ENGLISH–5

SEMESTER

1

Contents

1. The Gold Coins

ANSWERS

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. The bag contained

   (a) gold coins [✓] (b) silver coins [ ] (c) diamonds [ ]

2. Why could the courtiers not buy anything?

   (a) Because markets were closed [ ]

   (b) Because they lost the gold coins [ ]

   (c) Because they could not see the face of the king [✓]

3. What did Tenaliraman buy?

   (a) A gold chain, a gold ring and clothes [✓]

   (b) A horse [ ]

   (c) A house [ ]

B. Write True or False.

1. The courtiers were happy to receive the gold coins. **True**
2. The courtiers bought many things from the market. **False**
3. Tenaliraman fulfilled the condition laid down by the king. **True**
4. The king punished Tenaliraman. **False**

C. Answer these questions.

1. What did King Krishnadevaraya give to each of his courtiers?

Ans. King Krishnadevaraya gave each of his courtiers a bag containing fifty gold coins.

2. What was the condition laid down by the king?

Ans. The condition laid down by the king was that while spending gold coins, they had to see his face.

3. Did the courtiers buy anything? Why not?

Ans. No, the courtiers did not buy anything. They could not fulfil the condition laid down by the king.

4. How did Tenaliraman justify his action?

Ans. Tenaliraman justified his action by explaining to the king that every time he bought something, he saw the imprint of the king's face on the coin.

THINK AND ANSWER

D. Why did the king not punish Tenaliraman?

Ans. The king did not punish Tenaliraman because he was pleased by his clever answer.

GRAMMAR IS FUN

E. Circle the subjects in these sentences.

1. (Dhyan Chand) was a famous hockey player.
2. (Our school) is very old.
3. (Anju) loved the scenery.
4. (My grandparents) live in Jaipur.

F. Underline the predicates in these sentences.

1. The dodo <u>is an extinct</u> bird.
2. The kittens <u>were playing in the water</u>.
3. Anjusha <u>is in Class IA</u>.
4. Burma <u>is the old name of Myanmar</u>.
5. The courtiers <u>could not buy anything from the market</u>.

G. Tick (✓) the correct phrase in the brackets.

1. Don't put all your eggs (a breakfast/in one basket✓).
2. Let us act before it is (too early/too late✓).
3. The policeman fined the car driver (for overspeeding✓/for safe driving).
4. The train is (at the station✓/at the airport).
5. We have breakfast (at night/in the morning✓).

SPELL WELL

H. Tick (✓) the correct spellings.

1. One day, King Krishnadevaraya gave each of his courtiers✓/couriters a bag containing gold coins.
2. The court assambled/assembled✓ after a week.
3. The royal priest✓/preist wanted the king to punish Tenaliraman.
4. The king was serprised/surprised✓.

WORD POWER

I. Find words from the grid given below that mean the same as the following. The first one has been done for you.

1. observed
2. journey
3. inquisitively
4. famous
5. surprised
6. completely
7. purchased
8. cheerful

S	P	W	A	T	C	H	E	D	Y	Z
K	I	J	H	G	T	R	I	P	D	C
C	U	R	I	O	U	S	L	Y	B	A
Z	R	E	N	O	W	N	E	D	Q	P
A	M	A	Z	E	D	D	B	Z	Y	X
X	A	B	S	O	L	U	T	E	L	Y
O	L	M	N	P	B	O	U	G	H	T
H	A	P	P	Y	G	F	E	H	I	J

LET'S LISTEN

J. Your teacher will read the passage from the listening text or you can listen to it on the Digital Board. Listen to it carefully and answer these questions orally.

1. Who was Tenaliraman?

Ans. Tenaliraman was a poet and jester.

2. Why was the king impressed by Tenaliraman?

Ans. The king was impressed by Tenaliraman because of his wit and intelligence.

3. Whom did the king encourage in his kingdom?

Ans. The king encouraged poets and scholars.

4. What was the official language in the court of Krishnadevarya?

Ans. Kannada.

WRITE WELL

N. Imagine Tenaliraman visited your class and met all the children. As the class monitor, you took his interview. Complete the interview.

Ans. You : Sir, welcome to class **V**

Tenaliraman : Thank you.

You : Sir, why were courtiers jealous of you?

Tenaliraman : They were jealous because **the king was very fond of me.**

You : Do you enjoy your work?

Tenaliraman : **Yes, I enjoy my work a lot.**

You : What message would you like to give to the students of our class?

Tenaliraman : **Be happy always.**

You : Sir, we will always remember that. Thank you for visiting our class.

Tenaliraman : You are welcome. I enjoyed talking **to you**.

DICTIONARY SKILLS

O. Find out the meanings of the following words from the dictionary.

1. possible 2. condition 3. priest 4. fulfil

Ans. 1. possible: Able to be done or achieved.

2. condition: State.

3. priest: A person, usually a man who has been trained to perform religious duties.

4. fulfil: Meet the conditions or requirements.

2. The Monkeys go on a Fast

ANSWERS

WARM UP

Can you name these animals?

1. **Chimpanzee**

2. **Gorilla**

3. **Orangutan**

4. **Langur**

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. Who had the idea of going on a fast?

   (a) The chief [✓] (b) The chief's wife [ ] (c) A young monkey [ ]

2. A female monkey suggested that they should keep a fast on

   (a) every Thursday [ ] (b) every holy day [✓] (c) every Friday [ ]

3. Who were sent in search of food?

   (a) Young donkeys [ ] (b) Young monkeys [✓] (c) Old monkeys [ ]

4. The fruit they kept along with them was

   (a) mango [ ] (b) banana [✓] (c) apple [ ]

B. Fill in the blanks with the correct word from the box.

bananas swallowed chief troop permission

1. Once, in a forest, lived a **troop** of monkeys.
2. The monkeys returned with huge bunches of delicious-looking **bananas**.
3. The **chief** dismissed the gathering for the day.
4. All the monkeys agreed upon it but they had to seek **permission** from the chief.
5. One by one, they **swallowed** the bananas silently.

C. Answer these questions.

1. What did the wife of the chief suggest before the fast began?

Ans. The wife of the chief suggested that each of monkey should keep his/her share of bananas with him before the fast began.

2. What idea was suggested by the young monkey?

Ans. The young monkey suggested that they should peel a banana and keep it ready to eat.

3. What permission was given by the chief of monkeys?

Ans. The chief of the monkeys gave them permission to put bananas in their mouths but in no case should they eat them.

4. How did the fast of the monkeys end?

Ans. The monkeys swallowed the bananas kept in their mouth. This way, the fast of the monkeys ended.

THINK AND ANSWER

A. Is fasting good for health? How?

Ans. Yes, it is good for health because it gives rest to our digestive system and helps to throw out toxic matter from the body.

GRAMMAR IS FUN

E. Underline the proper names and circle the common names.

1. China is a big country and Beijing is its capital.
2. The Ganga flows down the Himalayas and reaches the plains.
3. I went to Jaipur last week.
4. The Red Fort is a beautiful monument.

F. Give examples of any three uncountable nouns.

1. **oil** 2. **music** 3. **flour**

G. Give examples of any three material nouns.

1. **gold** 2. **wood** 3. **silver**

H. Fill in the blanks with the correct collective nouns from the brackets.

1. a **herd** of cattle (herd/team)
2. an **army** of soldiers (army/assembly)
3. a **gang** of robbers (bundle/gang)
4. a **fleet** of ships (colony/fleet)
5. a **crowd** of people (pile, crowd)

I. Circle the abstract nouns given in the box.

happiness sky water city wisdom table beauty foolishness pencil

SPELL WELL

J. Circle the correct spellings.

1.	assambled	asembled	assembled	assembeld
2.	gethering	gathering	gathring	gadring
3.	dalicious	delicus	delicious	deliceous

WORD POWER

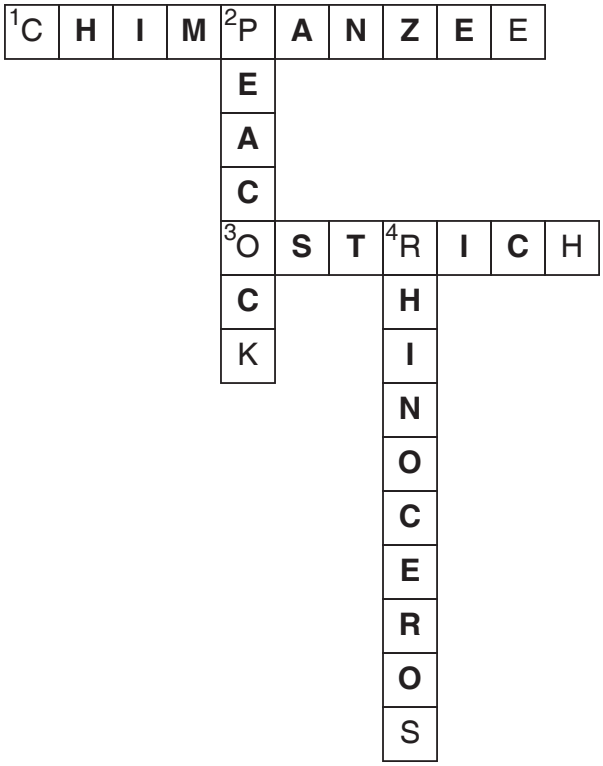
K. Solve this crossword puzzle.

Across

1. A very intelligent animal
3. A flightless bird

Down

2. Our national bird
4. An animal which has a horn on its nose



LET'S LISTEN

L. Your teacher will read the questions from the listening text or you can listen to them on the Digital Board. Listen to them carefully and tick (✓) the right answer.

1. (a) troup		(b) troop	✓
2. (a) flock	✓	(b) herd	
3. (a) pack		(b) pride	✓
4. (a) shoal	✓	(b) army	
5. (a) audience		(b) colony	✓
6. (a) pack	✓	(b) herd	

WRITE WELL

P. Have you ever kept a fast? Write your experience about your fast in a letter to your friend.

Ans. B-25,
Karol Bagh, New Delhi
4 January 2020
Dear Mukul,

Last Sunday, I kept a fast. I woke up early in the morning. I drank two glasses of water and then went for a walk. The whole day I ate nothing. I drank plenty of water throughout the day. It was a nice experience. I felt very light and active. I think one should fast for one day in a week. It gives rest to our digestive system. It makes us healthier and fitter.

Your friend,

Mohit

2. Beds (Poem)

ANSWERS

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. Beds come in

   (a) only one size ☐ (b) many sizes ✓ (c) two sizes only ☐

2. Best beds are much

   (a) more colourful ☐ (b) more boring ☐ (c) more interesting ✓

3. The right sort of a bed may be a

   (a) boat ☐ (b) submarine ✓ (c) ship ☐

B. Write True or False.

1. Most beds are used for sleeping. **True**
2. Mosquito nets offer protection against shooting stars. **True**
3. A jet-propelled bed might be used to go to Mercury. **False**

C. Match the rhyming words.

1. double	(a) prize
2. stars	(b) brittle
3. size	(c) bat
4. little	(d) trouble
5. rat	(e) Mars

ACTIVITY/PROJECT

D. Collect two different pictures of cradles and paste them. Write three sentences on the use of cradles.

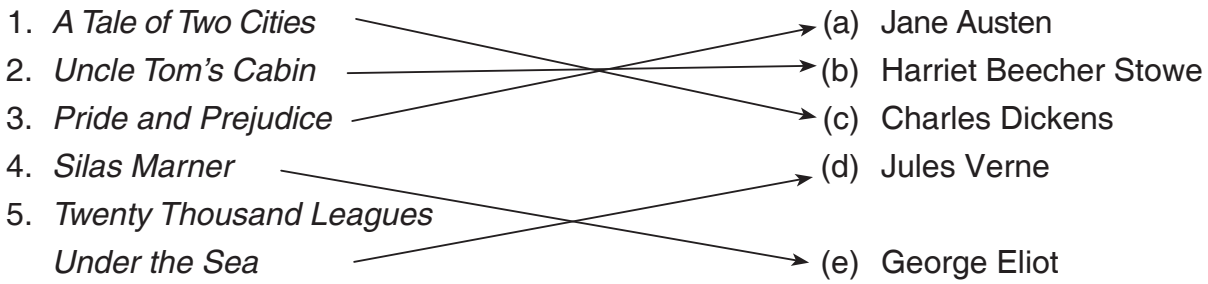
Ans. Do it yourself.

3. Tom Whitewashes the Fence

ANSWERS

WARM UP

Match the books with their authors.



READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. Tom had a holiday on

(a) Friday		(b) Wednesday		(c) Saturday	✓

2. Tom had a plan to go for a

(a) whitewash		(b) swim	✓	(c) match	

3. Tom had to whitewash the

(a) railing		(b) ceiling		(c) fence	✓

4. Aunt Polly gave Tom

(a) an orange to eat		(b) a pear to eat		(c) an apple to eat	✓

B. Fill in the blanks with the correct word from the box.

Jim Tom's Sid spotlessly clever

1. Tom and his cousin, **Sid**, were having a holiday.
2. **Jim** was carrying a bucket to fetch water from the water pump.
3. A brilliant idea came to **Tom's** mind.
4. Tom was very **clever** at getting what he wanted.
5. Aunt Polly was happy to see the fence looking so **spotlessly** white.

C. Answer these questions.

1. What task was given to Tom by Aunt Polly?

Ans. Tom was given the task of whitewashing the fence by Aunt Polly.

2. What clever idea came to Tom's mind?

Ans. The clever idea that came to Tom's mind was that he should pretend to enjoy his work.

3. Why was there a look of pity on Ben's face?

Ans. There was a look of pity on Ben's face because he was going for a swim while Tom was working.

4. What did Tom get before the afternoon was over?

Ans. Tom got twelve marbles, a tin soldier, a key, a dog's collar, the handle of a knife and four segments of an orange.

5. Why was Aunt Polly delighted?

Ans. Aunt Polly was delighted because the fence had been painted spotlessly white.

THINK AND ANSWER

D. How was Tom successful in getting others to do the work for him?

Ans. Tom was successful in getting others to do the work for him because he pretended to enjoy the work he was doing.

E. Circle the subjects in these sentences.

1. (This) car is mine.
2. I have read (these) books.
3. We are selling (this) house.
4. (That) house belongs to my uncle.

F. Underline the predicates in these sentences.

1. What kind of animals are these?
2. Which book is yours ?
3. Which boy needs (my) help?
4. What time are you leaving for (your) home?
5. Whose pen is lying on (my) table?

GRAMMAR IS FUN

G. Write the comparative and superlative forms of the given adjectives. The first one has been done for you.

Positive	Comparative	Superlative
1. brave	braver	bravest
2. great	**greater**	**greatest**
3. easy	**easier**	**easiest**
4. hot	**hotter**	**hottest**

5. intelligent	**more intelligent**	**most intelligent**

SPELL WELL

H. Tick (✓) the correct spellings.

1. Tom wanted to go for swiming/swimming✓.
2. A briliant/brilliant✓ idea came to his mind.
3. Aunt Polly was delighted✓/delited to see the fence so white.
4. Tom pritended/pretended✓ not to see Ben.
5. He sat down to eat the dalicious/delicious✓ apples.
6. Tom was having a holidey/holiday✓.

WORD POWER

I. In the groups of words given below, one word is different in meaning. Cross that word out.

1.	huge	big	large	~~tiny~~
2.	~~gloomy~~	cheerful	happy	joyful
3.	tired	weary	exhausted	~~energetic~~
4.	anger	rage	~~greed~~	wrath
5.	brilliant	excellent	superb	~~sheddy~~
6.	dismay	sorrow	~~joy~~	disappointment

LET'S LISTEN

J. Your teacher will read the passage from the listening text or you can listen to it on the Digital Board. Listen to it carefully and answer the questions orally.

