.

①
2 2
$\times 9$
1 9 8

3.

④
3 7
$\times 6$
2 2 2

4.

③
8 8
$\times 4$
3 5 2

5.

4 0
$\times 3$
1 2 0

6.

①
3 2
$\times 5$
1 6 0

7.

②
2 9
$\times 3$
8 7

8.

3 0
$\times 5$
1 5 0

Exercise 4.2

Multiply :

1.

H	T	O
	⑦	
	3	8
	$\times 9$	
3	4	2

2.

H	T	O
	①	
	4	2
	$\times 6$	
2	5	2

3.

H	T	O
	8	7
	$\times 4$	
3	4	8

4.

Th	H	T	O
	6	2	1
		×	3
1	8	6	3

5.

H	T	O
	^① 0	5
4		×
		2
8	1	0

6.

Th	H	T	O
	^② 3	^② 6	5
		×	4
1	4	6	0

7.

Th	H	T	O
	^③ 2	1	5
		×	6
1	2	9	0

8.

Th	H	T	O
	^② 1	^④ 2	5
		×	9
1	1	2	5

9.

Th	H	T	O
	^④ 3	7	0
		×	6
2	2	2	0

10.

Th	H	T	O
	^① 4	^② 2	5
		×	5
2	1	2	5

11.

Th	H	T	O
	5	1	1
		×	8
4	0	8	8

12.

H	T	O
1	2	5
	×	1
1	2	5

13.

Th	H	T	O
	^① 2	^① 4	6
		×	3
7	3	8	6

14.

Th	H	T	O
	^⑤ 2	^① 8	2
		×	7
1	9	7	4

15.

Th	H	T	O
	^① 1	^⑤ 1	^③ 8
		×	6
7	1	1	0

Exercise 4.3

1. Multiply the following.

(a)

H	T	O
	^② 3	5
	×	4
1	4	0

35×40
 $= 35 \times 4 \text{ and add a zero}$
 $= 1400$

(Multiply 35×4 and add a zero).

(b)

Th	H	T	O
		2	1
		5	4
		8	4
+	1	0	5
	1	1	3
		4	

(c)

Th	H	T	O
		8	1
		×	9
		7	2
+	7	2	9
	8	0	1
		9	

(d)

Th	H	T	O
		8	9
		×	2
		4	4
+	1	7	8
	2	2	2
		5	

(e)

Th	H	T	O	
		8	5	
	×	5	9	
<hr/>				
	7	6	5	
+	4	2	5	0
<hr/>				
	5	0	1	5

(f)

Th	H	T	O	
	^① 3	^① 2	2	
	×	4	6	
<hr/>				
	1	9	3	2
+	12	8	8	0
<hr/>				
	14	8	1	2

(g)

Th	H	T	O	
	6	2	2	
	×	1	0	
<hr/>				
	0	0	0	
+	6	2	2	0
<hr/>				
	6	2	2	0

(h) $13 \times 7 \times 2 = 13 \times 14$

H	T	O	
	1	3	
	×	1	4
<hr/>			
	5	2	
+	1	3	0
<hr/>			
	1	8	2

(i) $18 \times 9 \times 7 = 18 \times 63$

Th	H	T	O	
		1	8	
		×	6	3
<hr/>				
		5	4	
+	1	0	8	0
<hr/>				
	1	1	3	4

2. Solve the following.

(a)

H	T	O	
	3	3	
	×	2	5
<hr/>			
	1	6	5
+	6	6	1
<hr/>			
	8	2	5

(b)

H	T	O	
	2	4	
	×	3	3
<hr/>			
	7	2	
+	7	2	0
<hr/>			
	7	9	2

(c)

H	T	O	
	1	7	
	×	3	2
<hr/>			
	3	4	
5	1	×	
<hr/>			
	5	4	4

(d)

H	T	O	
	3	9	
	×	2	4
<hr/>			
	1	5	6
+	7	8	0
<hr/>			
	9	3	6

(b)

Th	H	T	O	
	3	5	2	
	×	2	1	
<hr/>				
	3	5	2	
+	7	0	4	0
<hr/>				
	7	3	9	2

(c)

Th	H	T	O		
	8	7	2		
	×	4	5		
<hr/>					
	4	3	6	0	
+	3	4	8	8	0
<hr/>					
	3	9	2	4	0

3. Multiply :

(a)

Th	H	T	O
		4	6
	×	1	0
		4	6

(b)

Th	H	T	O
		3	7
	×	8	0
		2	9

(c)

Th	H	T	O
		4	9
	×	1	0
		4	9

(d)

Th	H	T	O
			3
	×	1	0
		3	0

(e)

Th	H	T	O
		1	9
	×	7	0
		1	3

(f)

Th	H	T	O
	5	0	0
		×	5
	2	5	0

(g)

Th	H	T	O
		4	1
	×	3	0
	1	2	3

(h)

Th	H	T	O
		3	5
	×	2	0
	7	0	0

(i)

Th	H	T	O
		1	3
	×	1	0
	1	3	0

ACTIVITY WORKSHEET

Fill in the blanks.

1. $7 \times 0 = 0$
2. $9 \times 1 = 9$
3. $4 \times 7 = 7 \times 4$
4. $5 \times 4 \times 3 = 4 \times 3 \times 5$
5. $749 \times 0 = 0$
6. $8432 \times 1 = 8432$
7. $18 \times 1 = 18$
8. $82 \times 39 = 39 \times 82$
9. $824 \times 36 = 824 \times 36$
10. $7482 \times 0 = 0$

Exercise 4.4

1. One car has 4 tyres. There are 42 cars in the parking lot. How many tyres are there in total?

No. of cars in the parking lot = 42
 No. of tyres in 1 car = 4
 Total no. of tyres = 42×4

	4	2
	×	4
	1	6

Therefore, there are 168 tyres. = 168

2. There are 3 school buses taking students for a picnic to the zoo. If each bus contains 52 students, how many students are going for the picnic?

No. of children in each bus = 52
 No of buses = 3
 Total no of children = 52×3
 = 156

	5	2
	×	3
	1	5

Therefore, there are 156 children going for the picnic.

3. A movie theatre has 19 rows of seats. In each row, there are 11 seats. How many total seats are there in the movie theatre?

$$\begin{aligned}\text{No. of rows} &= 19 \\ \text{No. of seat in each row} &= 11 \\ \\ \text{Total no. of seats} &= 19 \times 11 \\ &= 209\end{aligned}$$

1	9
×	11
—	
1	9
1	9
×	
2	09

Therefore, there are 209 seats in the movie theatre.

4. If the weight of one plate is 214 g. What is the total weight of 8 plates?

$$\begin{aligned}\text{Weight of 1 plate} &= 214 \text{ g} \\ \text{Weight of 8 plates} &= 214 \times 8 \\ &= 1712\end{aligned}$$

①	③
2	14
×	8
—	
17	12

Therefore, 8 plates weighs 1712 g.

5. In a class, there are 45 students. Each student donated ₹ 25 for a relief fund. What is the total collection from the class?

$$\begin{aligned}\text{Total number of students} &= 45 \\ \text{Contribution of each child} &= 25 \\ \text{Total collection} &= 45 \times 25 \\ &= ₹1125\end{aligned}$$

4	5
×	25
—	
2	25
9	00
1	125

Therefore, ₹1125 is the total collection.

6. In an Orchard, there are 122 mango trees in a row and there are 18 such rows. How many mango trees are there in all?

$$\begin{aligned}\text{No. of mango trees row} &= 122 \\ \text{No. of rows} &= 18 \\ \text{Total no. of mango trees} &= 122 \times 18 \\ &= 2196\end{aligned}$$

1	2	2
×	1	8
—		
9	7	6
1	2	20
2	1	96

ONE STEP AHEAD

1.

H	T	O
2	2	5
×	1	3
—		
6	7	5
+	2	250
—		
2	9	25

2.

H	T	O
3	0	3
×	3	5
—		
1	5	15
+	9	090
—		
1	0	605

3.

H	T	O
1	3	5
×	1	3
—		
4	0	5
+	1	350
—		
1	7	55

4.

	H	T	O
1 3 0 0			
× 2 5			
6 5 0 0			
+ 2 6 0 0 0			
3 2 5 0 0			

5.

	H	T	O
3 0 3			
× 3 5			
1 5 1 5			
+ 9 0 9 0			
1 0 6 0 5			

6.

	H	T	O
3 0 3 3			
× 2 2			
6 0 6 6			
+ 6 0 6 6 0			
6 6 7 2 6			

SELF ASSESSMENT-4

1. Multiply :

(a)

	T	O
8 2		
× 5		
4 1 0		

(b)

	H	T	O
4 6 2			
× 7			
3 2 3 4			

(b)

	H	T	O
5 2 2			
× 4			
2 0 8 8			

(d)

	T	O
1 4		
× 1 6		
8 4		
+ 1 4 0		
2 2 4		

(d)

	T	O
2 2		
× 2 8		
1 7 6		
+ 4 4 0		
6 1 6		

(b)

	H	T	O
3 0 5			
× 2 6			
1 8 3 0			
+ 6 1 0 0			
7 9 3 0			

2. There are 20 sketch pens in a packet. How many sketch pens are there in 9 such packets?

No. of sketch pens in a packet = 20

No. of packets = 9

Total count of sketch pens = 20×9

= 180

Therefore, there are 180 sketch pens in 9 packets.

3. Shruti bought 115 bundles of notebook. If there are 12 notebooks in each bundle, how many notebooks did she buy in total?

No. of notebooks in a bundle = 12

No. of bundles = 15

Total notebooks = 115×12

= 1380

There are 1380 notebooks in 15 bundles.

	H	T	O
1 1 5			
× 1 2			
2 3 0			
+ 1 1 5 0			
1 3 8 0			

Chapter-5 Division

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Division -a concept of repeated subtraction and equal grouping.	Students will be able to divide by repeated subtraction.	Collect 15 pencils and divide equally among 5 students. Explain concept of repeated subtraction.	If 12 mangoes are divided equally among 4 children. How much will each child get?
Division of a two and three digit number by 1 digit number Multiplication and division facts.	Students will be able to divide 2 and 3 digit number by 1 digit.	Worksheets on division. practice of dodging tables to be done.	Divide 2 $\overline{)88}$
Story sums related to our day to day experiences.	Students will be able to solve word problem based on division.	Collect some fake currency notes. Enact out a story involving division word problems on money.	Cost of 10 toffees is ₹50. What will be the cost of 4 toffees?

page 2

ACTIVITY WORKSHEET

Fill in the blanks.

