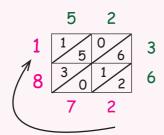
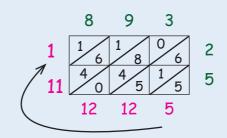
Step 5: Arrange the sum to get answer as follows.



Answer: 1872



Answer: (1+1) (1+1) (2+1) 2+5 2 2 3 2 5

Exercise



1. Find the product using standard algorithm:



2. Complete the following table

i) If the cost of one pen is ₹ 5, what will be the cost of 8 pens?	8 × 5 = 40
ii) If there are 7 balls in a bag, how many balls will be there in 4 bags?	4 × 7 =
iii) If the cost of one book is ₹ 10, what will be the cost of 7 books?	×10 =
iv) If there are 6 button in a shirt, how many buttons will be there in 3 shirts?	×=

3. Find the product of the following numbers using lattice multiplication

i)
$$22 \times 25$$

ii)
$$34 \times 51$$

iii)
$$45 \times 24$$









$$\otimes \otimes$$



$$\odot$$

$$\bigcirc$$
 = $(1+1+1) = 1 \times 3 = 3$ balls

Example 1

If the cost of one eraser is ₹ 4, what will be the cost of 2 erasers?





$$2 \times 4 = 8$$

$$2 \times 4 = 8$$

Example 2

If there are 6 eggs in a box, how many eggs will be there in 5 boxes.











Number of Boxes

Number of Eggs





1. If there are 4 toys in a box. How many toys will be there in 9 boxes?

Number of Boxes =

Number of toys in each box =

Total Number of toys

2. If there are 3 colour pencils in a packet. How many colour pencils will be there in 9 packets?

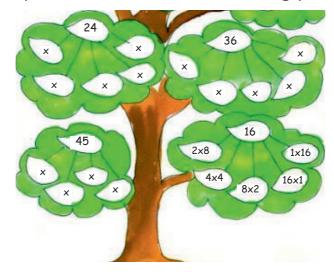


Number of packets

Number of colour pencils in each packets =

Total Number of colour pencils =

3. Write the multiplication fact for the following products





0

UNIT-2





Pattern in Numbers

We have learnt about some patterns in shapes.

Let us learn about patterns in numbers.

2.1 Patterns in numbers for odd and even numbers and in adding odd and even numbers.

Recall

Circle the odd numbers in the given sequence.

- i) 26, 29, 37, 42, 45.
- ii) 85, 84, 75, 76, 65, 64.
- iii) 11, 22, 33, 44, 55, 66.
- iv) 357, 896, 572, 951, 865, 423.
- v) 952, 698, 342, 780, 920, 850.

Complete the table from the above numbers.

Odd numbers	Even numbers





Observe the number chart given below. Colour the odd numbers with green and even numbers with blue.



201	202	203	204	205	206	207	208	209	210
211	212	213	214	215	216	217	218	219	220
221	222	223	224	225	226	227	228	229	230
231	232	233	234	235	236	237	238	239	240
241	242	243	244	245	246	247	248	249	250
251	252	253	254	255	256	257	258	259	260
261	262	263	264	265	266	267	268	269	270
271	272	273	274	275	276	277	278	279	280
281	282	283	284	285	286	287	288	289	290
291	292	293	294	295	296	297	298	299	300

We observe that odd and even numbers occur alternatively.

Complete the patterns :

i) 21, 22, 23, ____, ____, ____, ____.



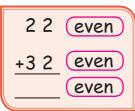
- iii) 2, 4, 6 ____, ____, ____.
- iv) 85, 86, 87, 88, ____, ___, ___, ___,
- v) 39, 41, 43, ____, ___, ___, ___,

Let's explore patterns while adding and subtracting odd and even numbers.



Add the following numbers:

i)



(ii

iii)



iv) 853 v) 978 vi) 252 +876 +553

Thus, we observe that addition of odd and even numbers involve a pattern.

Lets tabulate the patterns observed.

- i) Odd number + Odd number = Odd number
- ii) = Even number
- iii) Odd number + Odd number
- iv) Even number + Odd number

Subtract the following numbers:



- i) 756 ii) 8 -<u>252 -2</u>
- 8 9 5 (iii) -<u>2 5 3</u>

- 2 3 5 vi) +5 2 1
- 7 8 2 _____ +<u>1 4 1</u> ____

Let's tabulate the patterns observed.

v)

- i) Odd number Odd number = Odd number
- ii) = Even number
- iii) Odd number Odd number
- iv) Even number Odd number

2.2 Patterns using 10 in multiplication and division



Example:

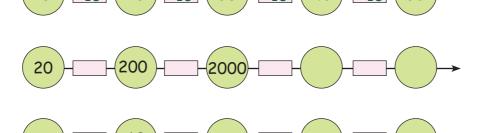
- i) 10,20,30,40,50 1,10,100,1000 ii)
- iii) 2000,200,20,2 iv) 5000,500,50,5

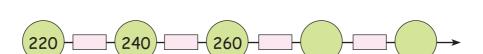
1. Make the patterns by multiplying with 10

Exercise



- 1,3,5,7, ..., ..., ... i)
- ii) 2,4,6,8, ---, ---, ---
- 2. Make the patterns by dividing with 10
- 110,120,130 ---, ---, ---
- ii) 210,230,250 ..., ..., ...
- iii) 470,430,410 ___, ___, ___
- iv) 540,470,350 ..., ..., ...
- v) 500,510,520 ---, ---, ---
- 3. Find the rule and complete the following pattern.