1. When was Mark Twain born?

Ans. Mark Twain was born on 30 November 1835.

2. On which river did he become the river pilot?

Ans. Mississippi river.

3. Name three novels of Mark Twain.

Ans. (a) 'Adventures of Tom Sawyer'
(b) 'The Prince and the Pauper'
(c) 'Adventures of Huckleberry Finn'

WRITE WELL

N. Imagine your parents were away for a day and you did a lot of work in the house. Write a letter to your friend and describe all that you did. Fill in the missing details and complete the following letter.

Ans. V–46/B, Rajouri Garden,
New Delhi – 110027
18/3/20xx
Dear Mini
Hope you are fine. How is everybody? We are all well at this end.
My parents were away for a day. They had gone out of town.
In my parents' absence, I did a lot of work at home.
I felt tired but I learnt a lot.
Do reply soon.
Your friend,
Rajesh

DICTIONARY SKILLS

O. Find out the meanings of the following words.

Ans. 1. chirping 2. whitewash 3. dismay 4. delicious 5. segments

1. chirping: Sound made by birds.
2. whitewash: A solution of lime and water, used for painting walls or other surfaces white.
3. dismay: Concern, or distress caused by something unexpected.
4. delicious: Tasty.
5. segments: Each of the parts into which something is or may be divided.

3. I Keep Six Honest Men (Poem)

ANSWERS

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. How many serving-men does the poet keep?

   (a) Five ☐ (b) Three ☐ (c) Six ✓

2. To which directions does the poet send them?

   (a) East and west ✓ (b) East and north ☐ (c) North and south ☐

3. When is the poet busy?

   (a) From nine to one ☐ (b) From nine to five ✓ (c) From nine to six ☐

B. Write True or False.

1. All the six serving-men are dishonest. **False**
2. After they have worked, the poet gives them rest. **True**
3. Different folk have different views. **True**
4. The ten million serving-men take rest all the time. **False**

C. Answer these questions.

1. Who has taught the poet all that he knows?

Ans. The six honest men.

2. What are the names of the six honest serving-men?

Ans. What, Why, When, Where and How.

3. Write the theme of the poem in brief.

Ans. We should be curious and ask questions like what, why, etc., to increase our knowledge.

D. Complete the word grid with the names of the six serving men.

Ans.

			W	**H**	**A**	T
H		W	**H**	**Y**		
O		**H**				
W	**H**	E	R	**E**		
		N				

ACTIVITY/PROJECT

E. How do these six serving men make one knowledgeable? Discuss it in the class.

Ans. Do it yourself.

F. What steps should you take to become knowledgeable? Discuss the options in the class.

Ans. Do it yourself.

PERIODIC TEST 1

A. Tick (✓) the correct answers.

1. The fat green frog lived in a

   (a) pond [✓] (b) well [ ] (c) river [ ]

2. One of the _____ came to the pond to see if there was any food there.

   (a) swans [ ] (b) ducks [✓] (c) bears [ ]

3. The frog and his wife were very

   (a) sad [ ] (b) happy [✓] (c) angry [ ]

4. The eggs were tiny _____ things that were laid in jelly.

   (a) red [ ] (b) gray [ ] (c) black [✓]

5. The duck could not eat the eggs because they were

   (a) hard. [ ] (b) too small. [ ] (c) slippery. [✓]

B. Answer the following questions briefly.

1. Describe the appearance of the frog.

Ans. The frog was fat and green.

2. Why did the duck come to the pond?

Ans. The duck came to the pond to see if there was any food there.

3. Why was the duck angry?

Ans. The duck was angry because she did not like being laughed at.

4. Describe the frogs' eggs.

Ans. The frogs' eggs were tiny black things laid in jelly. The jelly swelled up and rose to the surface of the pond.

5. Why did the two frogs croak with laughter?

Ans. The two frogs croaked with laughter watching the duck trying to gobble the eggs. Every time, she gobbled the jelly, it slipped out of her beak.

WRITE WELL

C. Imagine it is your first day in your new school. Since you are new, you do not

know anyone there. Write a short paragraph describing your day.

Ans. Do it yourself.

GRAMMAR IS FUN

D. Circle the subjects in the following sentences.

1. (Anjali) loved the scenery.
2. (Dhyan Chand) was a famous hockey player.

E. Underline the predicates in these sentences.

1. The puppies were playing in the garden.
2. Mohit is in Class 5 A.

F. Give examples of two countable nouns and two material nouns.

1. Countable nouns: (a) **pen** (b) **book**
2. Material nouns: (a) **cotton** (b) **milk**

G. Underline the interrogative and circle the possessive adjectives in the following sentences.

1. Which book is (yours?)
2. Which boy needs (my) help?

H. Answer the following questions.

1. What task was given to Tom by Aunt Polly?

Ans. Aunt Polly gave Tom the task of whitewashing the fence.

2. What did the wife of the chief suggest before the fast began?

Ans. The wife of the chief suggested that each monkey should keep his/her share of bananas with him before the fast began.

3. What was the condition laid down by the King?

Ans. The condition laid down by the king was that while spending gold coins, they had to see his face.

4. What permission was given by the chief of the monkeys?

Ans. The chief of the monkeys gave them permission to put bananas in their mouths but in no case should they eat them.

5. Why was there a look of pity on Ben's face?

Ans. There was a look of pity on Ben's face because he was going for a swim while Tom was working.

4. The King and his Hawk

ANSWERS

WARM UP

Can you name these famous kings?

Akbar

Ashoka

Alexander

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. Genghis Khan was a great

   (a) king ✓ (b) robber ☐ (c) joker ☐

2. On the king's wrist sat his favourite

   (a) parrot ☐ (b) hawk ✓ (c) eagle ☐

3. The dead animal lying in the pool of water was a

   (a) lizard ☐ (b) snake ✓ (c) monkey ☐

4. Who killed the hawk?

   (a) Genghis Khan ✓

   (b) A snake ☐

   (c) The king's bodyguard ☐

5. Genghis Khan felt _____ on killing his hawk.

   (a) sorry ✓ (b) happy ☐ (c) triumphant ☐

B. Fill in the blanks with the words given in the box.

spilled mounted Genghis Khan thirsty sword

1. **Genghis Khan** was a great king and warrior.
2. The king was very **thirsty**.

3. The water was all **spilled** from the cup.
4. With a quick sweep of the **sword**, he struck the bird as it passed.
5. He **mounted** the horse and rode swiftly home.

C. Answer these questions.

1. Who accompanied Genghis Khan to the woods?

Ans. His friends, servants, hounds and his hawk accompanied Genghis Khan to the woods.

2. Why could Genghis Khan not drink the water?

Ans. Genghis Khan could not drink the water because the hawk knocked his cup from his hands.

3. How did the hawk save Genghis Khan's life?

Ans. The hawk saved Genghis Khan's life by knocking off the cup which contained poisoned water from his hand.

4. What lesson did Genghis Khan learn?

Ans. Genghis Khan learnt the lesson that one should never do anything in anger.

THINK AND ANSWER

D. What would have happened if the King had drunk water?

Ans. He would have died because the water was poisoned.

GRAMMAR IS FUN

E. Pick out the pronouns in the following sentences and write whether they are demonstrative, interrogative, relative, reflexive or emphatic.

1. The dog hurt itself. **itself (reflexive)**
2. What is the latest news about the match? **What (interrogative)**
3. She herself told me so. **herself (emphatic)**
4. Those are your books. **Those (demonstrative)**
5. Namita wore the dress that mother gifted her. **that (relative)**

SPELL WELL

F. Fill in the missing letters to complete the words. You can take help from the box.

favourite mountain swiftly pathway

1. m **o** u **n** t **a** **i** n
2. s **w** i **f** t **l** y
3. p **a** t **h** w **a** y
4. f **a** v **o** u **r** **i** t **e**

WORD POWER

G. In the story, we read the simile 'as swift as an arrow'. Now fill in the blanks to complete the following similes.

coal hills diamond gold lark peacock cucumber honey

1. As proud as a **peacock**
2. As happy as a **lark**
3. As black as **coal**
4. As sweet as **honey**
5. As hard as **diamond**
6. As cool as a **cucumber**
7. As good as **gold**
8. As old as the **hills**

LET'S LISTEN

H. Your teacher will read the questions from the listening text or you can listen to them on the Digital Board. Listen to them carefully and write their answers.

1. **Ashoka**
2. **Alexander the Great**
3. **Shah Jahan**
4. **Razia Sultan**

WRITE WELL

L. Write a paragraph of around a hundred words about an experience that changed you life.

One day, I was sleeping very soundly. Suddenly, I was woken up by the constant barking of my pet dog, Sheru.

I was really annoyed with him. I told him to keep quiet and let me sleep. But he kept on barking with his face in the direction of the window. Finally, I could bear him no longer and shut him in the storeroom and went to sleep.

In the morning when I woke up, I came to know that thieves had stolen all the jewellery kept in the cupboard. I was really stunned! I felt very sorry with the way I had treated Sheru. Poor Sheru was trying to stop the thieves from breaking into our house. How foolish it was of me to shut Sheru in the storeroom.

From that day, I always keep my anger in check and think deeply before taking any action.

ACTIVITY/PROJECT

M. Collect five quotations related to anger management.

Ans. Do it yourself.

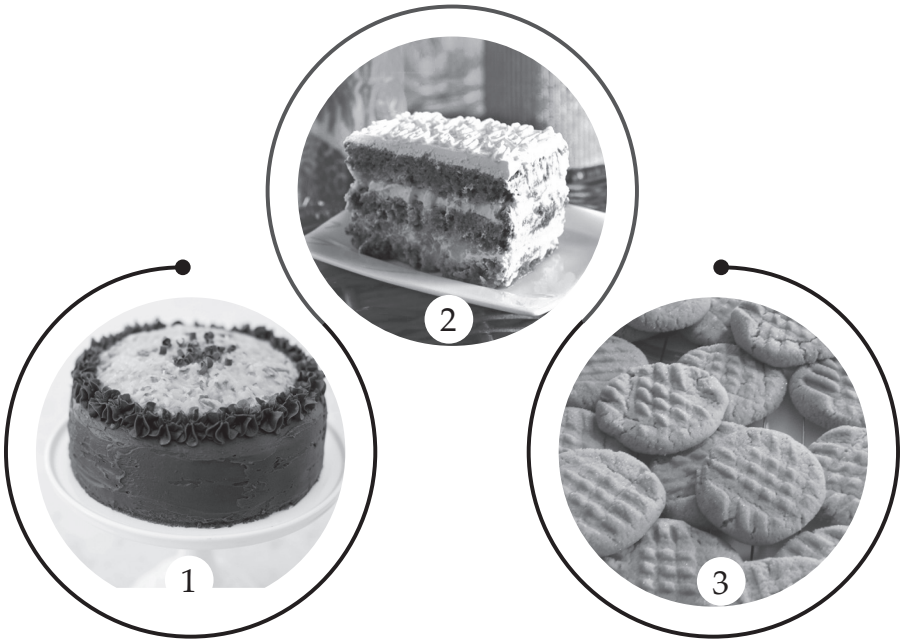
5. Blackberries – The Fruit

ANSWERS

WARM UP

A. Match the names of the various bakery products given in the box with their pictures.

chocolate cake cookies pastry



1. **Chocolate cake** 2. **Pastry** 3. **Cookies**

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. Andrew had planned to go with his friends to pluck

(a) mangoes		(b) grapes	
(c) blackberries	✓	(d) flowers	

2. Mrs Jones lived in

(a) Andrew's village		(b) a town	✓
(c) London		(d) a faraway village	

3. Peter and Charlotte met Andrew on the way and called him to go

(a) cycling ☐ (b) shopping ☐

(c) swimming ☐ (d) blackberrying ☑

B. Answer the following questions.

1. What did Andrew's mother ask him to do?

Ans. Andrew's mother asked him to run an errand for her, carrying books to Mrs Jones.

2. Why did Andrew start whistling, while going to Mrs Jones' house?

Ans. Andrew started whistling because it lifted his mood when he was angry or upset.

3. Mention any two good qualities of Andrew that Mrs Jones appreciated.

Ans. Andrew was kind and responsible.

4. Describe how Andrew plucked blackberries.

Ans. Andrew plucked the blackberries fast and filled his basket, also stuffing them into his mouth.

5. What did Andrew do to help his friends who met him on the way, while his return from Mrs Jones' house?

Ans. Andrew shared his blackberries with his friends.

6. What did Andrew's mother prepare for him after he came back?

Ans. Andrew's mother prepared a blackberry pie for him when he came back.

THINK AND ANSWER

C. Answer the following questions.

1. Andrew gave some blackberries to his friends too. Which qualities of Andrew are revealed by this simple act? Do you also like to share things with your friends?

Ans. Any reasonable answer is acceptable. Clues: Andrew is kind, generous, and responsible – does chores and runs errands without sulking.

2. What would you do if your parents asked you to do some urgent work during your playtime? Give a reason in support of your decision.

Ans. Any reasonable answer is acceptable.

GRAMMAR IS FUN

D. Fill in the blanks with suitable form of verbs given in the brackets according to the tense form mentioned with each sentence.

1. Chandra **goes** (go) to the gym every Sunday. (Simple Present Tense)
2. Vinay **is playing** (play) the guitar in his room. (Present Progressive Tense)
3. She **has left** (leave) for the airport. (Present Perfect Tense)
4. He **has eaten** (eat) his lunch. (Present Perfect Tense)
5. All mice **like** (like) to eat cheese. (Simple Present Tense)

E. Use suitable form of verbs given in the brackets to complete the following

sentences in the present perfect continuous tense.

1. Ginny **has been playing** (play) computer games since morning.
2. Sunny **has been working** (work) on the computer for two hours.
3. The singers **have been learning** (learn) the new tune for an hour.
4. My parents **have been waiting** (wait) for the guests since afternoon.

SPELL WELL

F. Fill in the missing letters to form meaningful words and learn their spellings. You may take the help of the words given in the box.

excitedly responsible bramble luscious
terribly amazed errand frown

1. **f** **r** o **w** n
2. **e** **r** r **a** n **d**
3. **t** e **r** **r** **i** bl **y**
4. **a** m **a** **z** e **d**
5. **e** **x** c **i** t **e** **d** l **y**
6. **b** r **a** **m** b **l** **e**
7. **l** u **s** **c** i **o** **u** s
8. **r** e **s** **p** o **n** **s** i **b** l **e**

WORD POWER

G. Rearrange the letters of the following words to form new words.

1. tear **rate**
2. leak **lake**
3. list **silt**
4. loot **tool**
5. lots **slot**
6. war **raw**
7. won **now**
8. dame **made**
9. lump **plum**
10. idle **lied**

LET'S LISTEN

H. Your teacher will read the passage from the listening text or you can listen to it on the Digital Board. Now, answer the questions orally.

1. What is the quantity of blackberries required for the pie?

Ans. Four cups of fresh blackberries.

2. What should be the temperature of the preheated oven?

Ans. The temperature of the oven should be 220°C.

3. What should we combine with $3\frac{1}{2}$ cups of berries at the very start?

Ans. We should combine sugar and flour with the berries.