1. $7 \times \underline{3} = 21$ and $2 = 7 = \underline{3}$
3. $5 \div 1 = 5$
5. $9 \div 9 = 1$

2. $81 \div 9 = 9$
4. $0 \div 7 = 0$
6. Dividend \div Division = Quotient

Exercise 5.1

1. Divide the following numbers.

$$\begin{array}{r} 9 \\ 4 \overline{) 36} \\ \underline{-36} \\ 00 \end{array}$$

Answer: 9

$$\begin{array}{r} 11 \\ 3 \overline{) 33} \\ \underline{-33} \\ 00 \end{array}$$

Answer: 11

$$\begin{array}{r} 5 \\ 9 \overline{) 45} \\ \underline{-45} \\ 00 \end{array}$$

Answer: 5

$$\begin{array}{r} 7 \\ 2 \overline{) 14} \\ \underline{-14} \\ 00 \end{array}$$

Answer: 7

$$\begin{array}{r} 15 \\ 3 \overline{) 45} \\ \underline{-3} \downarrow \\ 15 \\ \underline{-15} \\ 00 \end{array}$$

Answer: 15

$$\begin{array}{r} 19 \\ 2 \overline{) 38} \\ \underline{-2} \downarrow \\ 18 \\ \underline{-18} \\ 00 \end{array}$$

Answer: 19

$$\begin{array}{r} 8 \\ 5 \overline{) 40} \\ \underline{-40} \\ 00 \end{array}$$

Answer: 8

$$\begin{array}{r} 13 \\ 3 \overline{) 39} \\ \underline{-3} \downarrow \\ 09 \\ \underline{-9} \\ 0 \end{array}$$

Answer: 13

$$\begin{array}{r} 5 \\ 4 \overline{) 20} \\ \underline{-20} \\ 00 \end{array}$$

Answer: 5

2. Divide:

$$\begin{array}{r} 101 \\ 4 \overline{) 404} \\ \underline{-4} \downarrow \downarrow \\ 004 \\ \underline{-4} \\ 000 \end{array}$$

Answer: 101

$$\begin{array}{r} 312 \\ 3 \overline{) 936} \\ \underline{-9} \downarrow \downarrow \\ 03 \downarrow \\ \underline{-3} \downarrow \\ 06 \\ \underline{-06} \\ 0 \end{array}$$

Answer: 312

$$\begin{array}{r} 131 \\ 2 \overline{) 262} \\ \underline{-2} \downarrow \downarrow \\ 06 \downarrow \\ \underline{-6} \downarrow \\ 02 \\ \underline{-2} \\ 0 \end{array}$$

Answer: 131

$$\begin{array}{r} 81 \\ 2 \overline{) 162} \\ \underline{-16} \downarrow \\ 02 \\ \underline{-2} \\ 0 \end{array}$$

Answer: 81

$$\begin{array}{r} 11 \\ 11 \overline{) 121} \\ \underline{-11} \downarrow \\ 11 \\ \underline{-11} \\ 00 \end{array}$$

Answer: 11

$$\begin{array}{r} 113 \\ 5 \overline{) 565} \\ \underline{-55} \downarrow \\ 015 \\ \underline{-15} \\ 00 \end{array}$$

Answer: 113

Exercise 5.2

1. Solve the following.

$$\begin{array}{r} 7 \\ 5 \overline{) 37} \\ - 35 \\ \hline 02 \end{array}$$

Quotient = 7

Remainder = 2

$$\begin{array}{r} 14 \\ 6 \overline{) 88} \\ - 6 \downarrow \\ \hline 28 \\ 24 \\ \hline 4 \end{array}$$

Quotient = 14

Remainder = 4

$$\begin{array}{r} 658 \\ 9 \overline{) 5927} \\ - 54 \downarrow \\ \hline 52 \downarrow \\ 45 \downarrow \\ \hline 77 \\ - 72 \\ \hline 5 \end{array}$$

Quotient = 658

Remainder = 5

$$\begin{array}{r} 1536 \\ 2 \overline{) 3072} \\ - 2 \downarrow \\ \hline 10 \downarrow \\ - 10 \downarrow \\ \hline 07 \downarrow \\ - 6 \downarrow \\ \hline 12 \\ - 12 \\ \hline 00 \end{array}$$

Quotient = 1536

Remainder = 0

$$\begin{array}{r} 651 \\ 5 \overline{) 3255} \\ - 30 \downarrow \\ \hline 25 \downarrow \\ - 25 \downarrow \\ \hline 05 \\ - 5 \\ \hline 0 \end{array}$$

Quotient = 651

Remainder = 0

$$\begin{array}{r} 50 \\ 2 \overline{) 100} \\ - 10 \downarrow \\ \hline 00 \\ - 0 \\ \hline 000 \end{array}$$

Quotient = 50

Remainder = 0

2. Divide and find the quotients and remainder.

$$\begin{array}{r} 54 \\ 4 \overline{) 216} \\ - 20 \downarrow \\ \hline 16 \\ - 16 \\ \hline 00 \end{array}$$

Quotient = 54

Remainder = 0

$$\begin{array}{r} 9 \\ 7 \overline{) 68} \\ - 63 \\ \hline 05 \end{array}$$

Quotient = 9

Remainder = 5

$$\begin{array}{r} 364 \\ 5 \overline{) 1820} \\ - 15 \downarrow \\ \hline 032 \\ - 30 \\ \hline 20 \\ 20 \\ \hline 0 \end{array}$$

Quotient = 364

Remainder = 2

$$\begin{array}{r} 21 \\ 6 \overline{) 126} \\ - 12 \downarrow \\ \hline 6 \\ - 6 \\ \hline 0 \end{array}$$

Quotient = 21

Remainder = 0

$$\begin{array}{r} 872 \\ 9 \overline{) 7849} \\ - 72 \downarrow \\ \hline 64 \downarrow \\ - 63 \downarrow \\ \hline 019 \\ - 18 \\ \hline 1 \end{array}$$

Quotient = 872

Remainder = 1

$$\begin{array}{r} 33 \\ 3 \overline{) 99} \\ - 9 \downarrow \\ \hline 9 \\ - 9 \\ \hline 0 \end{array}$$

Quotient = 33

Remainder = 0

3. Find out the quotient and remainder without actually dividing.

$$\begin{array}{r} 8 \\ 10 \overline{) 86} \\ - 80 \\ \hline 06 \end{array}$$

Quotient = 8
Remainder = 6

$$\begin{array}{r} 37 \\ 10 \overline{) 375} \\ - 30 \downarrow \\ \hline 075 \\ 70 \\ \hline 5 \end{array}$$

Quotient = 37
Remainder = 5

$$\begin{array}{r} 41 \\ 10 \overline{) 412} \\ - 40 \downarrow \\ \hline 012 \\ 10 \\ \hline 02 \end{array}$$

Quotient = 41
Remainder = 2

Exercise 5.3

- 1. Sushrita baked 54 chocolate cupcakes for her friends. If the cake is to be equally distributed among 9 of her friends, how many cupcakes will each friend get?**

Sushrita baked = 125 cup cakes
No. of friends = 5
Each friend gets = $125 \div 5$
= 25

$$\begin{array}{r} 25 \\ 5 \overline{) 125} \\ - 10 \downarrow \\ \hline 25 \\ 25 \\ \hline 00 \end{array}$$

Therefore, each friends gets 25 cup cakes.

- 2. Miss Mishra has 242 pages of scrap paper. She wants to make them into scrap packets for her 9 students. How many pages will each packet contain? How many extra pages will she have with her?**

Mr Mishra has = 242 pages
No. of students = 9
Each packet = $242 \div 9$

$$\begin{array}{r} 26 \\ 9 \overline{) 242} \\ - 18 \downarrow \\ \hline 62 \\ 54 \\ \hline 8 \end{array}$$

Each packets has 26 pages and 8 pages are left

- 3. Betty likes to take photos with her camera. She has already taken 185 photos. She had bought the camera 5 days ago, and took equal number of pictures everyday. How many photos did she take each day?**

Total photos taken = 185
No. of days = 5
No. of photos taken per day = $185 \div 5$

$$\begin{array}{r} 37 \\ 5 \overline{) 185} \\ - 15 \downarrow \\ \hline 35 \\ 35 \\ \hline 00 \end{array}$$

No. of photos taken per day 37.

4. Miss Amily has 8 students in her class. She collected some amount from the students for a class picnic. She collected a total of ₹ 720. How much amount did she collect from each child?

$$\begin{aligned}\text{Total collection by Miss Amily} &= ₹ 720 \\ \text{No. of students in has class} &= 8 \\ \text{Each child's contribution} &= 720 \div 8 \\ &= 90\end{aligned}$$

$$\begin{array}{r} 90 \\ 8 \overline{) 720} \\ \underline{- 72} \downarrow \\ 00 \\ \underline{- 0} \\ 0 \end{array}$$

∴ Each child contributed ₹90.

5. A farmer produced 34580kg wheat. How many bags will he buy to store the wheat if one bag can hold 20 kg?

$$\begin{aligned}\text{Amount of wheat produced} &= 34580 \text{ kg} \\ \text{Amount of wheat a bag can hold} &= 20 \text{ kg} \\ \text{No. of bags to be purchased} &= 34580 \div 20\end{aligned}$$

$$\begin{array}{r} 3458 \\ 10 \overline{) 34580} \\ \underline{- 30} \downarrow \downarrow \downarrow \\ 45 \downarrow \downarrow \downarrow \\ \underline{- 40} \downarrow \downarrow \downarrow \\ 58 \downarrow \downarrow \downarrow \\ \underline{- 50} \downarrow \downarrow \downarrow \\ 80 \downarrow \downarrow \downarrow \\ \underline{- 80} \\ 00 \end{array}$$

No. of bags to be purchased is 3458.