UNIT-3

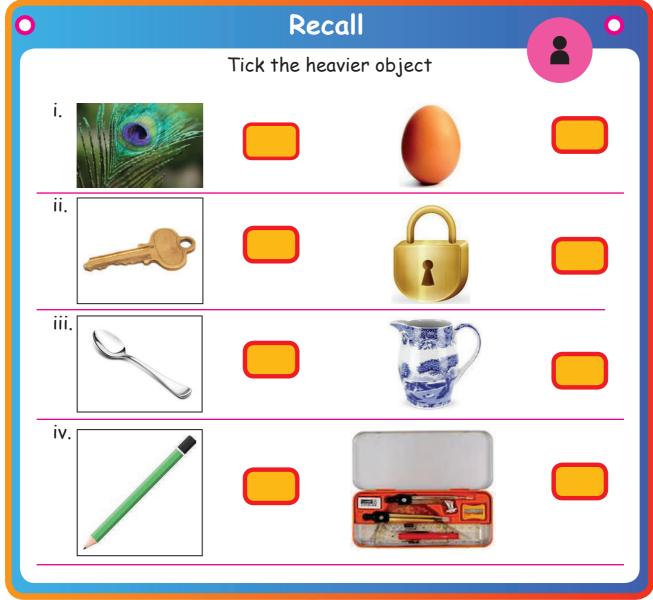








Measurement of Weight





3.1 Weighing objects using non standard units



Activity 1



Place your geometry box in one pan of the simple balance and weigh it using the following in the other pan (i) Tamarind seeds, (ii) Stones/Pebbles and (iii) Eraser. Tabulate the weight found.



Objects	Non standard units			
Geometry box	Tamarind seeds			
Geometry box	Stones/Pebbles			
Geometry box	Erasers			

Place a tiffin box instead of geometry box. You can try this activity with other objects also.

Objects	Non standard units			
Tiffin box	Tamarind seeds			
Tiffin box	Stones/Pebbles			
Tiffin box	Erasers			

Weight of the object measured using tamarind seeds, stones/pebbles and erasers differ as they are not standard. Hence, we use standard weighing object called weighing stones.









3.2 Conversion of weight in gram and kilogram.



We use standard units such as milligrams, grams and kilograms to measure weight.

Heavier things are measured in kilograms. It can be shortly written as **kg**

Lighter things are measured in grams. It can be shortly written as **q**

> 1 kilogram = 1000 gram

1000 milligram 1 gram

Conversion of weight

Do You Know

 $\frac{1}{2}$ kg = 500 grams

 $\frac{1}{4}$ kg = 250 grams

 $\frac{3}{4}$ kg = 750 grams



1kg = 10 packets of 100g= 1000g





2kg = 20 packets of 100g

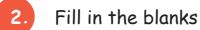
= 2000g

Find the number of 100g packets used to fill 3kg of rice.

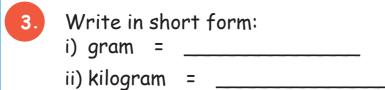
Exercise



- 1. Circle the odd one out.
 - i) gram kilogram
 - ii) 50g 500g 100cm
 - iii) 1 m 2 kg 5 kg



- i) 1000 grams = ____ kg
- ii) 2 kilograms = _____ grams



4. Find the number of bags to be used to fill the given items, if one bag can hold 100 g of the given items.

metre

Items	Quantity bought	weight in grams	number of bags
Pepper powder	1 kg		
Coriander powder	2 kg		
Coffee powder	5 kg		
Dhal	10 kg		
Mustard	2 kg		
Cashew nut	500 g		

- 5. Answer the following:
 - i) Price of 100g of icecream is ₹ 20. Ramya bought 1Kg of ice cream. How much should she pay to the shopkeeper.
 - ii) Price of 1 Kg of sugar is ₹ 50. Ranjith bought 2000g of sugar. Find the amount she has to pay to the shopkeeper.
 - iii) Saranya had 3 Kg of flour to be packed into packets of 500g each. In how many packets can she pack the flour?



UNIT-4





4.1 Reading time correct to the hour



In the class room

Children: Good Morning Teacher.