4. After the top crust is sealed, what should be brushed and sprinkled on it?

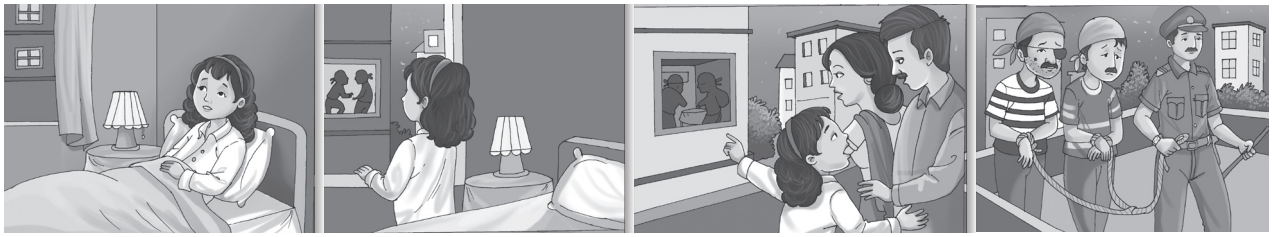
Ans. We should brush some milk and sprinkle 1/4 cup sugar on the crust.

5. How long should the pie be baked in the preheated oven without changing the set temperature?

Ans. The pie should be baked for 15 minutes.

WRITE WELL

L. Look at the following pictures and use the given clues to write a story.



Antara suddenly woke up late at night — time was 1 a.m. in the night — some screeching sound — quietly peeped out — torchlights in neighbour's house — knew that neighbours had gone to Goa on a holiday — saw shadows of two men on the closed window — frightened — tiptoed to her parent's bedroom — woke them up — they also saw the shadows — called up the police — within minutes the police arrived — thieves arrested — everyone praised Antara — she had acted fast — shown presence of mind.

Ans. Any reasonable answer based on the clues is acceptable.

DICTIONARY SKILLS

M. Refer to a dictionary and find out the meanings of the highlighted words. Write them in the blanks provided.

1. Reshma is **adept** at making handicraft items.

   adept: Very skilled or proficient in something.

2. Sneha is working as an **aide** to the lawyer, Mr Anil Sood.

   aide: An assistant to an important person.

3. Risha and Roshan are **alternately** taking leave from their offices to attend their ailing mother.

   alternately: One after the other.

4. The children were **amused** by watching the silly tricks of the clown.

   amused: Finding something funny or entertaining.

ACTIVITY/PROJECT

N. Work in groups of five. Make a list of any four outdoor activities that you enjoy doing with your friends. Illustrate any two of the activities by using newspaper cuttings or pictures. Give an attractive caption to the illustration. Do any of these four activities enable you to be of any help at home? Discuss with your project partners how you can contribute by doing so.

Ans. Do it yourself.

Poem

Don't be Afraid of the Dark

LESSON PLAN

The poem tell sus that we should not fear the dark, for it is our friend. It is at night when the earth rests and the world is at peace.

SPECIFIC OBJECTIVES

- Reading, enjoying and reciting poetry
- Understanding the poem
- Understanding and answering questions on it

5. Don't be Afraid of the Dark (Poem)

ANSWERS

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. What will be shining for ever and ever?

(a) Sun		(b) Moon	
(c) Stars	✓	(d) Diamonds	

2. What is never harsh?

(a) Moonlight	✓	(b) Sunlight	
(c) Starlight		(d) Neon light	

B. Answer the following questions.

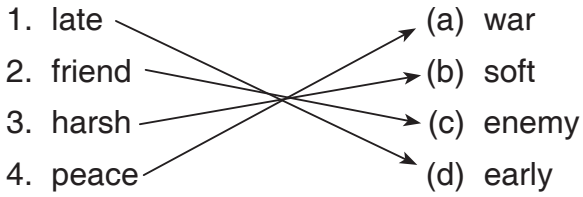
1. What are the things we see at night?

Ans. We see the moon and stars at night.

2. How is the world at peace at night?

Ans. There is silence because everyone is resting and no people are bustling about.

C. Match the words with their opposites.



The Selfish Giant

6

LESSON PLAN

SPECIFIC OBJECTIVES

- Learning to be considerate, generous and kind to others
- Reading, listening and understanding the lesson
- Answering the questions orally and in writing
- Vocabulary: Words, meanings, spellings, pronunciation, opposites in a grid
- Grammar: Learning about past tense: simple past tense, past continuous tense, past perfect tense and past perfect continuous tense; also, learning about future tense: simple future tense, future continuous tense, the 'going to' form and the future perfect continuous tense
- Learning to converse

6. The Selfish Giant

ANSWERS

WARM UP

Stories always carry us to a different world. It is wonderful to read about strange characters. Look at the following pictures and identify them. Take help from the box. You must have often met them in the world of your storybooks.

dragon fairy demon elf

Demon

Elf

Fairy

Dragon

READ AND UNDERSTAND

A. Tick (✓) the correct answers.

1. When the giant shouted at the children in a gruff voice, they

   (a) smiled at him ☐ (b) shouted back ☐ (c) ran away ☑

2. When the children were not allowed to play in the giant's garden, they tried to play

   (a) on the road ☑ (b) in their houses ☐ (c) in the stadium ☐

3. According to the giant, the most beautiful flowers are

   (a) roses ☐ (b) marigolds ☐ (c) children ☑

B. Read the following statements about the story you have just read. Based on this story, write 'Yes' for the correct and 'No' for the incorrect statements.

1. Children played in the giant's garden on holidays. **No**
2. After the children left, there was always spring in the giant's garden. **No**
3. The giant felt sorry for what he had done. **Yes**
4. A child took a big hammer and knocked down the wall. **No**

C. Answer these questions.

1. What did the giant see when he returned to his castle after seven years?

Ans. The giant saw that the children were playing happily in the garden.

2. Why did the children not want to play on the road?

Ans. The children did not want to play on the road because it was very dusty and full of stones.

3. What changes did the giant notice in the trees and the birds when the children crept into his garden?

Ans. The giant noticed that the trees were covered with blossoms; the birds were flying around, chirping with delight and there were flowers all around.

4. Why was a little boy crying in one corner of the garden?

Ans. The little boy was crying because he could not climb a tree.

5. What did the giant use to do when he grew old?

Ans. The giant used to sit on a chair and watch the children playing.

THINK AND ANSWER

D. What brought happiness in giant's life? Explain.

Ans. Love for children and unselfishness brought happiness in the giant's life.

GRAMMAR FUN

E. State whether the following sentences are in the simple past, past continuous, past perfect or past perfect continuous tenses.

1. Mother had baked the cake before the guests arrived. **Past perfect**
2. He gave his coat to the beggar. **Simple past**
3. People were shouting and running around in panic. **Past continuous**
4. Sheena had been working in this school as teacher for two years. **Past perfect continuous tense**

F. State whether the following sentences are in the simple future, future continuous, future perfect or future perfect continuous tenses.

1. The children will be waiting for Grandma to tell them a story. **Future continuous**
2. It will rain in the evening. **Simple future**
3. By the end of this term, I will have been studying Sanskrit for three years. **Future perfect continuous**
4. My parents will have gone to work by the time I get out of bed. **Future perfect**

SPELL WELL

G. Fill in the missing letters and complete the given words. You can take help of the words given in the box.

prosecuted beautiful castle trespassers

1. c **a** **s** t **l** e
2. **b** e **a** **u** t **i** f **u** l
3. **t** re **s** p **a** **s** s **e** r **s**
4. p **r** o **s** **e** c **u** t **e** d

WORD POWER

H. Find antonyms of the following words in the word grid and then write them in the space provided.

1. beautiful — 1. **ugly**
2. gruff — 2. **sweet**
3. dusty — 3. **clean**

P	Q	S	Y	L	O	O	U
Q	U	W	Z	M	I	P	P
B	G	E	C	H	N	R	S
A	L	E	L	J	S	M	T
D	Y	T	E	K	I	Q	A
C	M	F	A	I	D	N	I
R	T	E	N	O	E	S	R
P	T	Q	Z	U	L	G	S

4. outside — 4. **inside**
5. downstairs — 5. **upstairs**

LET'S LISTEN

I. Your teacher will read the questions or you can listen to them on the Digital Board. Listen to them carefully and write their answers.

1. **New Delhi** — 2. **Mysuru**
3. **Kashmir** — 4. **Chandigrah**

WRITE WELL

M. Imagine that the giant has invited the children to a party in his garden. Use your own words and the clues given in the box to complete the conversation.

begin you party evening games fun time snacks there

Dipti : Are you going to attend the giant's **party**?
Rashi : Oh, yes! What about **you**?
Dipti : I will be **there**. Where will the party be held?
Rashi : In the giant's garden.
Dipti : When will it **begin**?
Rashi : In the **evening**. I think there will be **snacks** and **games** for us.
Dipti : That sounds like **fun**. Reach there on **time**. Bye.
Rashi : Bye.

ACTIVITY/PROJECT

P. You have planned to visit an orphanage. Draw and colour or paste pictures to show any five things that you would like to carry as gifts for the children. These things belong to you and are in good condition and will be useful to the children.

Ans. Do it yourself.

LIFE SKILLS 1

A. If your friend is late for an appointment, you

1. get angry.
2. worry about her.
3. wait till she comes and find out why she was late.

Ans. Do it yourself.

B. If your brother/sister watches the sports channel while you want to watch a serial, you

1. get angry.
2. hide the remote.
3. strike a deal and watch your favourite programmes alternately.

Ans. Do it yourself.

C. When you see a piece of paper on the floor at home, you

1. always pick it up.
2. find out who threw it and make him/her pick it up.
3. ignore it. You didn't throw it anyway.

Ans. Do it yourself.

D. When you see your teachers outside school, you

1. ignore them.
2. wait for them to speak to you.
3. go up to them and wish them.

Ans. Do it yourself.

E. You find out that a classmate has invited some of your friends to a party but you haven't been invited. You

1. decide you will never speak to them.
2. ask your classmate why he didn't invite you. Maybe he forgot.
3. keep quiet and continue being friendly with that classmate.

Ans. Do it yourself.

PERIODIC TEST 2

READ AND ENJOY

A. Tick (✓) the correct answers.

1. Mrs Verma lived in a

(a) flat	✓	(b) bungalow		(c) hut	

2. She worked in a

(a) big company		(b) bank		(c) school	✓

3. _____ lived in the flat next door to Mrs Verma.

(a) Asha		(b) Seema		(c) Anjali	✓

4. What did Madhu make for Mrs Verma?

(a) Khichdi ✓ (b) Tea ☐ (c) Coffee ☐

5. _____ was very proud of her daughter.

(a) Mrs Verma ☐ (b) Bina ☐ (c) Madhu ✓

B. Answer the following questions briefly.

1. What did Bina tell Seema when she came home?

Ans. Bina told Seema that her mother had gone to Mrs Verma's house to take her to the doctor.

2. Who took Mrs Verma to the doctor and why?

Ans. Seema's mother, Madhu, took Mrs Verma to the doctor because she had fever.

3. Madhu made two things for Mrs Verma. What were they?

Ans. Madhu made *khichdi* and soup for Mrs Verma.

4. What were the three things Seema did for Mrs Verma?

Ans. Seema read a story for Mrs Verma. She dusted her house. She put a jug of water with a glass on her bedside table.

5. Why was Madhu proud of her daughter?

Ans. Madhu was proud of her daughter because she had taken care of Mrs Verma when she was ill.

WRITE WELL

C. Write a short paragraph about a funny incident that happened in your life.

Ans. Do it yourself.

GRAMMAR IS FUN

D. Tick (✓) the correct phrase in the brackets.

1. Don't put all your eggs (on the table/in one basket✓).
2. The police fined the car driver (for overspeeding✓/for safe driving).

E. Pick out the pronouns in the following sentences and write whether they are demonstrative, interrogative, relative, reflexive or emphatic.

1. The dog hurt itself. **reflexive**
2. What is the latest news about the match? **interrogative**

F. Use the suitable form of the verbs given in the brackets to complete the following sentences in the present perfect continuous tense.

1. Ginny **has been playing** (play) computer games since morning.
2. The singers **have been learning** (learn) the new tune for an hour.

G. State whether the following sentences are in the simple future, future continuous, future perfect or future perfect continuous tense.

1. It will rain in the evening. **Simple future**
2. The children will be waiting for Grandma to tell them a story. **Future continuous**

LITERATURE

H. Answer the following questions.

1. What did Tom get before the afternoon was over?

Ans. Before the afternoon was over, Tom got twelve marbles, a tin soldier, a key, a dog's collar, the handle of a knife and four segments of an orange.

2. Did the courtiers buy anything? Why not?

Ans. No, the courtiers did not buy anything. They could not fulfil the condition laid down by the king.

3. Why could Genghis Khan not drink the water?

Ans. Genghis Khan could not drink the water because the hawk knocked his cup from his hands.

4. What did Andrew's mother ask him to do?

Ans. Andrew's mother asked him to run and earned for her, carrying book to Mrs Jones.

5. What did the giant see when he returned to the castle after seven years?

Ans. The giant saw that the children were playing happily in the garden.

GRAMMAR WORKSHEETS

GRAMMAR WORKSHEET 1

The Gold Coins

Subject and Predicate

A. Underline the subject and circle the predicates in these sentences.

1. Most shops in the mall (are open on Sunday.)
2. Children in school uniform (were walking down the road.)
3. The baby elephant (is missing its mother.)
4. Rohan (has still not completed his homework.)
5. Beautiful flowers (covered the entire hillside.)
6. Mini and Rini (ran down the hill.)
7. The plains of North India (get very hot during the summer.)

8. The naughty child kept his mother busy all day.

B. Match the subjects with their predicates.

1. The jet aeroplane	(a) came in through the window.
2. The mice	(b) belonged to my grandmother.
3. Mrs Sharma	(c) flew high in the sky.
4. The ink	(d) played in the hockey park.
5. The children	(e) slipped on a banana peel.
6. My doctor	(f) spilled all over the paper.
7. This rocking chair	(g) is a kind, old gentleman.

Phrases

C. Complete these sentences with the help of suitable phrases from the box.

very crowded the festival of colours a file or a folder for the play
better than cure seven o'clock at Granny's house

1. Holi is **the festival of colours.**
2. The railway station was **very crowded.**
3. Prevention is **better than cure.**
4. Click the mouse twice to open **a file or a folder.**
5. They spent the weekend **at Granny's house.**
6. Please come home by **seven o'clock.**
7. I have got three passes **for the play.**

GRAMMAR WORKSHEET 2

The Monkeys go on a Fast

Kinds of Nouns

A. Circle the proper nouns and underline the common nouns.

1. Abdul Kalam delivered a speech.
2. Rima is writing with a pencil.
3. Sonam is travelling by bus.
4. Many tourists visited the Qutub Minar.

B. Read the following sentences and pick out the nouns from each. Also, write them separately in your notebook as common and proper nouns.

1. The children love Ms Diya Kumari as she is a very good teacher.
2. The tourists crowded around the tomb of Humayun and listened to the guide.
3. China is a big country and Beijing is its capital.
4. The Ganga flows down the Himalayas and reaches the plains.

Ans.	Common Noun	Proper Noun
1.	children, teacher	Ms Diya Kumari
2.	tourists, tomb, guide	Humayun
3.	country, capital	China, Beijing
4.	plains	the Ganga, the Himalayas

C. Circle the collective nouns in these sentences.

1. The tourists saw a (herd) of elephants crossing the river.
2. Thank you for the beautiful (bouquet.)
3. In the safari park, we photographed a (pride) of lions.
4. A (gang) of robbers attacked the bank.
5. A (swarm) of bees bit the bear.