6. Rashit is going for a long road trip across several states. He will drive for 132 hours in total. Each day he drives for 6 hours. In how many days will he complete his trip.

$$\begin{aligned}\text{No. of hours to be travelled} &= 132 \\ \text{No. of hours travelled per day} &= 6 \\ \text{No. of days travelled} &= 132 \div 6\end{aligned}$$

$$\begin{array}{r} 22 \\ 6 \overline{) 132} \\ \underline{- 12} \downarrow \\ 012 \\ \underline{- 12} \\ 00 \end{array}$$

∴ Rashit will complete his trip within 22 days.

SELF ASSESSMENT-5

1. Divide :

$$\begin{array}{r} 9 \\ 7 \overline{) 63} \\ \underline{- 63} \\ 00 \end{array}$$

$$\begin{aligned}\text{Quotient} &= 9 \\ \text{Remainder} &= 0\end{aligned}$$

$$\begin{array}{r} 59 \\ 4 \overline{) 236} \\ \underline{- 20} \downarrow \\ 036 \\ \underline{- 36} \\ 00 \end{array}$$

$$\begin{aligned}\text{Quotient} &= 59 \\ \text{Remainder} &= 0\end{aligned}$$

$$\begin{array}{r} 633 \\ 9 \overline{) 5699} \\ \underline{- 54} \downarrow \\ 029 \\ \underline{- 27} \\ 029 \\ \underline{- 27} \\ 02 \end{array}$$

$$\begin{aligned}\text{Quotient} &= 633 \\ \text{Remainder} &= 02\end{aligned}$$

2. Divide using multiplication tables.

a. $63 \div 9 = 7$

b. $28 \div 7 = 4$

c. $35 \div 7 = 5$

d. $54 \div 6 = 9$

e. $48 \div 8 = 6$

f. $12 \div 3 = 4$

3. 504 toffees are to be packed equally into 9 packets. How many toffees will be there in each packet?

No. of toffees = 504

No. of packets = 9

No. of a toffees in each packet = $504 \div 9$

$$\begin{array}{r} 56 \\ 9 \overline{) 504} \\ \underline{- 45} \downarrow \\ 054 \\ \underline{- 54} \\ 00 \end{array}$$

There will be 56 toffees in each packet.

4. Divide orally.

(a) $\boxed{38}6 \div 10$

Quotient = 38


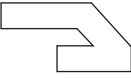
Remainder = 6

(b) $\boxed{97}2 \div 10$

Quotient = 97

Remainder = 2

Chapter-6 Lines and Shapes

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
2 dimensional shapes and its properties	The students should be able to identify 2-D shapes and identify sides and corner	show objects to understand flat surface and its shape.	How many corner does a triangle have?  Count the number of circles and triangles
Solid shapes Corners and edges of different solid shapes	To know about the curved and straight edges.	Objects can be shown and ask the students to identify curved and straight edges.	
Shapes of animals and birds with the help of tangrams	The students will be able to design shapes using tangrams.	Make the students make pictures of animals and birds by tangram	
Understanding of concept fundamental geometrical point, Line, line segment, ray.	The students will be able to identify different line, ray, segment etc	worksheet can be done.	How many line segments are joined to form the given shape? 
Measuring length of a line segment and Tessellation	The students will be able to create a pattern with no gaps (tessellation) They will be able to measure a given line segment using rules.	Worksheet to create tessellation	

Exercise 6.1

1. Look at the figure given below and answer the following questions.

- (a) Sides AB and **CD** are equal. (b) Sides AC and **BD** are equal.
 (c) The figure has **4** sides. (d) The figure has **4** corners.
 (e) The figure is a **Rectangle**.

2. (a) A square has **4** sides. (b) A circle has **0** corners.
 (c) A square has all sides **equal**. (d) A triangle has **3** corners.

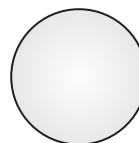
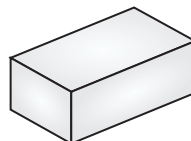
3. Draw a square and mark the corners as P, Q, R and S. Name the four sides.



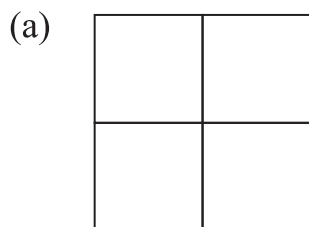
PQ, QR, SR and PS
are the sides.

Exercise 6.2

1. Look at the figure given below and answer the following questions.

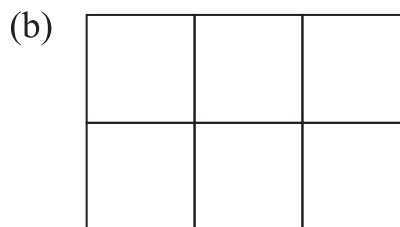


2. Count the number of squares in the given figure.



No of squares =

5

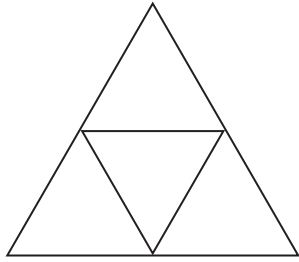


No of squares =

8

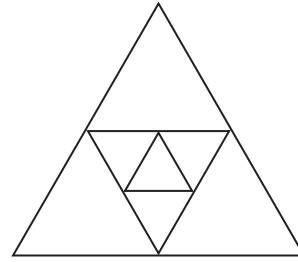
3. Count the number of triangles in the given figure.

(a)



No of triangles =

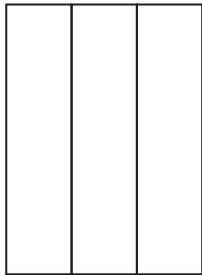
(b)



No of triangles =

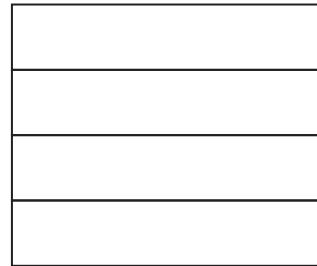
4. Count the number of rectangles in the given rectangles.

(a)



No of rectangles =

(b)







No of rectangles =

5. Fill in the blanks.

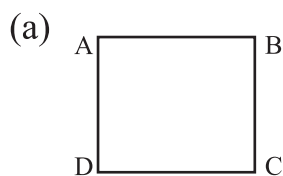
- (a) A woollen ball has **no** flat surface.
- (b) The top of our study table has a **flat** surface.
- (c) A sphere has **no** corner.
- (d) A cone has **one** flat surface.

6. Look at the table below and identify if they have a corner and edges or not. If yes, note down the number of corners. One has been done for you.

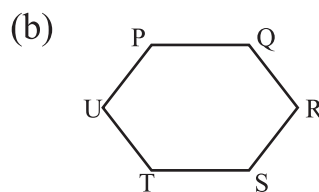
Object	Corner Yes/No	Number of Corners	Number of Edges
Box 	Yes	8	12
Orange 	No	0	0
Ice-cream Cone 	Yes	1	1
Burger 	No	0	0

Exercise 6.3

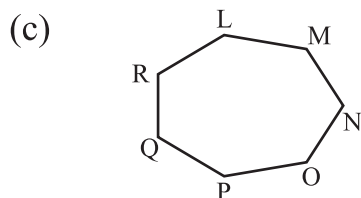
1. How many line segments are joined to form each shape? Name them.



4 line segments
(AB, BC, CD, DA)



6 line segments
(PQ, QR, RS, ST, TU, UP)



7 line segments
(LM, MN, NO, OP, PQ, QR, RL)

2. Fill in the blanks with correct words.

- (a) A line **segment** has a fixed length.
- (b) A ray has **one** end-point.
- (c) A line segment has **two** end-points.
- (d) A line has **no** end-points.

3. Measure the following lines.

- (a) 4 cm
- (b) cm

SELF ASSESSMENT-6

1. Fill in the blanks.

- (a) Opposite faces of a cuboid are **equal**.
- (b) All sides of a square are **equal** in length.
- (c) A cube has **8** vertices.
- (d) A 5 piece tangram has **3** triangle.
- (e) If we fold a triangular sheet at the corners. How many triangles will you get after 1 fold? **2**

3. Observe the given figure carefully and answer the questions.

Number of = 5

Number of = 3

Number of = 15

Chapter-7 Money

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Identifying currency notes and coins Putting together amounts of money	Students will be able to put together amounts of money and make small amount of money using 3-4 notes of different denominations	Involve children in groups and make them play involving exchange of money using dummy currency notes and coins	If you have a 20 rupee note, 10 rupee note, 5 rupee coin and 2 rupee coin How will you pay ₹27?
Conversion of Rupees to paisa and vice- versa	Students will be able to convert rupees to paisa and vice versa	Worksheet to be done	Convert ₹78.12 into paisa Write the following amount in rupees and paisa : 345 p
Addition and subtraction of money. Multiplication and division of money	Students will be able to manage money, perform addition and subtraction and multiplication and division on money.	Make the children collect children collect cash memos and make them play like paying bill and getting back balance.	Ask the children to collect the monthly electricity bill of a year and calculate the yearly expenditure on electricity.