Teacher: Good Morning Children. Ramya, When do you come to

school?

Ramya : By 8 O'Clock teacher.

Teacher: How do you know the time?

Ramya: My mother tells me the time by looking at the clock,

teacher.

Teacher: Do you know to find the time by looking at the clock?

Ramya : No Teacher.

Teacher: Children, Today we shall learn to find the time by looking at

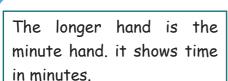
the clock

Observe the face of the clock.

The face of the clock is marked with numerals (1 to 12).

The clock has two hands. One hand is longer and another is shorter.







The shorter hand is the hour hand. It shows time in hours.

When the minute hand is at 12, the hour hand tells the hour of the day.

5'O clock

The short hand of the clock is at 5.

The long hand of the clock is at 12

So the time is 5'O clock.

We write it as 5:00.



After 1 hour

6'O clock

The short hand of the clock is at 6.

The long hand of the clock is at 12.

So the time is 6'O clock

We write it as 6:00





Activity 1

Look at the position of the hour hand and write the time in the given box.















Activity 2



Draw the hands in the following clocks to show the given time.











11'o clock

1'o clock

5'o clock

7'o clock

6'o clock



Activity 3



Tick the clock which shows the time mentioned below.



1 Hour later









2 Hour later









1 Hour later









2 Hour later









3 Hour later









UNIT-5 -





Modelling - Map Making

5.1 Making a map of known areas.



Map of Mala's Village



Mala has drawn the map of her house.

We shall locate the places from the above map as follows

- The garden is in the left side of the house.
- The house is in the right side of the garden
- The river is in the right side of the pond.
- The pond is in the left side of the river.









Discuss with your friends and draw the map of your classroom.

5.2 Mark routes for the given locations.



Given below is a map of a town showing some important places/landmarks.

Divya wants to go to library. One of the ways to reach the library from her house is shown below.



Observe the map and answer the following questions.

- 1. Name the location she passed in the given route.
- 2. From the library, Divya needs to reach pharmacy. Trace the path and name the landmarks between library and pharmacy.
- 3. Trace another route from Divya's house to reach library.
- 4. Mention any two places between museum and park.







Activity



- 1. Try to draw map of your school and mark the routes to reach headmaster's room from your class room
- 2. Collect some puzzles related to road map from your school library.

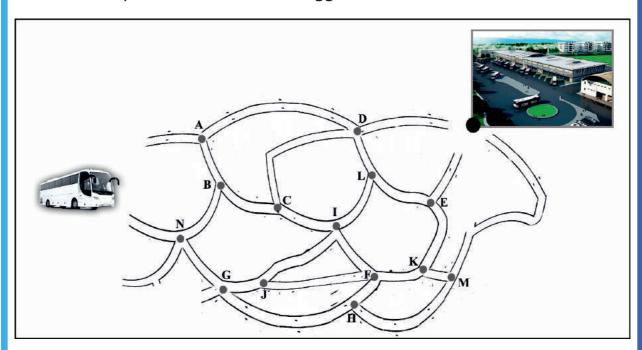
Exercise





Help the bus driver by marking the routes in the map to land the bus in bus stand.

Mark all the possible routes and suggest the best route.



Ways:

- 1. $A \rightarrow B \rightarrow C \rightarrow I \rightarrow L \rightarrow E$
- 2.
- 3.
- 4. Write the shortest route.
- 5. Write the longest route.



Following and Devising Algorithms

5.3 Devising instructions for going from one location to another on a map

Activity

- Teacher shall prepare chits of locations well known to children.
- Divide the children in groups of two each
- First player will pick up two chits from the lot and show one chit
 to every one and fix the place as starting point.
- He / She will show second chit only to the teacher. That place in the chit is fixed as the destination
- First player will give clues (i.e) route to help the second player to find the destination.
- The second player shoud find the correct destination. Team which finds the correct destination within the given time is considered as winners.
- 5.4 The quick way of finding 10 more than and less than a given number.

Colour the table in the next page by skip counting in tens as per the instructions given below.

- 1. Colour the numbers starting from 12 in blue.
- 2. Colour the numbers starting from 6 in pink.
- 3. Colour the numbers starting from 5 in yellow.
- 4. Colour the numbers starting from 9 in orange.

After colouring observe the table and fill in the blanks.

- 10 more than 45 is ______.
- 2. 10 less than 45 is _____.
- 3. 10 more than 22 is _____.
- 4. 10 less than 22 is _____.







3rd Unit 05 Information.indd 33

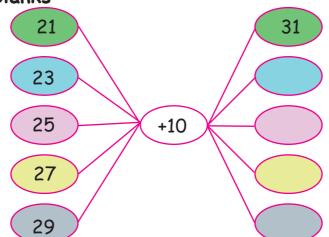


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Activity



Complete the blanks





21

23 25

11

-10

27

29