D. Fill in the blanks with abstract nouns from the box.

bravery behaviour imagination kindness honesty

1. **Honesty** is the best policy.
2. She was awarded by the President for her **bravery**.
3. The teacher told Ravi's parents about his good **behaviour** in school.
4. Einstein said that **imagination** is more important than knowledge.
5. Saint Teresa of Kolkata was known for her **kindness**.

E. Form abstract nouns from the following words.

1. brave	**bravery**	2. honest	**honesty**
3. loyal	**loyalty**	4. angry	**anger**
5. beautiful	**beauty**	6. think	**thought**
7. know	**knowledge**	8. friend	**friendship**

GRAMMAR WORKSHEET 3

Tom Whitewashes the Fence
Kinds of Adjectives

A. Circle the demonstrative adjectives in these sentences.

1. I have eaten (these) dishes before.
2. Who brought (those) toys?
3. Mala has joined (that) college.
4. (Those) apartments were built last year.
5. (This) pen writes well.

B. Underline the interrogative adjective and circle the possessive adjective in each sentence.

1. Whose books is Mini holding in (her) hand?
2. Which is (your) laptop?
3. What gift have you brought for (your) friend?
4. What tools does the carpenter need to start (his) work?
5. What time are you leaving for (your) college?

C. Complete the following table.

Positive degree	Comparative degree	Superlative degree
lucky	**luckier**	luckiest
bad	**worse**	**worst**
beautiful	more beautiful	**most beautiful**
good	**better**	best
ugly	uglier	**ugliest**

D. Identify the degrees of comparison in the following sentences. Also write P for positive degree, C for comparative degree and S for superlative degree against the sentences in the space provided.

1. Yoga is good for our physical and mental health. **P**
2. Yoga is more useful than jogging for good health. **C**
3. Yoga is the most sought after activity for people these days. **S**
4. She is the best singer of our school. **S**
5. Our Principal is an effective educational leader. **P**
6. Girls are said to be more emotional than boys. **C**

GRAMMAR WORKSHEET 4

The King and his Hawk

Kinds of Pronouns

A. Fill in the blanks with the suitable demonstrative pronouns given in the box.

That This

Mother : **This** mirror in the packet is broken.

Mukul : But I checked it before I bought it from the shop.

Mother : You must go back to the shopkeeper and show it to him. Where is the gift shop?

Mukul : **That** is very far from here.

Mother : In that case, I'll accompany you.

B. Fill in the blanks with suitable relative pronouns or interrogative pronouns and complete the passage. Use the clues from the box.

what whom who that who

Sarita wanted to watch the movie **that** won an Oscar Award in 2012. She had seen the actor **who** won the award for Best Acting on TV. She said to her father, "**What** is the name of the actor **who** played the role of Lincoln?" Joginder replied, "Daniel Day-Lewis, **whom** everyone praises for his excellent acting in the movie."

C. Fill in the blanks with reflexive or emphatic pronouns.

1. I **myself** gave you this book.
2. The little girl dressed **herself**.
3. I hurt **myself**.
4. We **ourselves** spoke to the principal.
5. Hansel and Gretel lost **themselves** in the forest.

D. Fill in the blanks with appropriate relative pronouns or interrogative pronouns.

1. **Who** is the captain of Tagore House?
2. This is the novel **that** was lost.
3. I know the gentleman **who** lives in this house.
4. **What** was the reason behind the train accident?
5. **Where** is this story book?
6. She wanted to purchase 'Ignited Minds', **which** is written by Dr APJ Abdul Kalam.
7. **Where** is your bag?
8. This is the house **that** is my grandfather's.
9. She is the girl **who** works sincerely.
10. Can I use the pen **that** is in the pencil box?

GRAMMAR WORKSHEET 5

Blackberries – The Fruit

Tenses – Present Tense

A. State which form of the Present Tense is used in the following sentences.

1. Meera has been learning music for one year. — **Present perfect continuous**
2. Mr Dixit forgets everything. — **Simple present**
3. He has forgotten his wife at the Mall. — **Present perfect**
4. The children are searching for the keys. — **Present continuous**

B. Use the suitable form of verbs given in the brackets to complete the following sentences in the present perfect tense.

1. Dipti **has written** (write) a story.
2. Mousy **has thrown** (throw) a ball at a bird.
3. Suhasini **has drawn** (draw) a picture.
4. Vidushi **has gone** (go) out.

C. Fill in the blanks with the suitable form of verbs given in the brackets according to the tense form mentioned with each sentences.

1. Chandra **goes** (go) to the gym every Sunday. (Simple Present Tense)
2. Vinay **is playing** (play) the guitar in his room. (Present Progressive Tense)
3. She **has left** (leave) for the airport. (Present Perfect Tense)
4. He **has eaten** (eat) his lunch. (Present Perfect Tense)
5. He **has been watching** (watch) TV for two hours. (Present Perfect Continuous Tense)

D. Fill in the blanks with present perfect continuous tense form of the verbs given in the brackets.

1. The dog **has been barking** for three hours; I wish someone would call the owner. (bark)
2. They **have been publishing** this newsletter for several years. (publish)
3. I **have been playing** for you to make up your mind. (wait)
4. I **has been working** for two hours. (work)
5. We **have been living** here since 1980. (live)
6. The boys **have been playing** football for three hours. (play)
7. It **has been raining** for two hours. (rain)

GRAMMAR WORKSHEET 6

The Selfish Giant

Tenses – Past Tense, Future Tense

A. Fill in the blanks with the simple past or past perfect forms of the verbs in the brackets.

1. When Rahul **reached** (reach) school, the bell **rang** (ring).
2. He **thanked** (thank) me for what I **had done** (do).
3. I **expected** (expect) to be bored at the play, but I **had** (have) fun.

B. Fill in the blanks with verbs given in the brackets in the past perfect continuous tense.

1. Sumit **had been learning** (learn) judo for one year.

2. The students **had been practising** (practise) the dance for two weeks.
3. Prakash **had been working** (work) in this office since 1992.

C. Fill in the blanks with suitable forms of verbs given in the brackets as per the tense forms mentioned with the sentences.

1. The inspector **will visit** (visit) the house tomorrow and meet the owner. (simple future tense) (should be 'meet' instead of 'met']
2. The Prime Minister **is going to inaugurate** (inaugurate) the new nuclear plant. ('going to' form)
3. The teacher **will be giving** (give) a gift to Tina after lunch. (future progressive tense)

D. Complete the following sentences with the given verbs in the future perfect continuous tense as shown.

1. Nitin **will have been solving** (solve) mathematical problems for half an hour when the last period gets over.
2. Shreyas **will have been giving** (give) a presentation on first aid for an hour when the seminar gets over.
3. The dancers **will have been dancing** (dance) for two hours when the programme gets over.
4. The choir singers **will have been singing** (sing) for an hour before the play is presented.

E. Rewrite the following sentences as directed. You may use words of your own if required.

1. We spend the winter vacation with our grandparents. (future continuous tense)

Ans. We will be spending the winter vacation with our grandparents.

2. She is leaving for Rishikesh by bus. (future continuous tense)

Ans. She will be leaving for Rishikesh by bus.

3. Mother is busy preparing dinner for the guests. (simple future tense)

Ans. Mother will prepare dinner for the guests.

4. My parents will meet my maths teacher today. ('going to' form)

Ans. My parents are going to meet my maths teacher today.

5. The minister will be meeting the earthquake victims today. ('going to' form)

Ans. The minister is going to meet the earthquake victims today.

MATHEMATICS – 5

SEMESTER

1

Contents

1. Large Numbers

ANSWERS

LET US RECALL

A. The numeral for: 3 lakhs, 3 ten thousands, 2 thousands, 5 hundreds, 6 tens and 7 ones is **332567.**

B. The numeral for: 400000 + 30000 + 4000 + 200 + 60 + 1 is **434261.**

C. 1,95,473 can be written in expanded form as **100000 + 90000 + 5000 + 400 + 70 + 3.**

D. The numeral for four lakh sixty three thousand six hundred and fifty five is **463655.**

E. The number name for 7,93,147 is **Seven lakh ninety three thousand one hundred forty seven.**

F. Place value of 2 in 2,35,145 is **200000.**

G. Successor of 8,35,299 is **8,35,300.**

H. Predecessor of 6,45,400 is **6,45,399.**

I. Give the next three numbers that come just after 2,45,459. **2,45,460; 2,45,461; 2,45,462**

J. Three numbers between 2,56,267 and 2,56,271 are **2,56,268; 2,56,269; 2,56,270.**

K. Arrange 4,23,902, 6,25,620, 3,22,642 in descending order. **6,25,620; 4,23,902; 3,22,642**

L. Arrange 1,63,623, 7,59,852, 3,87,634 in ascending order. **1,63,623; 3,87,634; 7,59,852**

M. Make the largest and the smallest numbers of 6-digits using the given digits. You may repeat the digits.

Digits	Largest Number	Smallest Number
5, 9, 2, 8, 3, 1	**9,99,999**	**1,11,111**

N. Make the largest and the smallest numbers of 6-digits using the digits given below. Repetition of digits is not allowed.

Digits	Largest Number	Smallest Number
6, 7, 4, 0, 1, 2	**7,64,210**	**1,02,467**

O. 5,75,207 rounded to nearest tens is **5,75,210.**

P. 4,42,825 rounded to nearest hundreds is **4,42,800.**

Q. 7,13,794 rounded to nearest thousands is **7,14,000.**

R. 5,52,089 rounded to nearest ten thousands is **5,50,000.**

S. 8,22,319 rounded to nearest lakhs is **8,00,000.**

T. 89 can be written in Roman numerals as **LXXXIX.**

U. XLVII is the Roman numeral for **47.**

EXERCISE 1.1

A. Write the following in ten lakhs, lakhs, ten thousands, thousands, hundreds, tens and ones.

1. 4423491 **2.** 8673756

Ans. 1. 4 ten lakhs, 4 lakhs, 2 ten thousands, 3 thousands, 4 hundreds, 9 tens, 1 one.

2. 8 ten lakhs, 6 lakhs, 7 ten thousands, 3 thousands, 7 hundreds, 5 tens, 6 ones.

B. Write the following in crores, ten lakhs, lakhs, ten thousands, thousands, hundreds, tens and ones.

1. 29534563 **2.** 33679012

Ans. 1. 2 crores, 9 ten lakhs, 5 lakhs, 3 ten thousands, 4 thousands, 5 hundreds, 6 tens, 3 ones.

2. 3 crores, 3 ten lakhs, 6 lakhs, 7 ten thousands, 9 thousands, 0 hundreds, 1 ten, 2 ones.

C. Write the following in ten crores, crores, ten lakhs, lakhs, ten thousands, thousands, hundreds, tens and ones.

1. 571823491 **2.** 845733757

Ans. 1. 5 ten crores, 7 crores, 1 ten lakh, 8 lakhs, 2 ten thousands, 3 thousands, 4 hundreds, 9 tens, 1 one.

2. 8 ten crores, 4 crores, 5 ten lakhs, 7 lakhs, 3 ten thousands, 3 thousands, 7 hundreds, 5 tens, 7 ones.

D. Write the number for each of these:

1. 7 ten lakhs, 4 lakhs, 1 ten thousand, 7 thousands, 4 hundreds, 0 tens and 2 ones.

Ans. 74,17,402

2. 2 crores, 3 ten lakhs, 4 lakhs, 1 ten thousand, 7 thousands, 6 hundreds, 8 tens and 7 ones.

Ans. 2,34,17,687

3. 7 ten crores, 5 crores, 6 ten lakhs, 3 lakhs, 4 ten thousands, 7 thousands, 9 hundreds, 2 tens and 4 ones.

Ans. 75,63,47,924

E. Write the place value of each digit of the following numbers.

1. 4638971 **2.** 12140879 **3.** 897614120

Ans. 1. P.V. of 1 is 1
P.V. of 7 is 70
P.V. of 9 is 900
P.V. of 8 is 8000
P.V. of 3 is 30000
P.V. of 6 is 600000
P.V. of 4 is 4000000

2. P.V. of 9 is 9
P.V. of 7 is 70
P.V. of 8 is 800
P.V. of 0 is 0
P.V. of 4 is 40000
P.V. of 1 is 100000
P.V. of 2 is 2000000
P.V. of 1 is 10000000

3. P.V. of 0 is 0
P.V. of 2 is 20
P.V. of 1 is 100
P.V. of 4 is 4000
P.V. of 1 is 10000
P.V. of 6 is 600000
P.V. of 7 is 7000000
P.V. of 9 is 90000000
P.V. of 8 is 800000000

F. Write the following numbers in a place value chart.

1. 7170287 **2.** 78237656 **3.** 928173126

Ans.

	TC	C	TL	L	TTh	Th	H	T	O
1.			7	1	7	0	2	8	7
2.		7	8	2	3	7	6	5	6
3.	9	2	8	1	7	3	1	2	6

G. Write the number name for each of the following:

1. 98,80,788 **2.** 7,98,69,887 **3.** 23,48,67,238

Ans. 1. ninety eight lakh eighty thousand seven hundred eighty eight

2. seven crore ninety eight lakh sixty nine thousand eight hundred eighty seven

3. Twenty three crore forty eight lakh sixty seven thousand two hundred thirty eight

H. Write the numeral for each of the following:

1. Fifty lakh, thirty eight thousand, four hundred and ninety nine

2. Eight crore, eighty seven lakh, seventy nine thousand, nine hundred and two

3. Forty three crore, fifty seven lakh, sixty thousand, six hundred and twenty two

Ans. 1. 50,38,499 **2.** 8,87,79,902 **3.** 43,57,60,622

I. Write the following numbers in expanded form:

1. 28,41,456 **2.** 3,87,35,645 **3.** 59,83,56,745

Ans. 1. 2000000 + 800000 + 40000 + 1000 + 400 + 50 + 6

2. 30000000 + 8000000 + 700000 + 30000 + 5000 + 600 + 40 + 5

3. 500000000 + 90000000 + 8000000 + 300000 + 50000 + 6000 + 700 + 40 + 5

J. Write the numeral for each of these:

1. 40,00,000 + 5,00,000 + 30,000 + 8,000 + 400 + 30 + 4

Ans. 45,38,434

2. 8,00,00,000 + 80,00,000 + 6,00,000 + 40,000 + 9,000 + 600 + 10 + 5

Ans. 8,86,49,615

3. 40,00,00,000 + 7,00,00,000 + 60,00,000 + 2,00,000 + 30,000 + 8,000 + 700 + 10 + 3

Ans. 47,62,38,713

EXERCISE 1.2

A. Write the successor of each of the following:

1. 70,82,146 **2.** 3,43,37,399 **3.** 12,34,56,781

Ans. 1. 70,82,147 **2.** 3,43,37,400 **3.** 12,34,56,782

B. Write the predecessor of each of the following:

1. 93,12,421 **2.** 8,76,32,914 **3.** 37,49,82,700

Ans. 1. 93,12,420 **2.** 8,76,32,913 **3.** 37,49,82,699

C. Write the next two numbers for each of the following:

1. 86,43,313 **2.** 2,34,87,398 **3.** 18,45,63,299

Ans. 1. 86,43,314; 86,43,315 **2.** 2,34,87,399; 2,34,87,400 **3.** 18,45,63,300; 18,45,63,301

D. Write the two numbers that come just before each of the following:

1. 27,46,301 **2.** 9,30,14,220 **3.** 14,52,37,802

Ans. 1. 27,46,300; 27,46,299 **2.** 9,30,14,219; 9,30,14,218 **3.** 14,52,37,801; 14,52,37,800

E. Write two numbers which come in between

1. 23,22,496 and 23,22,499 **2.** 5,97,69,760 and 5,97,69,763

3. 11,23,45,126 and 11,23,45,129

Ans. 1. 23,22,497; 23,22,498 **2.** 5,97,69,761; 5,97,69,762

3. 11,23,45,127; 11,23,45,128

EXERCISE 1.3

A. Which is the smaller number in each of the following pairs?

1. 42,12,758 and 32,13,446 **2.** 6,45,66,524 and 6,41,27,665

3. 23,32,56,295 and 23,32,55,262

Ans. 1. 32,13,446 **2.** 6,41,27,665 **3.** 23,32,55,262

B. Which is the greater number in each of the following pairs?

1. 28,54,632 and 28,52,544 **2.** 7,32,56,295 and 7,32,55,287

3. 64,56,63,111 and 64,12,75,729

Ans. 1. 28,54,632 **2.** 7,32,56,295 **3.** 64,56,63,111

C. Arrange the following numbers in ascending order.

1. 54,31,473, 59,48,237, 54,25,793

2. 46,95,11,225, 81,23,78,048, 71,84,65,122, 53,41,49,296

Ans. 1. 54,25,793; 54,31,473; 59,48,237

2. 46,95,11,225; 53,41,49,296; 71,84,65,122; 81,23,78,048

D. Arrange the following numbers in descending order.

1. 84,82,329, 38,77,227, 67,58,237

2. 22,81,25,489, 22,55,26,239, 54,76,34,149, 39,84,27,720

Ans. 1. 84,82,329; 67,58,237; 38,77,227

2. 54,76,34,149; 39,84,27,720; 22,81,25,489; 22,55,26,239

EXERCISE 1.4

A. Make the largest and the smallest 7-digit numbers using the given digits. Repetition is not allowed.

1. 5, 2, 7, 3, 6, 8, 4 **2.** 4, 5, 8, 7, 1, 2, 0, 3

Ans.