Exercise 7.1

1. Express in words.

- (a) ₹ 87.50 = Eighty seven and fifty paise
 (b) ₹ 30.05 = Thirty and five paise
 (c) ₹ 507.25 = Five hundred seven and twenty five paise

2. Write in figures (long form).

- (a) Fifty-two rupees and twenty paise = 52 rupees and 20 paise
 (b) Six rupees and eight paise = 6 rupees and 8 paise
 (c) Eight hundred and ten rupees and fifty paise = 810 rupees and 50 paise

3. Write in figure (short form).

- (a) Ninety-nine rupees and forty paise = ₹ 99.40
 (b) Thirty seven rupees and ten paise = ₹ 37.10
 (c) Seven hundred and nine rupees and fifty paise. = ₹ 709.50

4. Convert the following rupees into paise.

- (a) ₹ 82.72 = $82 \times 100 + 72$
 = 8272 p
 (b) ₹ 80 = 80×100
 = 8000 p
 (c) ₹ 37.50 = $37 \times 100 + 50$
 = 3750 p
 (d) ₹ 19.90 = $19 \times 100 + 90$
 = 1990 p
 (e) ₹ 18.08 = $18 \times 100 + 8$
 = 1808 p
 (f) ₹ 75 = 75×100
 = 7500 p

5. Convert the following paise into rupees.

(a) 1872 p = ₹ 18.72

(b) 87 p = ₹ 0.87

(c) 7 p = ₹ 0.07

(d) 375 p = ₹ 3.75

(e) 890 p = ₹ 8.90

(f) 772 p = ₹ 7.72

Exercise 7.2

1. Solve:

(a)

₹	p
45	50
+	30
75	70

(b)

₹	p
39	40
-	18
21	20

(c)

₹	p
182	75
+	111
294	12

(d)

₹	p
78	91
+	21
100	08

(e)

₹	p
125	70
-	35
90	44

(f)

₹	p
461	28
-	18
442	49

(g)

₹	p
36	25
+	15
51	61

(h)

₹	p
18	26
+	11
30	25

(i)

₹	p
30	77
-	18
12	55

2. Add the following.

(a)

₹	p
260	66
+	25
285	81

(b)

₹	p
180	22
+	10
190	22

(c)

₹	p
325	22
+	150
475	22

3. Subtract:

(a)

₹	p
48	89
-	36
12	67

(b)

₹	p
265	87
-	150
115	49

(c)

₹	p
705	22
-	208
497	04

Exercise 7.3

1. **Freddy loves eating fruits. Freddy paid ₹16.36 for apples, ₹18.16 for grapes and ₹20 for watermelon. In total, how much money did Freddy spend on fruits?**

		₹	p
Money spent on apples	=	1 6 . 3 6	
Money spent on grapes	=	1 8 . 1 6	
Money spent on water melons	=	+ 2 0 . 0 0	
Total money spent	=	5 4 . 5 2	

There fore, Freddy spent ₹54.52 on fruits.

2. **Scarlett has ₹15.60 and her sister gives her ₹22.89. How much money does Scarlett have now?**

		₹	p
Money Scarlett has	=	1 5 . 6 0	
Her sister game	=	+ 2 2 . 8 9	
Total money Scarlett has	=	3 8 . 4 9	

Therefore, Scarlett has ₹38.49

3. **Ravi wants to buy a pencil worth ₹ 5.28, an eraser worth ₹ 3.75 and a ruler worth ₹ 5.00. How much money should he have to buy these items?**

		₹	p
Cost of pencil	=	5 . 2 8	
Cost of cross	=	3 . 7 5	
Cost of ruler	=	+ 5 . 0 0	
Total money spent	=	1 4 . 0 3	

Therefore, ₹14.03 was spent in all.

4. **Ricky wants a new kite. The one he wants to buy costs ₹ 28.95. He has ₹50 note. Does he have enough money to buy the kite? If he buys it, how much will he get back?**

		₹	p
Yes Ricky has enough money		50 . 0 0	
Amount of money Picky has	=	50 . 0 0	
Price of balloon	=	- 2 8 . 9 5	
Money Ricky gets back	=	2 1 . 0 5	

Therefore, Ricky gets back ₹21.05

5. Steve has ₹ 85.24 and Robert has ₹ 64.24. Who has more money and by how much?

Steve has =
Robert has =
Steve has more money by

₹	p
85.24	
– 64.24	
21.00	

Therefore, Steve has ₹21.00 more money than Robert

6. Jack had ₹ 100.80. He bought a pair of socks for ₹ 28 and a pair of gloves for ₹50. How much money is left with him now?

Cost of socks =
Cost of gloves =
Total money pair

₹	p
28.00	
+ 50.00	
78.00	

$$\begin{aligned}\text{Money left} &= ₹ 100.80 - ₹ 78.00 \\ &= ₹ 22.80\end{aligned}$$

Therefore, ₹ 22.80 is left with Jack.

₹	p
100.80	
– 78.00	
22.80	

Exercise 7.4

1. Multiply the following.

a.
$$\begin{array}{r} ₹ 30.00 \\ \times 3 \\ \hline ₹ 90.00 \end{array}$$

b.
$$\begin{array}{r} ₹ 7.50 \\ \times 7 \\ \hline ₹ 52.50 \end{array}$$

c.
$$\begin{array}{r} ₹ 57.25 \\ \times 9 \\ \hline ₹ 515.25 \end{array}$$

d.
$$\begin{array}{r} ₹ 49.75 \\ \times 2 \\ \hline ₹ 99.50 \end{array}$$

e.
$$\begin{array}{r} ₹ 8.05 \\ \times 9 \\ \hline ₹ 72.45 \end{array}$$

f.
$$\begin{array}{r} ₹ 58 \\ \times 2 \\ \hline ₹ 116 \end{array}$$

2. Divide the following.

a.
$$\begin{aligned} ₹ 63 \div 9 \\ = ₹ 27 \\ \text{Ans : ₹ 7} \end{aligned}$$

b.
$$\begin{array}{r} 143 \\ 5 \overline{) 715} \\ \underline{5} \\ 21 \\ \underline{20} \\ 15 \\ \underline{15} \\ 00 \end{array}$$

Ans : ₹ 143

c.
$$\begin{array}{r} 21 \\ 4 \overline{) 84} \\ \underline{8} \\ 4 \\ \underline{4} \\ 0 \end{array}$$

Ans : ₹ 21

3. If a packet of chocolate costs ₹ 22.45. What is the cost of 8 packets of chocolates?

$$\begin{aligned}\text{Cost of 1 packet} &= ₹ 22.45 \\ \text{Cost of 8 packet} &= ₹ 22.45 \times 8 \\ &= ₹ 179.60\end{aligned}$$

	①	③	④
₹	2	2	. 4 5
			× 8
	1	7	9 . 6 0

Therefore, 8 packets of chocolate will cost ₹179.60.

4. Rohan gets ₹ 10.50 as pocket money daily. How much will he get in 9 days?

$$\begin{aligned}\text{Rohan gets} &= ₹ 10.50 \\ \text{In 9 days he will get} &= ₹ 10.50 \times 9 \\ &= ₹ 94.50\end{aligned}$$

	④
₹	1 0 . 5 0
	× 9
	9 4 . 5 0

5. Three pairs of slippers cost ₹ 336. What is the cost of 1 pair of slippers?

$$\begin{aligned}\text{Cost of 3 pairs of slippers} &= ₹ 336 \\ \text{Cost of 1 pair of slipper} &= ₹ 336 \div 3 \\ &= ₹ 112\end{aligned}$$

	112
3)	3 3 6
-	3 ↓
	3 ↓
-	3 ↓
	0 6
	- 6
	0 0

Therefore, cost of 1 pair of slippers is ₹ 112.

6. Vineeta bought sugar for ₹ 78.50, rice for ₹ 89.65 and salt for ₹ 12.00. How much money did she pay to the shopkeeper?

$$\begin{aligned}\text{Cost of sugar} &= ₹ 78.50 \\ \text{Cost of rice} &= ₹ 89.65 \\ \text{Cost of salt} &= ₹ 12.00 \\ \therefore \text{Total cost} &= ₹ 180.15\end{aligned}$$

	②	①
₹	7	8 . 5 0
₹	8	9 . 6 5
₹	1	2 . 0 0
	1	8 0 . 1 5

Vineeta will pay ₹180.15 to the shopkeeper.

SELF ASSESSMENT-7

1. Rishav and Ritika are going to the restaurant for breakfast. The menu card of the restaurant is as follows.

(a) Prince of 1 Idli	=	1×30.00	=	₹ 3 0 . 0 0
Prince of 2 toast jam	=	2×25.50	=	₹ 5 1 . 0 0
Prince of 1 tea	=	1×20.00	=	₹ 2 0 . 0 0
Prince of 1 coffee	=	1×35.00	=	₹ 3 5 . 0 0
				1 3 6 . 0 0

Therefore, total bill = ₹136.00

- (b) Share of each person = $136.00 \div 2$

$$\begin{array}{r}
 68 \\
 2 \overline{) 136} \\
 \underline{-12} \downarrow \\
 16 \\
 \underline{-16} \\
 \times
 \end{array}$$

Each person's share = ₹68

2. Fill in the blanks.

(a)	<div style="text-align: center;"> ^① ^① 2 5 0 . 7 8 3 5 . 2 2 <hr/> ₹ 2 8 6 . 0 0 </div>
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- (b) How many 5 rupee coin makes ₹ 50? = **10**

(c)	<div style="display: inline-block; vertical-align: top; margin-right: 20px;"> ^① ₹ 1 6 5 ₹ 2 6 0 <hr/> 4 2 5 </div> <div style="display: inline-block; vertical-align: top;"> ^④ 8 5 0 - 4 2 5 <hr/> 4 2 5 </div>
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On adding ₹165 and ₹260 and subtracting it from ₹850 we get? ₹425

Chapter-8 Meaning Lengths

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Length of objects by estimation. Units of lengths (km and cm)	Learners will be able to measure things using km, m and cm. using standard tools.	Measure the length of your friends bag, length of the classroom cupboard	If you have a 20 rupee note, 10 rupee note, 5 rupee coin and 2 rupee coin How will you pay ₹27?
Conversion of m to cm and vice versa. Addition and subtraction of length.	Learners will be able to convert, add and subtract lengths.	Worksheets	From a ribbon of length 7m 650 cm, a ribbon of length 750cm and 2cm are cut off. How much ribbon is left?

Exercise 8.1

1. Convert the following into centimetres.

- (a) $15\text{ m} = 15 \times 100 = 1500\text{cm}$ (b) $9\text{ m} = 9 \times 100 = 900\text{cm}$
(c) $110\text{ m} = 110 \times 100 = 11000\text{cm}$ (d) $24\text{ m} = 24 \times 100 = 2400\text{cm}$
(e) $80\text{ m} = 80 \times 100 = 8000\text{cm}$

2. Express in centimetres. One has been done for you.

- (a) $2\text{m } 12\text{ cm} = 2 \times 100 + 12\text{ cm} = 212\text{ cm}$ (b) $18\text{ m } 18\text{ cm} = 18 \times 100 + 18\text{cm} = 1818\text{ cm}$
(c) $64\text{ m } 0\text{ cm} = 64 \times 100 + 0\text{ cm} = 6400\text{ cm}$ (d) $9\text{ m } 90\text{ cm} = 9 \times 100 + 90\text{ cm} = 990\text{ cm}$
(e) $1\text{ m } 05\text{ cm} = 1 \times 100 + 05\text{ cm} = 105\text{ cm}$

3. Convert the following in metres.

- (a) $1200\text{ cm} = 1200 \div 100 = 12\text{ m}$ (b) $7200\text{ cm} = 7200 \div 100 = 72\text{ m}$
(c) $540\text{ cm} = 540 \div 100 = 5\text{m } 40\text{cm}$ (d) $925 = 925 \div 100 = 9\text{m } 25\text{cm}$

$$\begin{array}{r} 5\text{m} \\ 100 \overline{) 540} \\ \underline{500} \\ 40\text{ cm} \end{array}$$

$$\begin{array}{r} 9\text{m} \\ 100 \overline{) 925} \\ \underline{900} \\ 25\text{ cm} \end{array}$$

- (e) $175\text{ cm} = 175 \div 100 = 1\text{m } 75\text{ cm}$

$$\begin{array}{r} 1\text{m} \\ 100 \overline{) 175} \\ \underline{100} \\ 75\text{ cm} \end{array}$$

4. A pole is 2 m 10 cm tall. Express the length of the pole in cm.

$$\begin{aligned} \text{Length of pole} &= 2\text{m } 10\text{cm} \\ &= 2 \times 100 + 10\text{cm} \\ &= 200 + 10 \\ &= 210\text{ cm} \end{aligned}$$

Therefore, the length of pole in car is 210 cm.

5. A ribbon is 2408 cm long. What is the length in metres?

$$\begin{aligned}\text{Length of ribbon} &= 2408 \text{ cm} \\ &= 2408 \div 100\end{aligned}$$

$$\begin{array}{r} 24\text{m} \\ 100 \overline{) 2408} \\ \underline{200} \downarrow \\ 408 \\ \underline{400} \\ 8 \text{ cm} \end{array}$$

Therefore, length of ribbon in metres = 24m 8 cm.

6. The height of window 1 is 1 m 80 cm, while the height of window 2 is 108 cm. Which window has a greater height?

$$\begin{aligned}\text{Length of window 1} &= 1 \text{ m } 80 \text{ cm} \\ &= 1 \times 100 + 80 \\ &= 180 \text{ cm}\end{aligned}$$

$$\text{Height of window 2} = 108 \text{ cm}$$

Therefore, height of window 1 is greater since 180 cm is greater.

7. The height of a ladder is 160cm. Express the height in m.

$$\begin{aligned}\text{Height of ladder} &= 160 \text{ cm} \\ &= 160 \div 100\end{aligned}$$

$$\begin{array}{r} 1\text{m} \\ 100 \overline{) 160} \\ \underline{-100} \\ 60 \text{ cm} \end{array}$$

\therefore Height of ladder = 1m 60cm

Exercise 8.2

1. Solve the following.

(a)
$$\begin{array}{r} 24 \text{ m} \\ + 15 \text{ m} \\ \hline 39 \text{ m} \end{array}$$

(b)
$$\begin{array}{r} 4\text{m } 25\text{cm} \\ + 5\text{m } 35\text{cm} \\ \hline 9\text{m } 60\text{cm} \end{array}$$

(c)
$$\begin{array}{r} 70\text{m } 85\text{cm} \\ + 22\text{m } 15\text{cm} \\ \hline 93\text{m } 00\text{cm} \end{array}$$

(d)
$$\begin{array}{r} 18\text{m } 20\text{cm} \\ - 9\text{m } 13\text{cm} \\ \hline 9\text{m } 7\text{cm} \end{array}$$

(e)
$$\begin{array}{r} 36\text{m } 09\text{cm} \\ - 14\text{m } 78\text{cm} \\ \hline 21\text{m } 31\text{cm} \end{array}$$

(f)
$$\begin{array}{r} 15\text{m } 35\text{cm} \\ - 10\text{m } 21\text{cm} \\ \hline 5\text{m } 14\text{cm} \end{array}$$

2. Add the following.

(a)
$$\begin{array}{r} 2 \text{ m} \\ + 18 \text{ m} \\ \hline 20 \text{ m} \end{array}$$

(b)
$$\begin{array}{r} 65\text{m } 08\text{cm} \\ + 9\text{m } 99\text{cm} \\ \hline 75\text{m } 07\text{cm} \end{array}$$

(c)
$$\begin{array}{r} 36\text{m } 40\text{cm} \\ + 89\text{m } 00\text{cm} \\ \hline 125\text{m } 40\text{cm} \end{array}$$

3. Subtract the following.

(a)

28m
– 12m
16m

(b)

24m 19cm
–12m 12cm
12m 07cm

(c)

46m 13cm
– 20m 00cm
26m 13cm

4. A nylon rope is 42 m long. If 12 m 50 cm is cut off from it, what is the length of the rope left?

Length of nylon rope	=	⁽⁴¹⁾ 42 m 00cm
Length of rope cut off	=	⁽¹⁰⁰⁾ –12m 50cm
Length of rope left	=	29m 50cm

∴ 29m 88cm of rope is left.

5. If the length of a window is 218 cm and breadth is 116 cm, by how much does the length exceed the breadth? Find the sum of the length and breadth.

Length of window	=	218 cm
Breadth of window	=	– 116 cm
The length exceed the breadth	=	102 cm

∴ The length exceeds the breadth by 102 cm.

6. There are two line segments. One is 4 m 70 cm long and the other is 5 m long. Find the total length of both the line segments.

Length of first line segment	=	4 m 70 cm
Length of second line segment	=	+ 5 m 00 cm
Total length of both line segment	=	9 m 70 cm

The total length of both line segment is 9 m 10 cm.

Sum of length and breadth	=	⁽¹⁾ 2 1 8 cm + 1 1 6 cm 3 3 4 cm
---------------------------	---	------------------------------------------------------

7. Bob's house is 234 m away from the market. The Railway station is 175 m 20 cm further away from the market. What is the distance between Bob's house and railway station?

Distance of Bob's house from the market	=	234m 00cm
Distance of Railway station from the market	=	+175m 20cm
Total distance between Bob's house and railway station	=	409m 20cm

∴ The distance between Bob's house and railway station is 409m 20cm.

SELF ASSESSMENT-8

1. Choose which unit will be used to measure the following. (m/cm)

- (a) cm (b) m (c) cm (d) m

2. Solve the following.

(a)

m	cm
^① 25	^① 56
18	00
+ 40	25
83 m	81 c m

(b)

m	cm
^② ^{①⑦} 38	^{①①} 14
- 18	50
19 m	64 m

3. Anuja bought 2 pieces of cloth each measuring 2 m 35 cm and 3 m 85 cm. She joined both the pieces to make a curtain. If the height of her window is 4m. Find what length she will have to cut off to fit the curtain to the window.

Length of one cloth	=	^① 25	^① 35 c m
Length of another cloth	=	+ 3 m	85 c m
Total height curtain	=	6 m	20 c m

Length of one curtain	=	6 m	20 c m
Length of window	=	- 4 m	00 c m
Length of cloth left	=	2 m	20 c m

∴ 2m 20cm of cloth is left.

4. A baby snake is 252 m long and her mother is 3 m 85 cm. What is the difference in their lengths?

Length of mother snake	=	3m 85 cm			
	=	385 cm			
Length of baby snake	=	252 cm			
Difference is lengths	=	<table><tr><td>3 8 5 cm</td></tr><tr><td>– 2 5 2 cm</td></tr><tr><td>1 3 3 cm</td></tr></table>	3 8 5 cm	– 2 5 2 cm	1 3 3 cm
3 8 5 cm					
– 2 5 2 cm					
1 3 3 cm					

Difference in lengths is 133 cm = 1m 33 cm

Chapter-9 Measuring Mass (Weight)

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Knowledge of units of mass/weight. Use of Balance weights and concept of kg and grams.	Students will be able to guess the weight in kg and grams.	Guess the weight of pencil box, a watermelon, a packet of chips.	Which is heavier? 1 kg cotton or 1 kg iron rods.
Conversions of kg to grams and vice-versa. Addition and subtraction of weights.	Students will be able to convert kg to g and vice versa. They will also be able to add/subtract weights	Worksheets to be done on conversion.	Your mother goes to the market to buy groceries. She bought 2 kg 250 g of dal and 4 kg of rice. How much weight is she carrying?

Exercise 9.1

1. Convert the following into grams.

- (a) $4 \text{ kg} = 4 \times 1000 = 4000 \text{ g}$ (b) $6 \text{ kg} = 6 \times 1000 = 6000 \text{ g}$
 (c) $25 \text{ kg} = 25 \times 1000 = 25000 \text{ g}$ (d) $18 \text{ kg} = 18 \times 1000 \text{ g} = 18000 \text{ g}$
 (e) $30 \text{ kg} = 30 \times 1000 = 30000 \text{ g}$

2. Express in grams. One has been done for you.

- (a) $2 \text{ kg } 400 \text{ g} = 2 \times 1000 + 400 = 2400 \text{ g}$
 (b) $7 \text{ kg } 80 \text{ g} = 7 \times 1000 + 80 \text{ g} = 7080 \text{ g}$
 (c) $18 \text{ kg } 200 \text{ g} = 18 \times 1000 + 200 \text{ g} = 18200 \text{ g}$
 (d) $70 \text{ kg} = 70 \times 1000 \text{ g} = 70000 \text{ g}$
 (e) $15 \text{ kg} = 15 \times 1000 = 15000 \text{ g}$

3. Convert the following into kilograms.

- (a) $9000 \text{ g} = 900 \div 1000 = 9 \text{ kg}$
 (b) $7008 \text{ g} = 7008 \div 1000$ (c) $2200 \text{ g} = 2200 \div 100$

$$\begin{array}{r} 7 \text{ kg} \\ 1000 \overline{) 7008} \\ \underline{-7000} \\ 8 \text{ g} \end{array}$$

$$\begin{array}{r} 2 \text{ kg} \\ 1000 \overline{) 2200} \\ \underline{-2000} \\ 200 \text{ g} \end{array}$$

$$= 2 \text{ kg } 200 \text{ g}$$

- (d) $3435 \text{ g} = 3435 \div 1000$

- (e) $5017 \text{ g} = 5017 \div 1000$

$$\begin{array}{r} 3 \text{ kg} \\ 1000 \overline{) 3435} \\ \underline{-3000} \\ 435 \text{ g} \end{array}$$

$$\begin{array}{r} 5 \text{ kg} \\ 1000 \overline{) 5017} \\ \underline{-5000} \\ 17 \text{ g} \end{array}$$

$$= 3 \text{ kg } 435 \text{ g}$$

$$= 5 \text{ kg } 17 \text{ g}$$

4. **Ravi bought 2 kg 500 g of fruits. Express the weight in grams.**

Ravi bought 2 kg 500 g of fruits

weight is gram = $2 \times 1000 + 500 = 2500$ g

\therefore Ravi bought 2500g.