	Largest	Smallest
1.	8765432	2345678
2.	8754321	1023457

B. Make the largest and the smallest 7-digit numbers using the given digits. Repetition is allowed.

1. 5, 6, 1, 2, 3, 7, 4 **2.** 6, 9, 4, 3, 0, 5, 8, 2

Ans.

	Largest	Smallest
1.	7777777	1111111
2.	9999999	2000000

C. Make the largest and the smallest 8-digit numbers using the given digits. Repetition is not allowed.

1. 4, 5, 3, 2, 7, 1, 6, 8 **2.** 6, 3, 8, 2, 1, 0, 4, 7

Ans.

	Largest	Smallest
1.	87654321	12345678
2.	87643210	10234678

D. Make the largest and the smallest 8-digit numbers using the given digits. Repetition is allowed.

1. 6, 9, 8, 3, 2, 4, 5, 7 **2.** 2, 1, 8, 9, 7, 3, 4, 0, 6

Ans.

	Largest	Smallest
1.	99999999	22222222
2.	99999999	10000000

E. Make the largest and the smallest 9-digit numbers using the given digits. Repetition is not allowed.

1. 9, 4, 5, 3, 2, 7, 1, 6, 8 **2.** 5, 6, 3, 8, 2, 1, 0, 4, 7

Ans.

	Largest	Smallest
1.	987654321	123456789
2.	876543210	102345678

F. Make the largest and the smallest 9-digit numbers using the given digits. Repetition is allowed.

1. 1, 2, 3, 4, 5, 6, 7, 8, 9 **2.** 0, 1, 2, 3, 4, 5, 6, 7, 8

Ans.

	Largest	Smallest
1.	999999999	111111111
2.	888888888	100000000

EXERCISE 1.5

A. Round the following numbers to nearest tens.

1. 73,35,152 **2.** 3,44,54,515 **3.** 1,23,45,67,346

Ans. 1. 73,35,150 **2.** 3,44,54,520 **3.** 1,23,45,67,350

B. Round the following numbers to nearest hundreds.

1. 21,44,467 **2.** 7,51,52,442 **3.** 87,23,45,651

Ans. 1. 21,44,500 **2.** 7,51,52,400 **3.** 87,23,45,700

C. Round the following numbers to nearest thousands.

1. 71,74,565 **2.** 8,23,76,484 **3.** 18,23,45,572

Ans. 1. 71,75,000 **2.** 8,23,76,000 **3.** 18,23,46,000

D. Round the following numbers to nearest ten thousands.

1. 91,45,632 **2.** 3,35,58,451 **3.** 12,34,56,167

Ans. 1. 91,50,000 **2.** 3,35,60,000 **3.** 12,34,60,000

E. Round the following numbers to nearest lakhs.

1. 25,13,651 **2.** 4,52,14,441 **3.** 12,45,67,891

Ans. 1. 25,00,000 **2.** 4,52,00,000 **3.** 12,46,00,000

F. Round the following numbers to nearest ten lakhs.

1. 64,14,295 **2.** 7,18,57,387 **3.** 12,13,15,234

Ans. 1. 60,00,000 **2.** 7,20,00,000 **3.** 12,10,00,000

G. Round the following numbers to nearest crores.

1. 4,91,28,402 **2.** 28,58,17,903

Ans. 1. 5,00,00,000 **2.** 29,00,00,000

H. Round the following numbers to nearest ten crores.

1. 27,01,19,384 **2.** 38,29,38,111

Ans. 1. 30,00,00,000 **2.** 40,00,00,000

EXERCISE 1.6

A. Write the following in millions, hundred thousands, ten thousands, thousands, hundreds, tens and ones.

1. 3856348 **2.** 5398675

Ans. 1. 3 millions, 8 hundred thousands, 5 ten thousands, 6 thousands, 3 hundreds, 4 tens, 8 ones

2. 5 millions, 3 hundred thousands, 9 ten thousands, 8 thousands, 6 hundreds, 7 tens, 5 ones

B. Write the following in ten millions, millions, hundred thousands, ten thousands, thousands, hundreds, tens and ones.

1. 46404237 **2.** 99675346

Ans. 1. 4 ten millions, 6 millions, 4 hundred thousands, 4 thousands, 2 hundreds, 3 tens, 7 ones

2. 9 ten millions, 9 millions, 6 hundred thousands, 7 ten thousands, 5 thousands, 3 hundreds, 4 tens, 6 ones

C. Write the following in hundred millions, ten millions, millions, hundred thousands, ten thousands, thousands, hundreds, tens and ones.

1. 334204981 **2.** 219234567

Ans. 1. 3 hundred millions, 3 ten millions, 4 millions, 2 hundred thousands, 4 thousands, 9 hundreds, 8 tens, 1 one

2. 2 hundred millions, 1 ten millions, 9 millions, 2 hundred thousands, 3 ten thousands, 4 thousands, 5 hundreds, 6 tens, 7 ones

D. Write the numeral for each of these:

1. 3 millions, 5 hundred thousands, 7 ten thousands, 4 thousands, 1 hundred, 3 tens, 8 ones.

Ans. 3,574,138

2. 5 ten millions, 2 millions, 6 hundred thousands, 8 ten thousands, 9 thousands, 2 hundreds, 4 tens, 6 ones.

Ans. 52,689,246

3. 4 hundred millions, 4 ten millions, 9 millions, 5 hundred thousands, 8 ten thousands, 2 thousands, 3 hundreds, 7 tens, 5 ones.

Ans. 449,582,375

E. Write the place value of each digit of the following numbers.

1. 9,876,504 **2.** 78,376,534 **3.** 682,345,128

Ans.

1. P.V. of 4 is 4
P.V. of 0 is 0
P.V. of 5 is 500
P.V. of 6 is 6000
P.V. of 7 is 70000
P.V. of 8 is 800000
P.V. of 9 is 9000000

2. P.V. of 4 is 4
P.V. of 3 is 30
P.V. of 5 is 500
P.V. of 6 is 6000
P.V. of 7 is 70000
P.V. of 3 is 300000
P.V. of 8 is 8000000
P.V. of 7 is 70000000

3. P.V. of 8 is 8
P.V. of 2 is 20
P.V. of 1 is 100
P.V. of 5 is 5000
P.V. of 4 is 40000
P.V. of 3 is 300000
P.V. of 2 is 2000000
P.V. of 8 is 80000000
P.V. of 6 is 600000000

F. Write the following numbers in a place value chart.

1. 1,335,267 **2.** 72,367,990 **3.** 374,237,107

Ans.

	HM	TM	M	HTh	TTh	Th	H	T	O
1.			1	3	3	5	2	6	7
2.		7	2	3	6	7	9	9	0
3.	3	7	4	2	3	7	1	0	7

G. Write the number name for each of the following:

1. 9,298,737 **2.** 93,386,357 **3.** 845,678,120

Ans. 1. Nine million two hundred ninety eight thousand seven hundred thirty seven

2. Ninety three million three hundred eighty six thousand three hundred fifty seven

3. Eight hundred forty five million six hundred seventy eight thousand one hundred twenty

H. Write the numeral for each of the following:

1. Five million, three hundred thirty four thousand, six hundred and twenty eight.

Ans. 5,334,628

2. Twenty three million, five hundred sixty seven thousand, nine hundred and eighteen.

Ans. 23,567,918

3. Six hundred thirty million, four hundred twenty six thousand, three hundred and fifteen.

Ans. 630,426,315

EXERCISE 1.7

A. Write the Hindu-Arabic Numeral for each of the following.

1. VIII	**2.** XVIII	**3.** XXIX	**4.** LXXV	**5.** XCII
6. CXLIX	**7.** CCC	**8.** CDLV	**9.** DCCCXVI	**10.** CML

Ans.

1. 8	**2.** 18	**3.** 29	**4.** 75	**5.** 92
6. 149	**7.** 300	**8.** 455	**9.** 816	**10.** 950

B. Write the Roman Numeral for each of the following.

1. 9	**2.** 15	**3.** 36	**4.** 49	**5.** 88
6. 255	**7.** 400	**8.** 770	**9.** 888	**10.** 1000

Ans.

1. IX	**2.** XV	**3.** XXXVI	**4.** XLIX	**5.** LXXXVIII
6. CCLV	**7.** CD	**8.** DCCLXX	**9.** DCCCLXXXVIII	**10.** M

C. Which of the following are meaningless?

1. IIII	**2.** VX	**3.** CM	**4.** LL	**5.** MMMD
6. LXXX	**7.** DCCCC	**8.** VC	**9.** IL	**10.** LIXX

Ans. 1, 2, 4, 7, 8, 9, 10 (these are meaning less)

D. Find the value of the following expressions.

1. LX + XL = **C (100)**

2. D − CX = **CCCXC (390)**

3. XXX ÷ V = **VI (6)**

4. LV × II = **CX (110)**

E. Match the following.

Roman Numerals	**Hindu-Arabic Numerals**
1. XXXIV	(a) 2000
2. CMLX	(b) 790
3. MM	(c) 34
4. DCCXC	(d) 59
5. LIX	(e) 960

THINK AND ANSWER

1. Write a meaningful word using the letters used as the Roman symbols. Then, express the value of the word you wrote in the Hindu-Arabic Numerals.

Ans. MIX → 1009

2. Write some abbreviations with the symbols of the Roman Numerals only. Do they form any meaningful Roman Numerals? If yes, express them into the Hindu-Arabic Numerals.

Example: DL (Driving License); DL = 500 + 50 = 550

Ans. CV $\rightarrow$ 105 CM $\rightarrow$ 900 CD $\rightarrow$ 400 MCD $\rightarrow$ 1400

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FUN ZONE

When the number names are written according to the International System of Numeration

- The letters a, b, c and d of the English alphabet do not appear in the spellings of 1 to 99.
- The letters a, b and c do not appear anywhere in the spellings of 1 to 999.
- The letters b and c do not come from 1 to 999999999.
- The letter c does not come at all.

Now, think of the number names and answer the following questions.

1. When does the letter 'd' come for the first time? **Hundred**

2. When does the letter 'a' come for the first time? **Thousand**

3. When does the letter 'b' come for the first time? **Billion**

2. Operations on Large Numbers

ANSWERS

LET US RECALL

A.

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

B.

	L	TTh	Th	H	T	O
	3	6	5	6	3	4
–	2	8	6	4	7	1
		7	**9**	**1**	**6**	**3**

C.

	L	TTh	Th	H	T	O
		2	3	1	5	7
×					1	2
	2	**7**	**7**	**8**	**8**	**4**

D.

$$
\begin{array}{r}
14203 \\
15\overline{)213045} \\
-15 \\
\hline
63 \\
-60 \\
\hline
30 \\
-30 \\
\hline
04 \\
-00 \\
\hline
45 \\
-45 \\
\hline
0
\end{array}
$$

E. 6,78,292 bags of cement are stored in a warehouse. Also 2,31,507 bags of cement are stored in another warehouse. In all how many bags of cement are stored in the two warehouses?

Ans. 9,09,799 bags

	L	TTh	Th	H	T	O
	1					
	6	7	8	2	9	2
+	2	3	1	5	0	7
	9	**0**	**9**	**7**	**9**	**9**

F. There are 14,557 boys and 18,723 girls enrolled in an university. How many more girls than boys are enrolled in the university?

Ans. 4,166 girls

	TTh	Th	H	T	O
			6	11	13
	1	8	~~7~~	~~2~~	~~3~~
–	1	4	5	5	7
		4	**1**	**6**	**6**

G. Each packet has 1,450 erasers. How many erasers are there in 35 such packets?

Ans. 50,750 erasers

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

H. 16 apples can be packed in a tray. How many trays are needed to pack 1,97,472 apples?

Ans. 12,342 trays

I. Fill in the blanks.

1. 16,456 + 35,578 = **35,578** + 16,456.

2. 0 + 45,955 = **45,955** .

3. [6,60,714 + 5,92,572] + 7,80,413 = **6,60,714** + [5,92,572 + 7,80,413].

J. Fill in the blanks.

1. 42,782 – 0 = **42,782** .

2. 2,34,219 – **0** = 2,34,219.

3. **2,13,780** – 0 = 2,13,780.

4. 23,412 – **23,412** = 0.

K. Fill in the blanks.

1. 31,235 × 1 = **31,235** .

2. 1 × **50,853** = 50,853.

3. 1,23,635 × 0 = **0** .

4. 0 × 7,95,964 = **0** .

5. [23,411 × 16,456] × 32,112 = 23,411 × [**16,456** × **32,112**].

L. Fill in the blanks.

1. 7,162 × 10 = **71,620** .

2. 4,719 × 100 = **4,71,900** .

3. 226 × 1,000 = **2,26,000** .

4. 241 × 80 = **19,280** .

5. 800 × 90 = **72,000** .

6. 700 × 300 = **2,10,000** .

M. Fill in the blanks.

1. 10,343 ÷ 10,343 = **1** .

2. 7,44,143 ÷ **7,44,143** = **1.**

3. 5,43,241 ÷ 1 = **5,43,241** .

4. 5,22,467 ÷ **1** = 5,22,467.