5. **Sonam and Ritesh went to the market and bought some fruits. Sonam bought 3 kg 150g of fruits while Ritesh bought 3050g of fruits. Who bought more fruits?**

Sanam bought = $3 \text{ kg } 150\text{g} = 3000 + 150 = 3150$ g

Ritesh bought = 3050g.

Sanam bought more fruits since $3150\text{g} > 3050$ g

6. **Fill in the blanks**

(a) Half kg is same as **500** g

(b) $34250 = 34 \text{ kg } 250$ g

$$\begin{array}{r} 34\text{kg} \\ 1000 \overline{) 34250} \\ \underline{3000} \downarrow \\ 4250 \\ \underline{4000} \\ 250 \end{array}$$

Exercise 9.2

1. **Solve the following.**

(a)

18 kg
+ 12 kg
30 kg

(b)

22kg 700g
+ 8kg 145g
30kg 845g

(c)

⁶ 70kg ¹⁰ 800g
- 12kg 200g
58kg 600g

(d)

45kg 180g
- 14kg 090g
31kg 90g

(e)

⁴ 150kg ⁹ 180g
- 15kg 200g
134kg 980g

(f)

¹ 115kg ¹ 072g
+ 27kg 980g
143kg 052g

2. **Add the following.**

(a)

¹ 3kg 300g
+12kg 800g
16kg 100g

(b)

9kg 872g
+19kg 014g
28kg 886g

(c)

14kg 150g
+ 2kg 168g
16kg 168g

3. **Subtract the following.**

(a)

³ 18kg ³ 400g
-7kg 250g
11kg 150g

(b)

⁶ 70kg ¹¹ 180g
-55kg 400g
14kg 780g

(c)

¹¹ 12kg ¹¹ 150g
-4kg 500g
7kg 650g

4. **Rashmita bought 3 packets of breads weighing 3 kg 825g, 735g and 2 kg 150g. Find the total weight of the breads.**

Weight of 1st packet bread	=	$\overset{(1)}{3} \text{ kg } \overset{(11)}{825} \text{ g}$
Weight of 2nd packet bread	=	$0 \text{ kg } 735 \text{ g}$
Weight of 3rd packet bread	=	$+2 \text{ kg } 150 \text{ g}$
Total Weight	=	$6 \text{ kg } 710 \text{ g}$

Therefore, the total weight of 3 packets of bread is 6kg 710g

5. **Ronita has 3kg 800g of flour. She uses 1 kg 250g of flour in making a cake. How much flour is left?**

Quantity of flour	=	$\overset{(1)}{3} \text{ kg } \overset{(7)}{800} \text{ g}$
Quantity of flour used	=	$-1 \text{ kg } 250 \text{ g}$
Quantity of flour left	=	$2 \text{ kg } 550 \text{ g}$

\therefore 2kg 550g of flour is left.

6. **Sunita bought a bag containing 3kg 120g wheat and another bag containing 2 kg 290g rice. What is the total weight of both the bags?**

Weight of wheat bag	=	$\overset{(1)}{3} \text{ kg } 120 \text{ g}$
Weight of rice bag	=	$+2 \text{ kg } 290 \text{ g}$
Total weight of both bags	=	$5 \text{ kg } 410 \text{ g}$

\therefore Both bags weigh 5kg 410g

7. **Sita baked a cake weighing 2 kg 5g and Sunita baked a cake weighing 2 kg 50g. Whose cake is heavier and by how much?**

Weight of Sunita's cake	=	$\overset{(4)}{2} \text{ kg } \overset{(10)}{50} \text{ g}$
Weight of Sita's cake	=	$-2 \text{ kg } 05 \text{ g}$
		45 g

Sunita's cake weighs more by 45g

SELF ASSESSMENT-9

1. **Solve.**

(a)

kg	g
128	250
+11	425
139kg	675g

(b)

kg	g
240	060
+100	990
341kg	050g

(c)

kg	g
71	155
-4	50
67kg	105g

2. By how much is 36 kg 460g greater than 32 kg 50 g?

kg	g
36kg	460g
-32kg	050g
4kg	410g

3. The total weight of three girls is 150 kg. If two of them weighs 48kg and 54 kg, find the weight of the third girl.

Weight of two girl = 48kg + 54kg

48kg
+54kg
102kg

Total weight of 3 girls	=	150kg
Weight of 2 girls	=	-102kg
Weight of the third girl	=	48kg

∴ The third girl weight 48 kg

4. Solve: 3 kg 150 g – 50 g – 1 kg.

3kg 150g
- 50g
3kg 100g

3kg 100g
-1kg 000g
2kg 100g

Answer : 2kg 100g

Chapter-10 Measuring Capacity

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Concept of Litre and millilitre	Children will be able to Understand that only liquids can be measured using containers of known capacity.	Find out how many jugs of water you require to bath. Find the capacity of that.	Take Draw containers that hold water less than one litre and more than one litre
Measurement and Volume	Compare different containers in terms of capacity. Get the idea of half, twice, four times etc. Estimate and guess.	Compare the two jugs and identify which one holds more water.	

Conversion of L → ml and vice versa. Addition and subtraction of capacity.	Students will be able to convert litre to millilitre and vice versa. They will be able to perform calculations of capacity	Measuring the capacity of 1 litre water bottle using different containers Worksheets on conversion to be done.	Fill in the blanks using (twice/half/3times) Pot B holds 11 glassfuls of water Pot A holds twice as much water as Pot B. _____ glasses are needed to fill the pot A.
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Challenge Corner

A tank contains 245680 mL of water. What is the capacity of the tank in L?

$$245680 \text{ mL} = 245680 \div 1000$$

$$= 245 \text{ L } 680 \text{ mL}$$

Exercise 10.1

1. Fill in the blanks.

(a) $1 \text{ L} = \mathbf{500} \text{ mL} + 500 \text{ mL}$

(b) $200 \text{ mL} + 200 \text{ mL} + 100 \text{ mL} + 500 \text{ mL} = \mathbf{1} \text{ L}$

(c) $1000 \text{ mL} + 1000 \text{ mL} = \mathbf{2000} \text{ mL}$

(d) $500 \text{ mL} + 200 \text{ mL} = \mathbf{700} \text{ mL}$

(e) $1000 \text{ mL} = 300 \text{ mL} + \mathbf{700} \text{ mL}$

2. Convert the following into mL.

(a) $7 \text{ L} = 7 \times \mathbf{1000} = \mathbf{70000} \text{ mL}$

(b) $10 \text{ L} = \mathbf{10} \times \mathbf{1000} = \mathbf{10000} \text{ mL}$

(c) $28 \text{ L} = \mathbf{28} \times \mathbf{1000} = \mathbf{28000} \text{ mL}$

(d) $3 \text{ L} = \mathbf{3} \times \mathbf{1000} = \mathbf{30000} \text{ mL}$

(e) $14 \text{ L} = \mathbf{14} \times \mathbf{1000} = \mathbf{14000} \text{ mL}$

3. Express the following into mL.

(a) $2 \text{ L } 500 \text{ mL} = \mathbf{2} \times \mathbf{1000} + \mathbf{500} \text{ mL} = \mathbf{2500} \text{ mL}$

(b) $8 \text{ L } 420 \text{ mL} = \mathbf{8} \times \mathbf{1000} + \mathbf{420} \text{ mL} = \mathbf{8420} \text{ mL}$

(c) $15 \text{ L } 720 \text{ mL} = \mathbf{15} \times \mathbf{1000} + \mathbf{720} \text{ mL} = \mathbf{15720} \text{ mL}$

(d) $3 \text{ L } 900 \text{ mL} = \mathbf{3} \times \mathbf{1000} + \mathbf{900} \text{ mL} = \mathbf{3900} \text{ mL}$

(e) $1 \text{ L } 200 \text{ mL} = \mathbf{1} \times \mathbf{1000} + \mathbf{200} \text{ mL} = \mathbf{1200} \text{ mL}$

4. Convert the following into L.

(a) $2800 \text{ mL} = \mathbf{2} \text{ L } \mathbf{800} \text{ mL}$

(b) $4260 \text{ mL} = \mathbf{4} \text{ L } \mathbf{260} \text{ mL}$

(c) $7600 \text{ mL} = \mathbf{7} \text{ L } \mathbf{600} \text{ mL}$

(d) $1800 \text{ mL} = \mathbf{1} \text{ L } \mathbf{800} \text{ mL}$

(e) $1425 \text{ mL} = \mathbf{1} \text{ L } \mathbf{425} \text{ mL}$

Exercise 10.2

1. Solve the following.

(a)

3 L	465 mL
+	4 L 132 mL
7 L 597 mL	

(b)

18 L	942 mL
+	6 L 246 mL
25 L 188 mL	

(c)

2 L	700 mL
+	1 L 180 mL
3 L 880 mL	

$$\begin{array}{r}
 \overset{\textcircled{6}}{\cancel{70}}\text{L } 182\text{mL} \\
 - 18\text{L } 061\text{mL} \\
 \hline
 52\text{L } 121\text{mL}
 \end{array}$$

$$\begin{array}{r}
 2\text{L } 018\text{mL} \\
 + 11\text{L } 152\text{mL} \\
 \hline
 13\text{L } 170\text{mL}
 \end{array}$$

$$\begin{array}{r}
 18\text{L } \overset{\textcircled{3}}{\cancel{4}}\overset{\textcircled{15}}{5}2\text{mL} \\
 - 9\text{L } 180\text{mL} \\
 \hline
 9\text{L } 272\text{mL}
 \end{array}$$

2. Add the following.

$$\begin{array}{r}
 \overset{\textcircled{1}}{3}\text{L } 550\text{mL} \\
 + 42\text{L } 150\text{mL} \\
 \hline
 45\text{L } 700\text{mL}
 \end{array}$$

$$\begin{array}{r}
 18\text{L } 150\text{mL} \\
 + 20\text{L } 000\text{mL} \\
 \hline
 38\text{L } 150\text{mL}
 \end{array}$$

$$\begin{array}{r}
 \overset{\textcircled{1}}{5}\text{L } 850\text{mL} \\
 + 2\text{L } 250\text{mL} \\
 \hline
 8\text{L } 100\text{mL}
 \end{array}$$

3. Subtract the following.

$$\begin{array}{r}
 15\text{L } 650\text{mL} \\
 - 2\text{L } 150\text{mL} \\
 \hline
 13\text{L } 500\text{mL}
 \end{array}$$

$$\begin{array}{r}
 \overset{\textcircled{3}}{\cancel{4}}\text{L } \overset{\textcircled{9}}{\cancel{0}}\overset{\textcircled{10}}{\cancel{0}}0\text{mL} \\
 - 2\text{L } 150\text{mL} \\
 \hline
 1\text{L } 850\text{mL}
 \end{array}$$

$$\begin{array}{r}
 28\text{L } 750\text{mL} \\
 - 18\text{L } 120\text{mL} \\
 \hline
 10\text{L } 630\text{mL}
 \end{array}$$

4. A container contains 2L 550 mL of milk. Later 1L 250 mL more milk was added to it. How much milk is there in the container now?

$$\begin{array}{lcl}
 \text{Quantity of milk in the container} & = & 2\text{L } 550\text{mL} \\
 \text{Quantity of milk added} & = & 1\text{L } 250\text{mL} \\
 \text{Total Quantity of milk} & = & 2\text{L } 550 + 1\text{L } 250\text{mL} \\
 & = & 3\text{L } 800\text{mL}
 \end{array}$$

$$\begin{array}{r}
 \overset{\textcircled{1}}{2}\text{L } 550\text{mL} \\
 + 1\text{L } 250\text{mL} \\
 \hline
 3\text{L } 800\text{mL}
 \end{array}$$

The container has 3L 800mL of milk

5. An oil tanker contains 85L 730mL. Out of the total oil 13L 430 mL was delivered to a station. How much quantity of oil is still left in the tanker?

$$\begin{array}{lcl}
 \text{Quantity of milk in the container} & = & 85\text{L } 730\text{mL} \\
 \text{Quantity of milk added} & = & 13\text{L } 430\text{mL} \\
 \text{Total Quantity of milk} & = & 72\text{L } 300\text{mL}
 \end{array}$$

$$\begin{array}{r}
 85\text{L } 730\text{mL} \\
 - 13\text{L } 430\text{mL} \\
 \hline
 72\text{L } 300\text{mL}
 \end{array}$$

∴ 72L 300 mL of oil is left in the tanker.

6. A factory has 2 machines, one machine consumes 28L 225mL of petrol per day and the other consumes 14L 750mL. How much Petrol do both machines consume?

$$\begin{array}{lcl}
 \text{Quantity of petrol consumed by 1 machine} & = & 28\text{L } 225\text{mL} \\
 \text{Quantity of petrol consumed by another machine} & = & 14\text{L } 750\text{mL} \\
 \text{Total petrol consumption} & = & 28\text{L } 225\text{mL} + 14\text{L } 750\text{mL} \\
 & = & 42\text{L } 975\text{mL}
 \end{array}$$

$$\begin{array}{r}
 28\text{L } 225\text{mL} \\
 + 14\text{L } 750\text{mL} \\
 \hline
 42\text{L } 975\text{mL}
 \end{array}$$

∴ 42L 975mL of petrol is consumed by both machines.

7. A watering can contains 1L 850mL of water. After watering the plants, 800 mL of water is left. How much water was used to water the plants?

$$\begin{aligned}\text{Quantity of water in watering can} &= 1\text{L } 850\text{mL} \\ \text{Quantity of water left} &= 800\text{ mL} \\ \text{Quantity of water used} &= 1\text{L } 850 - 800\text{ mL} \\ &= 1\text{L } 050\text{ mL}\end{aligned}$$

1 L	850 mL
-	800 mL
1 L	050 mL

∴ 1L 50mL of water was used to water the plants.

SELF ASSESSMENT-10

1. Solve the following.

(a)

L	mL
374	140
+121	680
495 L	820 mL

(b)

L	mL
⁷ 18 ¹²	550
- 25	000
157 L	550 mL

(b)

L	mL
¹ 28 ¹ ¹	¹ 250
152	150
+ 19	850
200 L	250 mL

2. Nandini bought a 600 mL of cooking oil. She poured it into a bottle which already had 650 mL of oil. How much oil does the bottle hold now? Give your answer in litres.

$$\begin{aligned}\text{Total oil in the bottle} &= 600 + 650\text{ mL} \\ &= 1250\text{ mL}\end{aligned}$$

600 mL
+650 mL
1250 mL

Converting 1250 mL to L (by $\div 1000$)

$$= 1250 \div 1000$$

$$= 1\text{ L } 250\text{ mL}$$

∴ The bottle holds 1L 250 mL of oil

3. A milk can holds 15L 350 mL of milk. The milkman sold 8L 125 mL in the morning. How much milk is left in the can?

Quantity of milk in the can	=	15 L ⁴ 3 ¹⁰ 50 mL
Quantity of milk sold	=	- 8 L 125 mL
Quantity of milk left	=	7 L 225 mL

∴ 7L 225 mL of milk is left in the can.

Chapter-11 Time

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Concept of time including seconds, minutes, hours, days, weeks, months and years Estimating time.	Students will be able to know that seconds, minutes, hours are inter related and leads to the formation of days, months and years	Collecting data from fellow students like time taken to bath, eating etc.	How much time does it take to come back from school?
Reading time to hours and minutes. Knowing the part of the day Am/Pm.	Students will be able to read time from the clock and know Am/Pm.	Worksheet on clock can be given.	What time will it be 12 hours after 2 Pm?
12 Hour and 24 hour clock and conversion	Students will be able to tell the time in both 12 hour and 24 hour clock	Practice conversion of 12 hour clock to 24 hours clock and vice-versa	If the time shown by a digital clock is 18:10 hours, what is the time in 12 hour formed.
Calendar	Understanding and reading a calendar	Worksheets can be done.	Can there be 6 sundays is a month.

Exercise 11.1

1. Write the time shown on each clock.

(a)



Quarter to 2

(b)



Half past 10

(c)



Quarter past 9

2. Draw the minutes and hour hands to show the given time.

(a)



(b)



(c)



Exercise 11.2

1. Write the time shown on each clock.

(b)



7 : 10
10 minutes past 7

(c)



7 : 35
35 minutes past 7

(d)



3 : 55
35 minutes past 3
5 minutes to 4

(e)



2 : 40
40 minutes past 2
20 minutes to 3

(f)



6 : 45
45 minutes past 6
15 minutes to 7

2. Read the first clock. Draw and write the time in the next clock.

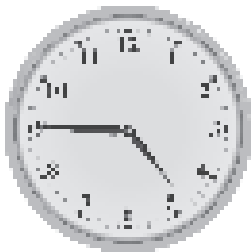
(a)



3 hours
later →



(b)



2 hours
before →



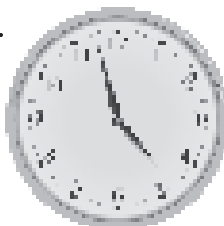
3. Draw the minutes hands for the following clocks to show the correct time.

(a)



7 : 20

b.



4 : 55

c.



3 : 25

Exercise 11.3

- Write the time shown on each clock using a.m. or p.m.
(a) 9 am (b) 5 pm
- Fill in the blanks with a.m. or p.m.
(a) p.m. (b) a.m. (c) p.m. (d) p.m. (e) p.m. (f) a.m.

Exercise 11.4

- Convert the following time into 24 hour clock time.
(a) 2 p.m. = **14 : 00** hours (b) 11 : 30 a.m. = **11:30** hours
(c) 4 : 10 p.m. = **16:10** hours (d) 12 midnight = **0:00** hours
- Convert the following time into 12 hour clock time.
(a) 7 : 00 hours = **7 a.m.** (b) 13 : 40 hours = **1:40 p.m.**
(c) 23 : 00 hours = **11:00 p.m.** (d) 12 : 00 hours = **12 noon**
- Fill in the blanks.

	Railway Time	Ordinary Clock Time
(a)	13 : 30 hours	1 : 30 p.m.
(b)	2 : 30 hours	2 : 30 a.m.
(c)	19 : 00 hours	7 p.m.
(d)	6 : 00 a.m.	6 a.m.
(e)	5 : 15 hours	5 : 15 a.m.

Exercise 11.5

- Fill in the blanks.
(a) **June** is the 6th month of the year?
(b) Republic Day is celebrated in the month of **January**.
(c) **7** months have 31 days in a year.
(d) In which month were you born? _____
(e) Which month comes in between July and September? **August**
- Convert.
(a) 9 days into hours = 9×24 (b) 18 days into hours = 18×24

⑤

T	O
3	
2	4
×	9
21	6

$\therefore 9 \text{ days} = 216 \text{ hours}$

T	O
1	8
×	2
7	2
3	6
4	3

18 days = 432 hours

- (c) 2 hours into minutes = $2 \times 60 = 120$ minutes (since 1 hour = 60)
 (d) 17 hours into minutes = $17 \times 60 = 1020$ minutes
 (e) 5 years into months = $5 \times 12 = 60$ months (\because 1 year = 12 months)
 (f) 18 years into months = $18 \times 12 = 216$ months

	T	O
	1	8
\times	1	2
	3	6
1	8	\times
2	1	6

3. Use the calendar to answer the questions.

- (a) 31 days (b) Saturday (c) 4 (d) 5 (e) 6th January

SELF ASSESSMENT-11

1. Read the time.

(b)



2 : 05

(c)



9 : 00

(d)



8 : 20

2. Draw the clock to show the time.

(a)



half past 2

(b)



5 minutes to 10

(c)



25 past 8

3. Given below is a time table of a particular railway station.

- (a) 9 p.m.
 (b) 1 hour (since arrival is 3 : 05 and departure is 4:05)
 (c) arrival is 12 : 55 p.m. and departure is 1 : 30 p.m.