N. Estimate the sum by rounding to nearest ten.

12,428 + 45,281

Estimate: 12,430 + 45,280 = 57,710

O. Estimate the difference by rounding to nearest hundred.

96,521 – 44,431

Estimate: 96,500 – 44,300 = 52,200

P. Estimate the sum by rounding to nearest thousand.

4,23,921 + 3,73,301

Estimate: 4,24,000 + 3,73,000 = 7,97,000

Q. Estimate the difference by rounding to nearest ten thousand.

4,51,629 – 1,37,298

Estimate: 4,50,000 – 1,40,000 = 3,10,000

R. Estimate the product by rounding to nearest ten.

729 × 98

Estimate: 730 × 100 = 73,000

EXERCISE 2.1

A. Find the sum.

1.
```
  1     1 1   1
  4 8 5 1 7 9 4 6
+ 3 4 2 7 5 3 8
-----------------
  5 1 9 4 5 4 8 4
-----------------
```

2.
```
    1 1 1     1
  4 2 5 9 7 0 0 6
+ 9 1 8 7 3 5 4 7
-----------------
1 3 4 4 7 0 5 5 3
-----------------
```

3.
```
      1   1 1
  8 1 7 0 5 0 9 4
+ 3 1 6 0 7 8 5 2 6
-------------------
  3 9 7 7 8 3 6 2 0
-------------------
```

4.
```
  1 1 1 1 1 1 1
    9 7 5 3 2 4 8
  3 1 2 4 3 5 8 9 6
+ 4 2 6 8 5 3 0 1
-----------------
3 6 4 8 7 4 4 4 5
-----------------
```

5.
```
    1 1 2 2 2 1
  2 3 4 5 7 8 9
  3 1 4 7 5 2 8 6
+   7 6 8 9 5 4
---------------
3 4 5 9 0 0 2 9
---------------
```

3.
```
      2 1 1 1 2 1
  1 2 3 5 0 4 6 8 7
      8 4 2 6 9 3
  7 0 9 6 0 0 5 3
+       4 8 3 5 0
-----------------
1 9 5 3 5 5 7 8 3
-----------------
```

B. Add:

1. 4,65,974, 69,58,341 and 23,47,563

Ans. 97,71,878

2. 35,84,600, 7,32,965 and 12,34,56,789

Ans. 12,77,74,354

3. 48,53,76,951, 4,95,00,172 and 9,87,645

Ans. 53,58,64,768

4. 11,11,11,111, 2,22,22,222, 33,33,333 and 6,66,666

Ans. 13,73,33,332

C. Find the difference.

1.
```
    8 14 14   8 11 11
  8 9 5 4 6 9 2 1
- 7 3 5 9 6 4 8 7
-----------------
1 5 9 5 0 4 3 4
-----------------
```

2.
```
  4 8 5 7 9 5 6 2
- 3 1 2 6 8 3 4 0
-----------------
1 7 3 1 1 2 2 2
-----------------
```

3.
```
    1 9 9     12 15
  8 2 0 0 6 1 3 5
- 4 1 2 5 8 0 3 7
-----------------
4 0 7 4 8 0 9 8
-----------------
```

4.
```
  3 9 9 9  9 9 9 10
  4 0 0 0 0 0 0 0 0
- 9 8 7 6 5 4 2
---------------
3 0 1 2 3 4 5 8
---------------
```

2.
```
    6 14 11 10 9  9 10
  8 3 7 5 2 1 0 0 0
- 4 9 6 7 9 8 4
---------------
8 3 2 5 5 3 0 1 6
---------------
```

3.
```
      5 14 13 12 11 11
  9 8 7 6 5 4 3 2 1
- 1 2 3 4 5 6 7 8 9
-------------------
8 6 4 1 9 7 5 3 2
-------------------
```

D. Subtract.

1. 8,27,65,321 from 90,00,00,000

2. 10,37,59,846 from 98,64,32,107

3. 46,82,01,357 from 84,63,21,075

4. 8,88,88,866 from 12,34,56,709

Ans. **1.** 81,72,34,679 **2.** 88,26,72,261 **3.** 37,81,19,718 **4.** 3,45,67,843

E. Fill in the missing digits.

1.

$$\begin{array}{r} 4\,\boxed{5}\,9\;6\;8\;7\,\boxed{4} \\ +\;1\;2\,\boxed{4}\,8\;5\,\boxed{6}\;2 \\ \hline \boxed{5}\;8\;4\;5\,\boxed{4}\;3\;6 \\ \hline \end{array}$$

2.

$$\begin{array}{r} \boxed{8}\;0\;5\,\boxed{9}\;4\,\boxed{6}\;3 \\ -\;4\,\boxed{0}\;1\;6\,\boxed{0}\;4\,\boxed{3} \\ \hline 4\;0\,\boxed{4}\;3\;4\;2\;1 \\ \hline \end{array}$$

3.

$$\begin{array}{r} \boxed{1}\;2\;3\,\boxed{4}\;5\;6\;7\,\boxed{0} \\ 4\,\boxed{7}\;5\;9\;4\;7\,\boxed{9}\;8 \\ +\;2\;1\,\boxed{7}\;4\;6\,\boxed{8}\;5\;3 \\ \hline 8\;1\;6\;8\,\boxed{7}\;3\;2\;1 \\ \hline \end{array}$$

4.

$$\begin{array}{r} \boxed{6}\;9\,\boxed{5}\;7\;4\;8\;3\,\boxed{1}\;2 \\ -\;2\,\boxed{9}\;6\;5\,\boxed{7}\;6\,\boxed{4}\;1\;8 \\ \hline 3\;9\;9\,\boxed{1}\;7\,\boxed{1}\;8\;9\,\boxed{4} \\ \hline \end{array}$$

F. Simplify.

1. 1,23,456 + 65,04,321 – 9,87,546

Ans. 56,40,231

2. 24,75,987 + 8,97,54,680 – 1,23,45,678 – 98,76,543

Ans. 7,00,08,446

3. 4,68,03,571 – 4,68,321 – 1,20,34,689

Ans. 3,43,00,561

4. 4,67,20,081 – 5,74,13,097 + 9,87,65,432 – 6,98,54,301

Ans. 1,82,18,115

G. Solve the following word problems.

1. There are 4,67,59,841 men, 3,84,00,857 women and 5,43,21,768 children living in a state. Find the total population of the state.

Ans. 13,94,82,466

2. Mr Khanna purchased a car for ₹24,87,425. He also paid ₹75,625 for documentation and accessories. What is the total amount paid by him?

Ans. ₹25,63,050

3. The sum of two numbers is 87,95,40,603. If one of the numbers is 49,68,57,000, find the other number.

Ans. 38,26,83,603

4. A publisher published 6,75,000 copies of a book and sold 4,69,500 copies. 2,925 copies got damaged. How many copies of the book are left in the stock now?

Ans. 2,02,575 copies

5. Subtract the sum of the greatest numbers of 6 and 7 digits from the smallest number of 9 digits.

Ans. 8,90,00,002

6. How much is the number 37,46,885 smaller than the sum of 12,34,567 and 54,32,901?

Ans. 29,20,583

EXERCISE 2.2

A. Find the product.

1.
$$\begin{array}{r} 4372 \\ \times\ 369 \\ \hline 111 \\ 39348 \\ 262320 \\ 1311600 \\ \hline \mathbf{1613268} \end{array}$$

2.
$$\begin{array}{r} 42837 \\ \times\ 95 \\ \hline 1\quad\ 1 \\ 214185 \\ 3855330 \\ \hline \mathbf{4069515} \end{array}$$

3.
$$\begin{array}{r} 24085 \\ \times\ 432 \\ \hline 1111\ 1 \\ 48170 \\ 722550 \\ 9634000 \\ \hline \mathbf{10404720} \end{array}$$

B. Multiply.

1. 4,235 by 69 **2.** 60,537 by 84 **3.** 9,215 by 235

4. 27,016 by 328 **5.** 12,038 by 234 **6.** 32,401 by 386

Ans. 1. 2,92,215 **2.** 50,85,108 **3.** 21,65,525

4. 88,61,248 **5.** 28,16,892 **6.** 1,25,06,786

C. Solve the following word problems.

1. There are 95 schools in a city. On an average, a school has 1,675 students studying in different classes. How many students are there in the city?

Ans. 1,59,125 students

2. A factory produces 46,580 bolts per day. How many bolts are produced in the month of January?

Ans. 14,43,980 bolts

3. How many minutes are there in a leap year?

Ans. 5,27,040 minutes

4. On an average, 64 eggs are kept in an egg tray. A hotel owner buys 25 bundles. Each bundle contains 8 trays. Find the number of eggs that the owner buys.

Ans. 12,800 eggs

5. What number do you get when you multiply the predecessor of 648 by the largest 4-digit number?

Ans. 64,69,353

6. Form the largest and the smallest numbers using the digits 2, 5, 0 and 8 only once and find their product.

Ans. 8,520 × 2,058 = 1,75,34,160

EXERCISE 2.3

A. Find the product of the following:

1. 25 × 100 **2.** 967 × 20 **3.** 6,174 × 1,000

4. 428 × 500 **5.** 1,234 × 800 **6.** 354 × 7,000

Ans. 1. 2,500 **2.** 19,340 **3.** 61,74,000

4. 2,14,000 **5.** 9,87,200 **6.** 24,78,000

B. Multiply using short-cut tricks.

1. 86 × 5 **2.** 72 × 25 **3.** 436 × 50

4. 958 × 25 **5.** 6,972 × 50 **6.** 1,234 × 5

Ans. 1. 430 **2.** 1800 **3.** 21,800

4. 23,950 **5.** 3,48,600 **6.** 6,170

C. Find the product without performing actual multiplication.

1. 472 × 99 **2.** 6,981 × 999 **3.** 64 × 9,999 **4.** 5,274 × 999

5. 87 × 101 **6.** 2,358 × 11 **7.** 4,063 × 1,001 **8.** 725 × 11

Ans. 1. 46,728 **2.** 69,74,019 **3.** 6,39,936 **4.** 52,68,726

5. 8,787 **6.** 25,938 **7.** 40,67,063 **8.** 7,975

D. Multiply the following using short-cut tricks.

1. 35 × 35 **2.** 75 × 75 **3.** 55 × 55 **4.** 95 × 95

5. 105 × 105 **6.** 145 × 145 **7.** 850 × 850 **8.** 115 × 115

Ans. 1. 1,225 **2.** 5,625 **3.** 3,025 **4.** 9,025

5. 11,025 **6.** 21,025 **7.** 7,22,500 **8.** 13,225

E. Find the product without actual multiplication.

1. 45 × 9 = **405** **2.** 54 × 99 = **5,346** **3.** 68 × 999 = **67,932**

4. 75 × 11 = **825** **5.** 123 × 101 = **12,423** **6.** 742 × 1,001 = **7,42,742**

EXERCISE 2.4

A. Divide and check by division algorithm.

1. $48\overline{)9854}$ **2.** $65\overline{)49758}$ **3.** $210\overline{)47853}$

4. $97\overline{)608005}$ **5.** $358\overline{)687604}$ **6.** $426\overline{)987600}$

Ans. 1. Q = 205, R = 14 **2.** Q = 765, R = 33 **3.** Q = 227, R = 183

4. Q = 6,268, R = 9 **5.** Q = 1,920, R = 244 **6.** Q = 2,318, R = 132

B. Divide the following.

1. 46,950 ÷ 75 **2.** 5,97,461 ÷ 32 **3.** 87,49,563 ÷ 89

4. 37,698 ÷ 230 **5.** 8,57,216 ÷ 345 **6.** 98,74,628 ÷ 915

Ans. 1. Q = 626, R = 0 **2.** Q = 18,670, R = 21 **3.** Q = 98,309, R = 62

4. Q = 163, R = 208 **5.** Q = 2,484, R = 236 **6.** Q = 10,791, R = 863

C. Solve the following word problems.

1. A cricket team of 11 players won a cash prize of ₹6,95,200. The prize money is to be equally divided among them. Find the share of each player.

Ans. Each player got ₹63,200

2. The product of two numbers is 99,025. If one number is 425, find the other number.

Ans. 233

3. How many packets of biscuits of weight 160 g each can be packed from a stock of 25 kg 600 g of biscuits?

Ans. 160 packets

4. Find a number which when subtracted from 46,975 will make it completely divisible by 89.

Ans. 72

5. Find a number which when added to 9,50,683 will make it completely divisible by 564.

Ans. 221

6. Find the smallest six-digit number completely divisible by 325.

Ans. 1,00,100

7. Find the largest seven-digit number completely divisible by 872.

Ans. 99,99,224

8. Find the smallest seven-digit number exactly divisible by 914.

Ans. 10,00,830

EXERCISE 2.5

Simplify:

1. $676 - 100 \times 4 \div 2$

Ans. 476

2. $620 \div 62 + 15 \times 3 - 9$

Ans. 46

3. $1005 \times 2 - 125 \div 5 + 12$

Ans. 1,997

4. $300 \times 9 \div 3 + 150$

Ans. 1,050

5. $[100 + \{30 - (2 \times 5)\}] \times 30$

Ans. 3,600

6. $80 + [20 \times \{65 - (16 \div 4)\} - 2]$

Ans. 1,298

THINK AND ANSWER

Study the facts given in the following patterns and extend up to next 3 steps.

1. 1,23,45,679 × 9 × 9 = 99,99,99,999
1,23,45,679 × 9 × 8 = 88,88,88,888
1,23,45,679 × 9 × 7 = 77,77,77,777

_____
_____
_____

2. 1 + 2 = 3
4 + 5 + 6 = 7 + 8
9 + 10 + 11 + 12 = 13 + 14 + 15

_____
_____
_____

Justify your answer by doing operations.

Ans. **1.** 1,23,45,679 × 9 × 6 = 66,66,66,666;
1,23,45,679 × 9 × 5 = 55,55,55,555;
1,23,45,679 × 9 × 4 = 44,44,44,444

2. 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

PUZZLE

Identify the two numbers and complete the table.

Numbers		(A + B)	(A – B)	(A × B)	(A ÷ B)	
A	B	Sum	Difference	Product	Quotient	Remainder
5	2	7	3	10	2	1
10	5	15	**5**	**50**	**2**	**0**
12	**4**	**16**	8	**48**	**3**	**0**
9	**5**	14	**4**	45	**1**	**4**
24	3	**27**	**21**	**72**	8	0
11	**7**	**18**	4	77	**1**	**4**

3. Factors and Multiples

ANSWERS

LET US RECALL

A. Write the first six multiples of 15.

Ans. 15, 30, 45, 60, 75, 90

B. Classify the following into even and odd numbers:

68, 273, 312, 3336, 5545, 12304, 34799, 121917, 1325051, 9067600

Ans. **Even :** 68, 312, 3336, 12304, 9067600

Odd : 273, 5545, 34799, 121917, 1325051

C. Give all the factors of 144.

Ans. 1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 36, 48, 72, 144

D. Check if 3525 is divisible by 15. **Yes✓/No**

E. Check if 21 is a factor of 29821. **Yes/No✓**

EXERCISE 3.1

A. Fill in the blanks.

1. **1** is a factor of every number.