4. (a) Convert 4 days into hours.
 $= 4 \times 24$ (1 day = 24 hours)

T	O
2	4
×	4
9	6

= 96 minutes

- (b) Convert 24 hours into minutes.
 24 hours into minutes
 $= 24 \times 60$ (Since 1 hour = 60 minutes)
 $= 1440$ minutes

T	O
2	4
×	60
1	440

= 1440 minutes

Chapter-12 Patterns

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Drawing of patterns of walls floors etc Palterns using shapes, colours and numbers	Learners will be able to understand different patterns	Show different pattern of wall, floor, tiles from swaunding and pictures Engage the students to draw a pattern of their own. Observe and make arrangement of basic patterns on floor and walls Worksheet based on shapes and number to be done.	Complete the given pattern A C E G _ _
Even and Odd numbers	Learners will able to identify even and odd numbers.	Ask the students to stand is a line. Give then the numbers according to their positions. Ask all students standing in even places to step forward and all odd number students to move one step backward.	From the given list cross out the odd numbers 28, 349, 1059, 273

Exercise 12.1

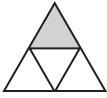
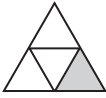
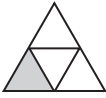
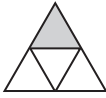
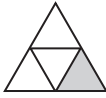
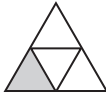
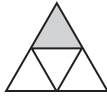
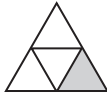
Study the following patterns carefully and complete them.

1.

2	3	2	3	2	3	2	3
----------	----------	----------	----------	----------	----------	----------	----------
2.

A	A	B	B	C	C	D	D
----------	----------	----------	----------	----------	----------	----------	----------
3.

	—	—		—	—		—
--	---	---	--	---	---	--	---
4.

							
-----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	-----------------------------------------------------------------------------------	------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------
5.

↑↓	↓↑	↑↑	↓↓	↑↓	↑↓	↑↑	↓↓
----	----	----	----	----	----	----	----

Exercise 12.2

1. Observe and complete the pattern.

- (a)

7	14	21	28	35	42	49	56	63
----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------
- (b)

4	14	24	34	44	54	64	74	84
----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------
- (c)

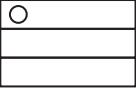
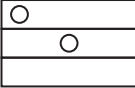
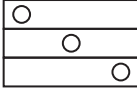
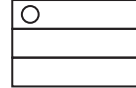
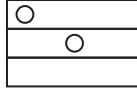
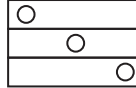
17	15	13	11	9	7	5	3	1
-----------	-----------	-----------	-----------	----------	----------	----------	----------	----------
- (d)



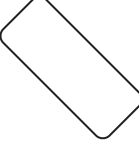



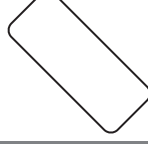

99	88	77	66	55	44	33	22	11
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------
- (e)







0	9	18	27	36	45	54	63	72
----------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

2. Complete the pattern by drawing the missing elements.

- (a)

					
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------
- (b)

							
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------
- (c)

					
-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------

3. Circle the odd numbers.

(a) 18, 28, 37, 27, 12

(b) 105, 103, 102, 100

4. Circle the even numbers.

(a) 37, 36, 89, 86, 40

(b) 105, 214, 501, 702, 100

5. Fill in the blanks.

(a) Even number + **Even** number = Even number

(b) Odd number + Odd number = **Even** number

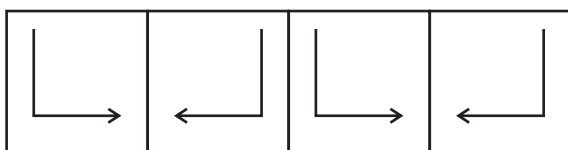
(c) $55 + 34 = 89$

(d) **Odd** number + Even number = Odd number

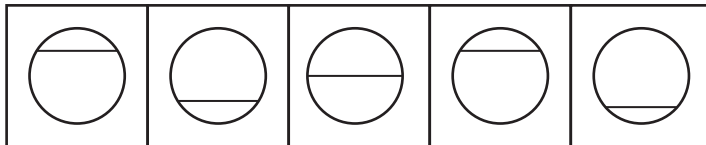
SELF ASSESSMENT-12

1. What will come next in the following pattern ?

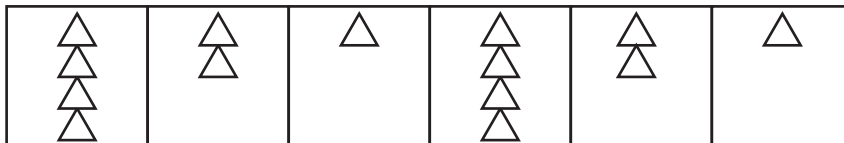
(a)



(b)



(c)













































3. Fill in the blanks to complete the pattern.

(a) 14, 18, 22, 26, 30

(b) 22, 33, 44, 55, 66, 77

Chapter-13 Data Handling

Topics	Learning Outcomes	Teaching Learning Activity	Questions on Hots
Concept of data (collecting and analyzing data)	knowledge about data	Collection of object and grouping them. Ask the children to find out how many students have bought junk food in their lunch box.	Count the number of red cars passing in front of school within 15 minutes.









Pictograph	Students will have knowledge about pictograph and will be able to represent collected data using pictograph	Ask the students to prepare a chart and collect data about the favourite food items among some girls (burger, pizza, samosa, momos etc) and prepare a pictograph.	Visit a garden and find out the number of red pink and yellow flowers in the garden. Represent it with the help of a pictograph										
Tally marks	Students will be able to record data using tally marks.	<table><tr><th>Food</th><th>No. of students</th></tr><tr><td>Burger</td><td>   </td></tr><tr><td>Pizza</td><td>    </td></tr><tr><td>Samosa</td><td> </td></tr><tr><td>Momos</td><td>  </td></tr></table>	Food	No. of students	Burger	   	Pizza	    	Samosa	 	Momos	  	
		Food	No. of students										
Burger	   												
Pizza	    												
Samosa	 												
Momos	  												
		Ask the students to prepare a tally marks table using the data collected above (favourite food items)	Using the tally marks answer the questions Which is the most popular food items? Which item is least liked?										

Exercise 13.1

1. Study the table given below. This is how children came to school on Wednesday. Each symbol represent one.

- (a) How many children came to school by bus? **4**
- (b) How many children walked to school? **6**
- (c) Which mode of transport was used most? **walking**
- (d) How many children came by bike? **3**
- (e) How many children did not walk? **12**

2. Count the given picture and draw tally marks.





Shapes	Tally Marks	No. of Shapes
	  II	7
	  	5
	III	3

3. The pictograph below shows the marks obtained by 5 students of a class in their maths exam out of 100. Each ★ represents 10 marks.





Answer the following questions.

- (a) How many marks did Aziz get? **40**
 (b) Who got 100 out of 100 marks? **Saaman**
 (c) Who got 20 less than 100 marks? **Priyanshi**
 (d) Who scored the least marks? **Aziz**
 (e) How much more did Priyanshi score than Rittika? **30**


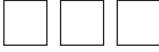


4. From the tally marks given below, find out the number of different types of vehicles Mr. Dobson repaired last week.

Vehicles	Tally Marks	Number of Vehicles
		4
	 	10
		3
		2

5. Using tally marks, find out the number of different types of balloons sold by a balloon seller.

Balloons	Tally Marks	Number
	 	8
		4
		4
	 	5






6. Draw a pictograph for the following information about vegetable boxes sold by a vegetable seller in a week.

Vegetables	Number of boxes sold	
Cauliflower	50	
Capsicum	15	
Carrot	25	
Radish	5	

1  = 5 vegetable

SELF ASSESSMENT-13

- The pictograph below shows the points made by different teams of a class in a quiz contest. Study the pictograph carefully and answer the questions.
 - Which team scored the highest? **Team C**
 - If the qualifying point to next round is 6 points, which team did not qualify? **Team D**
 - Which two teams scored same points? **Team Band E**
- A class survey was done on students hobby. Based on the students response, the following data was tabulated.

Hobby	Tally Marks	Number of students
Painting		5
Reading		14
Gardening		3
Dance		9
Craft		4
Total		35

- Which is the least popular hobby? **Gardening**
- Number of students who like craft? **4**

WORKSHEET

Worksheet-1

1. 130 2. 45 3. 225 4. 391 5. 700 6. 77 7. 1103
8. 200 9. = 10. 525

Worksheet-2

1. 6 tens 2. 1832 3. 1000 4. 181 (200-19) 5. 4305
6. 30 7. 3408 8. $7(21 \div 3 = 7)$ 9. 25 10. 50 (₹200-150)

Worksheet-3

1. $24(48 \div 2)$ 2. 4 3. 46 4. $300(90 + 210)$ 5. 27th April
6. 84 7. $500(250 \times 2)$ 8. $460(400 + 60)$ 9. $52(60 - 8)$ 10. 2:40

Worksheet-4

1. 625 2. 12 3. 9000 4. 1000g 5. 870
6. $\triangle \triangle \triangle \bigcirc \bigcirc \triangle \triangle \triangle$ 7. 26 8. 120 9. 8 10. 18, 40, (35), (47), (59)

Worksheet-5

1. 1 2. > 3. 30 minutes 4. 300 5. 900
6. 8495 7. 68 8. 100 9. $240(60 \times 4)$ 10. 8000

Worksheet-6

1. 50 2. 0 3. 9999 4. 1 5. 5999 6. 6000
7. 14m 8. 100 9. No 10. 81

Worksheet-7

1. 1001 2. 0 3. 1 4. $1782 = 1 \text{ thousand} + 7 \text{ hundreds} + 8 \text{ tens} + 2 \text{ ones}$
5. 3 6. 0 7. $162(18 \times 9)$ 8. 42 9. 800 10. 1436

Worksheet-8

1. 7999 2. 16 weeks approx 3. 8 (Since $58 + 30 = 88$) 4. ₹70 5. 1
6. 6 7. 52 8. 1301 9. 450 10. 520

Worksheet-9

1. 75 2. 7 3. 39 4. 10000 5. (12), 13, 27, 45, (92)
6. 55555 7. Draw the hands to show quarter to 5. 8. 99 9. = 10. 2000



Worksheet-10

1. = 2. 9 3. 140 4. 4:40 pm 5. 1m 6. 18000
7. 520 8. 4 9. J 10. 40