2. Every number except 1 has at least **two** factors.

3. There are **infinite** multiples of every number.

4. The **multiple** of a number is greater than or equal to the number.

5. If 2 × 3 × 5 = 30, then **2** , **3** and **5** are **factors** of 30.

6. If 7 × 11 = 77, then **77** is a **multiple** of 7 and 11.

B. Write the factors of each of the following.

1. 16 **2.** 24 **3.** 30 **4.** 36 **5.** 40

Ans. **1.** 1, 2, 4, 8, 16 **2.** 1, 2, 3, 4, 6, 8, 12, 24 **3.** 1, 2, 3, 5, 6, 10, 15, 30

4. 1, 2, 3, 4, 6, 9, 12, 18, 36 **5.** 1, 2, 4, 5, 8, 10, 20, 40

C. Write the first five multiples of each of the following.

1. 4 **2.** 6 **3.** 9 **4.** 11 **5.** 14

Ans. **1.** 4, 8, 12, 16, 20 **2.** 6, 12, 18, 24, 30 **3.** 9, 18, 27, 36, 45

4. 11, 22, 33, 44, 55 **5.** 14, 28, 42, 56, 70

D. Write the common factors of the following pairs.

1. 6, 8 **2.** 10, 15 **3.** 12, 18 **4.** 16, 20 **5.** 24, 32

Ans. **1.** 1, 2 **2.** 1, 5 **3.** 1, 2, 3, 6 **4.** 1, 2, 4 **5.** 1, 2, 4, 8

E. Write the first two common multiples of the following pairs.

1. 2, 3 **2.** 3, 4 **3.** 3, 5 **4.** 4, 8 **5.** 6, 9

Ans. 1. 6, 12 **2.** 12, 24 **3.** 15, 30 **4.** 8, 16 **5.** 18, 36

F. Which of the following is not a factor of 72?

1. 3 **2.** 8 **3.** 16 **4.** 12 **5.** 18

Ans. 3. 16

G. Which of the following are the multiples of 13?

1. 39 **2.** 85 **3.** 117 **4.** 175 **5.** 221

Ans. 1. 39 **3.** 117 **5.** 221

H. 1. Write the largest 2-digit common multiple of 8 and 12.

Ans. 96

2. Write the smallest 3-digit common multiple of 3 and 7.

Ans. 105

EXERCISE 3.2

A. State whether the following numbers are divisible by:

1. 2	(a) 25	(b) 370	(c) 884	(d) 4169	(e) 12058
2. 3	(a) 17	(b) 68	(c) 105	(d) 3159	(e) 49578
3. 4	(a) 100	(b) 320	(c) 6472	(d) 12342	(e) 20357
4. 5	(a) 35	(b) 49	(c) 110	(d) 1000	(e) 49875
5. 6	(a) 32	(b) 75	(c) 165	(d) 426	(e) 3594
6. 8	(a) 124	(b) 1048	(c) 5000	(d) 96832	(e) 42596
7. 9	(a) 63	(b) 234	(c) 3456	(d) 98765	(e) 100089
8. 10	(a) 95	(b) 410	(c) 6280	(d) 40005	(e) 83100

Ans. 1. (a) No (b) Yes (c) Yes (d) No (e) Yes

2. (a) No (b) No (c) Yes (d) Yes (e) Yes

3. (a) Yes (b) Yes (c) Yes (d) No (e) No

4. (a) Yes (b) No (c) Yes (d) Yes (e) Yes

5. (a) No (b) No (c) No (d) Yes (e) Yes

6. (a) No (b) Yes (c) Yes (d) Yes (e) No

7. (a) Yes (b) Yes (c) Yes (d) No (e) Yes

8. (a) No (b) Yes (c) Yes (d) No (e) Yes

B. Identify the numbers divisible by 11 in the following.

1. 37946 **2.** 8357 **3.** 40612 **4.** 88888 **5.** 101011

Ans. 3. 40612

C. Are the following statements correct? Justify your answer.

1. A number divisible by 8 must be divisible by 2 and 4.

Ans. Yes, as 8 itself is divisible by 2 and 4.

2. A number divisible by 3 is also divisible by 9.

Ans. No, as 15 is divisible by 3 but not divisible by 9.

3. A number divisible by 5 is also divisible by 10.

Ans. No, as 25 is divisible by 5 but not divisible by 10.

4. A number divisible by 3 and 4 both is not divisible by 12 also.

Ans. No, 12 is a common multiple of 3 and 4.

5. A number divisible by 2 and 5 both is divisible by 10.

Ans. Yes

6. A number divisible by 3 and 5 both is necessarily divisible by 15.

Ans. Yes

7. Which smallest digit will you put in place of * in the number 69413* to make it divisible by (a) 2 (b) 3 (c) 4 (d) 5 (e) 8 (f) 9 and (g) 11?

Ans. (a) 0 (b) 1 (c) 2 (d) 0
(e) 6 (f) 4 (g) 3

EXERCISE 3.3

A. Fill in the blanks.

1. Even – Even = **Even**

2. Even – Odd = **Odd**

3. **Odd** – Even = Odd

4. **Odd** ÷ Odd = Odd

5. Even ÷ Odd = **Even**

6. Odd – **Odd** = Even

B. Write E for even and O for odd numbers in each of the following.

1. 48	**2.** 97	**3.** 105	**4.** 9000	**5.** 43251
6. 896702	**7.** 45389	**8.** 24068	**9.** 731013	**10.** 123456

Ans. 1. E	**2.** O	**3.** O	**4.** E	**5.** O
6. E	**7.** O	**8.** E	**9.** O	**10.** E

C. Identify primes and composites in the following numbers.

1. 14	**2.** 21	**3.** 87	**4.** 65	**5.** 38
6. 19	**7.** 73	**8.** 69	**9.** 89	**10.** 41

Ans. 1. Composite	**2.** Composite	**3.** Composite	**4.** Composite	**5.** Composite
6. Prime	**7.** Prime	**8.** Composite	**9.** Prime	**10.** Prime

D. Solve the following problems.

1. How many pairs of twin primes are there from 31 to 70?

Ans. Two pairs: 41, 43 and 59, 61

2. Find the prime factorisation of 24, 32, 56 and 72 using the factor tree method.

Ans. $24 = 2 \times 2 \times 2 \times 3$
$32 = 2 \times 2 \times 2 \times 2 \times 2$
$56 = 2 \times 2 \times 2 \times 7$
$72 = 2 \times 2 \times 2 \times 3 \times 3$

3. Write the prime factorisation of 18, 40, 60 and 96 using the division method.

Ans. $18 = 2 \times 3 \times 3$
$40 = 2 \times 2 \times 2 \times 5$
$60 = 2 \times 2 \times 3 \times 5$
$96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$

4. (a) Can a pair of co-primes have both odd numbers?

Ans. Yes, 9 and 25 have a common factor 1.

(b) Can a pair of co-primes have both even numbers? Justify your answer with examples.

Ans. No, two even numbers always have 2 as a common factor.

5. Write the number whose prime factorisation is first five primes.

Ans. 2310

E. State True or False for the following statements.

1.	1 is the smallest prime number.	**False**
2.	Every prime number is an odd number.	**False**
3.	Two even numbers can never be co-primes.	**True**
4.	$7 \times 9 \times 11$ is the prime factorisation of 693.	**False**
5.	The smallest 3-digit odd number is a prime number.	**True**

EXERCISE 3.4

A. Find the HCF of the following by the factor method.

	1. 6, 8	**2.** 10, 15	**3.** 12, 16	**4.** 18, 30
	5. 20, 45	**6.** 8, 12, 20	**7.** 16, 24, 40	**8.** 28, 42, 56
Ans.	**1.** 2	**2.** 5	**3.** 4	**4.** 6
	5. 5	**6.** 4	**7.** 8	**8.** 14

B. Find the HCF of the following by the prime factorisation method.

	1. 20, 24	**2.** 30 45	**3.** 32, 40	**4.** 36, 60
	5. 40, 60, 80	**6.** 45, 75, 90	**7.** 48, 112, 120	**8.** 64, 96, 144
Ans.	**1.** 4	**2.** 15	**3.** 8	**4.** 12
	5. 20	**6.** 15	**7.** 8	**8.** 16

C. Find the HCF of the following by the division method.

	1. 25, 40	**2.** 24, 64	**3.** 18, 54	**4.** 45, 100
	5. 54, 72, 90	**6.** 63, 81, 105	**7.** 132, 180, 284	**8.** 120, 150, 486
Ans.	**1.** 5	**2.** 8	**3.** 18	**4.** 5
	5. 18	**6.** 3	**7.** 4	**8.** 6

D. What is the HCF of

1. two consecutive numbers?

2. two consecutive odd numbers?

3. two consecutive even numbers? **4.** two prime numbers?

Ans. 1. 1 **2.** 1 **3.** 2 **4.** 1

E. Find the HCF of the following by observation/without any calculation. Give reason.

1. 259 and 258 **2.** 735 and 733 **3.** 434 and 432 **4.** 49 and 97

Ans. 1. 1 **2.** 1 **3. 2** **4.** 1

EXERCISE 3.5

A. Find the LCM of the following numbers using the common multiple method.

1. 3, 5 **2.** 4, 8 **3.** 8, 10 **4.** 9, 12

5. 6, 10 **6.** 8, 12 **7.** 12, 15 **8.** 15, 20

Ans. 1. 15 **2.** 8 **3.** 40 **4.** 36

5. 30 **6.** 24 **7.** 60 **8.** 60

B. Find the LCM of the following numbers using the prime factorisation method.

1. 16, 24 **2.** 15, 25 **3.** 18, 30 **4.** 24, 36

5. 20, 30, 50 **6.** 28, 42, 63 **7.** 48, 56, 72 **8.** 60, 90, 150

Ans. 1. 48 **2.** 75 **3.** 90 **4.** 72

5. 300 **6.** 252 **7.** 1008 **8.** 900

C. Find the LCM of the following numbers using the common division method.

1. 18, 27 **2.** 20, 30 **3.** 30, 45 **4.** 32, 48, 72

5. 40, 75, 120 **6.** 63, 91, 130 **7.** 56, 84, 126 **8.** 120, 150, 210

Ans. 1. 54 **2.** 60 **3.** 90 **4.** 288

5. 600 **6.** 8,190 **7.** 504 **8.** 4,200

D. What is the LCM of

1. two consecutive numbers? **2.** two consecutive odd numbers?

3. two prime numbers?

Ans. 1. their product **2.** their product **3.** their product

E. Find the LCM of the following by observation/without any calculation.

1. 24 and 25 **2.** 99 and 101 **3.** 11 and 19

Ans. 1. 600 **2.** 9,999 **3.** 209

EXERCISE 3.6

A. Complete the following table.

Ans.

S. No.	First Number	Second Number	HCF	LCM
1.	12	**78**	6	156
2.	**35**	63	7	315
3.	54	90	18	**270**
4.	150	250	**50**	750
5.	144	216	**72**	**432**

B. Solve the following word problems.

1. Find the greatest number which divides 56 and 84 without leaving a remainder.

Ans. 28

2. Find the smallest number which is exactly divisible by 4, 6 and 9.

Ans. 36

3. What is the least number of chairs that can be arranged in rows of 15 or 21?

Ans. 105

4. Find the smallest number which when divided by 32, 48 and 60 leaves 5 as the remainder in each case.

Ans. 485

5. From a sheet of chart paper with size 48 cm × 30 cm, squares of the same size are to be cut. Find the least possible number of squares.

Ans. 40 squares each of dimension 6 cm × 6 cm

6. Two bells ring at an interval of 30 minutes and 36 minutes. They ring simultaneously at 8:30 a.m. When will they ring simultaneously again?

Ans. 11.30 a.m.

7. The product of two numbers is 2535 and their HCF is 13. Find the LCM of the two numbers.

Ans. 195

8. The product of the LCM and HCF of two numbers is 640. If one number is 16, find the other number.

Ans. 40

9. Can the LCM and HCF of two numbers be 120 and 9 respectively? Justify your answer.

Ans. No, 120 is not divisible by 9.

10. Find the largest 3-digit number that can be divided by 6, 8 and 15 exactly.

Ans. 960

PERIODIC TEST 1

A. Choose the correct option.

1. The product of two place values of 6 in the number 98642561 is

(a) 1000000 (b) 6000000 (c) 36000000✓ (d) 360000000

2. The difference between the greatest and the smallest 8-digit numbers formed using the digits 4, 2, 0, 8 and 3 is (Digits may be repeated)

(a) 68883972✓ (b) 88884320 (c) 20000348 (d) 20348

3. The digit at the ones place in the product of first five primes will be

(a) 0✓ (b) 1 (c) 2 (d) 5

4. Which of the following do not make a pair of co-primes?

(a) 9, 29 (b) 17, 19 (c) 44, 75 (d) 35, 91✓

B. Fill in the blanks.

1. **2** is the only even prime.

2. **10** millions make a crore.

3. The successor of the largest 8-digit even number is **99999999**.

4. The number of twin primes between 50 and 100 is **2**.

C. State True or False.

1. The smallest odd composite number is 15.

Ans. False

2. There is no symbols for 0 in the Roman Numeral System.

Ans. True

3. The sum of two even numbers can never be an odd number.

Ans. True

4. The product of two numbers is equal to the product of their HCF and LCM.

Ans. True

D. Arrange the following numbers in descending order.

1. 99999, 99999999, 999999, 100000000

2. 123123123, 321321321, 323232111, 112233123

Ans. 1. 100000000, 99999999, 999999, 99999

2. 323232111, 321321321, 123123123, 112233123

E. Write the greatest 7-digit number using the digits 2, 5, 0 and 8. Digits may be repeated.

Ans. 8888520

F. A cricket team of 11 players won a cash prize of ₹6,95,200. The prize money is to be equally divided among them. Find the share of each player.

Ans. ₹ 63,200

G. Find the HCF of 32 and 40 by the prime factorisation method.

Ans. 8

H. A number is said to be a perfect number when the sum of all its factors is double the number itself. 6 is the smallest perfect number as $1 + 2 + 3 + 6 = 12$, i.e., 2×6. Can you find any other perfect number?

Ans. Yes; 28, as $1 + 2 + 4 + 7 + 14 + 28 = 56$, i.e., 2×28

I. Two trains (passenger and superfast) start together from a station for Chennai. The passenger train stops at every third station and the superfast train stops at every fifth station. At the fifth station, a man boards the superfast train. Which is the first station at which he can change the trains?

Ans. Fifteenth station

4. Fractions

ANSWERS

LET US RECALL

A. Find an equivalent fraction of $\frac{9}{27}$ with numerator 3.

Ans. $\frac{3}{9}$

B. Check if the following fractions are in the lowest term. If not, reduce to the lowest term.

1. $\frac{12}{15}$ **2.** $\frac{7}{15}$ **3.** $\frac{24}{42}$

Ans. **1.** No; $\frac{4}{5}$ **2.** Yes **3.** No; $\frac{4}{7}$

C. Convert the following mixed fractions into improper fractions.

1. $2\frac{2}{3}$ **2.** $1\frac{2}{7}$ **3.** $7\frac{1}{8}$

Ans. **1.** $\frac{8}{3}$ **2.** $\frac{9}{7}$ **3.** $\frac{57}{8}$

D. Arrange $\frac{8}{13}, \frac{8}{9}, \frac{8}{17}, \frac{8}{25}$ in ascending order.

Ans. $\frac{8}{25}, \frac{8}{17}, \frac{8}{13}, \frac{8}{9}$

E. Add:

1. $\frac{3}{20}$ and $\frac{5}{20}$ **2.** $2\frac{1}{3}$ and $3\frac{1}{3}$

Ans. **1.** $\frac{8}{20}$ or $\frac{2}{5}$ **2.** $5\frac{2}{3}$

F. Subtract:

1. $\frac{3}{25}$ from $\frac{8}{25}$ **2.** $4\frac{1}{2}$ from $8\frac{2}{3}$

Ans. **1.** $\frac{5}{25}$ or $\frac{1}{5}$ **2.** $4\frac{1}{6}$

G. What should be added to $7\frac{2}{3}$ to get the result $10\frac{1}{6}$?

Ans. $\frac{5}{2}$

EXERCISE 4.1

A. Identify proper, improper and mixed fractions.

1. $\frac{2}{7}$ **2.** $\frac{14}{9}$ **3.** $\frac{8}{13}$ **4.** $6\frac{1}{5}$ **5.** $\frac{18}{11}$

Ans. **1.** proper **2.** improper **3.** proper **4.** mixed **5.** improper

B. Match the following improper fractions (Column I) with corresponding mixed fractions (Column II).

Column I		Column II	
1.	$\frac{14}{3}$	(a)	$3\frac{1}{8}$
2.	$\frac{18}{13}$	(b)	$7\frac{3}{16}$
3.	$\frac{25}{8}$	(c)	$4\frac{4}{9}$
4.	$\frac{40}{9}$	(d)	$4\frac{2}{3}$
5.	$\frac{115}{16}$	(e)	$1\frac{5}{13}$

C. Identify like fractions in a group of fractions given below.

1. $\frac{1}{3}, \frac{2}{7}, \frac{4}{9}, \frac{5}{7}, \frac{3}{7}$ **2.** $\frac{9}{13}, \frac{5}{17}, \frac{4}{25}, \frac{16}{17}, \frac{25}{38}$ **3.** $\frac{6}{11}, \frac{5}{40}, \frac{21}{40}, \frac{9}{17}, \frac{85}{40}$

Ans. 1. $\frac{2}{7}, \frac{5}{7}, \frac{3}{7}$ **2.** $\frac{5}{17}, \frac{16}{17}$ **3.** $\frac{5}{40}, \frac{21}{40}, \frac{85}{40}$

D. Check whether the given fractions are in the simplest form. If not, reduce it to the simplest term.

1. $\frac{5}{9}$ **2.** $\frac{8}{25}$ **3.** $\frac{17}{37}$ **4.** $\frac{40}{64}$ **5.** $\frac{38}{152}$

Ans. 1, 2 and 3 are in its simplest forms. **4.** $\frac{5}{8}$ **5.** $\frac{1}{4}$

E. Write any five fractions equivalent to each of the fractions given below.

1. $\frac{2}{3}$ **2.** $\frac{4}{5}$ **3.** $\frac{6}{11}$ **4.** $\frac{18}{30}$ **5.** $\frac{32}{40}$

Ans. 1. $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}, \frac{12}{18}$ **2.** $\frac{8}{10}, \frac{12}{15}, \frac{16}{20}, \frac{20}{25}, \frac{25}{30}$ **3.** $\frac{12}{22}, \frac{18}{33}, \frac{24}{44}, \frac{30}{55}, \frac{42}{66}$

4. $\frac{9}{15}, \frac{3}{5}, \frac{6}{10}, \frac{12}{20}, \frac{15}{25}$ **5.** $\frac{16}{20}, \frac{4}{5}, \frac{8}{10}, \frac{12}{15}, \frac{24}{30}$

F. Are the pairs of fractions equivalent?

1. $\frac{5}{7}, \frac{10}{14}$ **2.** $\frac{8}{12}, \frac{12}{18}$ **3.** $\frac{9}{15}, \frac{21}{35}$ **4.** $\frac{2}{5}, \frac{4}{9}$

5. $\frac{16}{30}, \frac{4}{7}$ **6.** $\frac{6}{9}, \frac{10}{15}$ **7.** $\frac{14}{21}, \frac{40}{60}$ **8.** $\frac{8}{11}, \frac{24}{36}$

Ans. 1. Yes **2.** Yes **3.** Yes **4.** No

5. No **6.** Yes **7.** Yes **8.** No

EXERCISE 4.2

A. Change the following unlike fractions into like fractions.

1. $\frac{2}{3}, \frac{3}{9}$ **2.** $\frac{1}{16}, \frac{5}{8}$ **3.** $\frac{4}{5}, \frac{6}{7}$ **4.** $\frac{5}{14}, \frac{8}{21}$

Ans. 1. $\frac{6}{9}, \frac{3}{9}$ or $\frac{2}{3}, \frac{1}{3}$ **2.** $\frac{1}{16}, \frac{10}{16}$ **3.** $\frac{28}{35}, \frac{30}{35}$ **4.** $\frac{15}{42}, \frac{16}{42}$

B. Compare the following fractions using >, < or =.

1. $\frac{4}{15} \boxed{<} \frac{7}{15}$ **2.** $\frac{6}{11} \boxed{>} \frac{6}{14}$ **3.** $2\frac{1}{2} \boxed{>} 1\frac{5}{6}$ **4.** $\frac{9}{17} \boxed{>} \frac{5}{13}$

5. $\frac{8}{25} \boxed{>} \frac{3}{25}$ **6.** $\frac{15}{9} \boxed{>} \frac{15}{12}$ **7.** $\frac{4}{12} \boxed{=} \frac{3}{9}$ **8.** $\frac{2}{3} \boxed{>} \frac{4}{7}$

C. Arrange the following fractions in ascending order:

1. $\frac{2}{3}, \frac{4}{5}, \frac{7}{8}, \frac{3}{4}$ **2.** $\frac{6}{15}, \frac{9}{15}, \frac{4}{15}, \frac{12}{15}$ **3.** $4\frac{1}{7}, 2\frac{5}{9}, \frac{6}{17}, \frac{6}{11}$ **4.** $\frac{4}{6}, \frac{5}{15}, \frac{9}{12}, \frac{6}{15}$

Ans. 1. $\frac{2}{3}, \frac{3}{4}, \frac{4}{5}, \frac{7}{8}$ **2.** $\frac{4}{15}, \frac{6}{15}, \frac{9}{15}, \frac{12}{15}$ **3.** $\frac{6}{17}, \frac{6}{11}, 2\frac{5}{9}, 4\frac{1}{7}$ **4.** $\frac{5}{15}, \frac{6}{15}, \frac{4}{6}, \frac{9}{12}$

D. Arrange the following fractions in descending order:

1. $\frac{25}{43}, \frac{25}{17}, \frac{25}{29}, \frac{25}{37}$ **2.** $\frac{8}{15}, \frac{11}{18}, \frac{4}{11}, \frac{9}{16}$ **3.** $\frac{4}{12}, \frac{5}{16}, \frac{6}{20}, \frac{8}{32}$ **4.** $\frac{14}{27}, \frac{19}{27}, \frac{18}{27}, \frac{11}{27}$

Ans. 1. $\frac{25}{17}, \frac{25}{29}, \frac{25}{37}, \frac{25}{43}$ **2.** $\frac{11}{18}, \frac{9}{16}, \frac{8}{15}, \frac{4}{11}$ **3.** $\frac{5}{16}, \frac{4}{12}, \frac{6}{20}, \frac{8}{32}$ **4.** $\frac{19}{27}, \frac{18}{27}, \frac{14}{27}, \frac{11}{27}$

EXERCISE 4.3

A. Find the sum.

1. $\frac{3}{8} + \frac{4}{8}$ **2.** $\frac{2}{7} + \frac{1}{7}$ **3.** $\frac{5}{12} + \frac{2}{12} + \frac{3}{12}$

4. $\frac{6}{25} + \frac{8}{25} + \frac{17}{25}$ **5.** $4\frac{1}{17} + 2\frac{1}{17}$ **6.** $1\frac{1}{9} + 2\frac{2}{9} + \frac{8}{9}$

Ans. 1. $\frac{7}{8}$ **2.** $\frac{3}{7}$ **3.** $\frac{5}{6}$

4. $1\frac{6}{25}$ **5.** $6\frac{2}{17}$ **6.** $4\frac{2}{9}$

B. Add:

1. $\frac{9}{12}$ and $\frac{1}{3}$ **2.** $\frac{7}{10}$ and $\frac{2}{5}$ **3.** $\frac{6}{25}$ and $\frac{18}{75}$

4. $\frac{4}{9}, \frac{5}{12}$ and $\frac{7}{18}$ **5.** $\frac{8}{15}, \frac{11}{24}$ and $\frac{13}{40}$ **6.** $4\frac{1}{5}$ and $\frac{12}{25}$

Ans. **1.** $1\frac{1}{12}$ **2.** $1\frac{1}{10}$ **3.** $\frac{12}{25}$

4. $1\frac{1}{4}$ **5.** $1\frac{19}{60}$ **6.** $4\frac{17}{25}$

C. Find the difference.

1. $\frac{3}{10} - \frac{1}{10}$ **2.** $\frac{9}{16} - \frac{5}{16}$ **3.** $\frac{11}{25} - \frac{6}{25}$

4. $4\frac{7}{40} - 2\frac{3}{40}$ **5.** $\frac{108}{70} - \frac{3}{70}$ **6.** $\frac{8}{14} - \frac{1}{14}$

Ans. **1.** $\frac{1}{5}$ **2.** $\frac{1}{4}$ **3.** $\frac{1}{5}$

4. $2\frac{1}{10}$ **5.** $1\frac{1}{2}$ **6.** $\frac{1}{2}$

D. Subtract:

1. $\frac{8}{45}$ from $\frac{5}{9}$ **2.** $\frac{1}{5}$ from $\frac{19}{20}$ **3.** $\frac{2}{3}$ from $\frac{3}{4}$

4. $\frac{7}{9}$ from $\frac{12}{5}$ **5.** $2\frac{1}{3}$ from $8\frac{5}{21}$ **6.** $\frac{17}{8}$ from 8

Ans. **1.** $\frac{17}{45}$ **2.** $\frac{3}{4}$ **3.** $\frac{1}{12}$

4. $1\frac{28}{45}$ **5.** $5\frac{19}{21}$ **6.** $5\frac{7}{8}$

E. Simplify.

1. $\frac{3}{4} + \frac{2}{4} - \frac{1}{4}$ **2.** $\frac{5}{12} - \frac{8}{12} + \frac{7}{12}$ **3.** $\frac{2}{3} + \frac{4}{5} - \frac{3}{4}$

4. $\frac{4}{9} - \frac{3}{18} + \frac{8}{36}$ **5.** $8 - 2\frac{3}{5} - 1\frac{7}{10}$ **6.** $12 - 13\frac{3}{4} + 2\frac{1}{8}$

Ans. **1.** 1 **2.** $\frac{1}{3}$ **3.** $\frac{43}{60}$

4. $\frac{1}{2}$ **5.** $3\frac{7}{10}$ **6.** $\frac{3}{8}$

F. Solve the following word problems.

1. Which fraction is $\frac{2}{3}$ more than $\frac{5}{9}$?

Ans. $1\frac{2}{9}$

2. What fraction should be added to $\frac{5}{7}$ to get 1?

Ans. $\frac{2}{7}$

3. What fraction should be subtracted from $\frac{9}{16}$ to get $\frac{1}{2}$?

Ans. $\frac{1}{16}$

4. How much is $\frac{5}{7}$ more than $\frac{3}{5}$?

Ans. $1\frac{11}{35}$

5. Subtract the sum of $4\frac{1}{2}$ and $2\frac{1}{4}$ from $10\frac{5}{8}$.

Ans. $3\frac{7}{8}$

6. What fraction is $\frac{7}{12}$ greater than $\frac{9}{16}$?

Ans. $1\frac{7}{8}$

7. Abhishek bought $2\frac{1}{4}$ kg potatoes, $1\frac{2}{5}$ kg onions, $1\frac{7}{10}$ kg brinjals and 3 kg cauliflowers. Find the total weight of vegetables Abhishek bought.

Ans. $8\frac{7}{20}$ kg

8. Kapil bought $\frac{2}{3}$ basket of mangoes. He gave $\frac{1}{2}$ basket of mangoes to Prabha. How much mangoes were left with Kapil?

Ans. $\frac{1}{6}$ basket

9. Radhika ate $\frac{3}{4}$ of a pizza and Meenakshi ate $\frac{3}{16}$ of the same pizza. How much of the pizza is left?

Ans. $\frac{1}{16}$ of the pizza

10. Manisha takes $12\frac{1}{4}$ minutes while Ridhi takes $15\frac{2}{5}$ minutes to reach the school from their homes. Who takes less time, and by how much?

Ans. Manisha, $3\frac{3}{20}$ minutes

EXERCISE 4.4

A. Multiply.

1. $\frac{4}{7}$ by 28 **2.** $\frac{2}{5}$ by 15 **3.** $\frac{8}{15}$ by 10 **4.** $\frac{3}{8}$ by 16

5. 6 by $\frac{2}{3}$ **6.** 12 by $\frac{3}{4}$ **7.** 36 by $\frac{5}{12}$ **8.** 20 by $\frac{7}{10}$

Ans. **1.** 16 **2.** 6 **3.** $5\frac{1}{3}$ **4.** 6

5. 4 **6.** 9 **7.** 15 **8.** 14

B. Find the product of each of the following.

1. $\frac{3}{4} \times \frac{12}{15}$ **2.** $\frac{2}{3} \times \frac{9}{16}$ **3.** $\frac{18}{35} \times \frac{5}{27}$ **4.** $\frac{6}{13} \times \frac{65}{84}$

5. $\frac{8}{11} \times \frac{77}{112}$ **6.** $\frac{60}{91} \times \frac{13}{15}$ **7.** $\frac{3}{7} \times \frac{35}{48}$ **8.** $\frac{4}{9} \times \frac{45}{56}$

Ans. **1.** $\frac{3}{5}$ **2.** $\frac{3}{8}$ **3.** $\frac{2}{21}$ **4.** $\frac{5}{14}$

5. $\frac{1}{2}$ **6.** $\frac{4}{7}$ **7.** $\frac{5}{16}$ **8.** $\frac{5}{14}$

C. Multiply and express the result in the simplest term.

1. $1\frac{1}{7} \times 28$ **2.** $2\frac{1}{3} \times 9$ **3.** $15 \times 3\frac{1}{5}$ **4.** $\frac{8}{15} \times 1\frac{1}{2}$

5. $4\frac{2}{3} \times \frac{18}{35}$ **6.** $2\frac{2}{3} \times 4\frac{5}{16}$ **7.** $1\frac{1}{11} \times 8\frac{1}{4}$ **8.** $8\frac{2}{5} \times 7\frac{1}{7}$

Ans. **1.** 32 **2.** 21 **3.** 48 **4.** $\frac{4}{5}$

5. $\frac{7}{5}$ **6.** $11\frac{1}{2}$ **7.** 9 **8.** 60

D. Solve the following word problems.

1. A bottle can hold $\frac{2}{5}$ L of milk. How much milk can be filled in 15 such bottles?

Ans. 6 L milk

2. A tailor stitches a shirt using $2\frac{1}{4}$ m of a cloth. How much cloth is required to stitch 20 such shirts?

Ans. 45 m

3. The cost of 1 kg of guavas is ₹$25\frac{1}{2}$. Find the cost of $3\frac{1}{3}$ kg of guavas.

Ans. ₹85

4. Anuradha bought $6\frac{1}{4}$ m rope at the rate of ₹ $6\frac{2}{5}$ per metre. How much money did she pay to the shopkeeper?

Ans. ₹40

5. Out of 36 students in a class, $\frac{1}{3}$ liked apples, $\frac{1}{4}$ liked oranges, 7 liked strawberries and the remaining students liked mangoes. How many students liked mangoes?

Ans. 8 students

6. Find the perimeter of a square whose each side is $1\frac{1}{2}$ m long.

Ans. 6 m

EXERCISE 4.5

A. Find the reciprocal of each of the following.

1. 4 **2.** 8 **3.** $\frac{1}{9}$ **4.** $\frac{2}{8}$ **5.** $\frac{15}{4}$

6. $\frac{18}{25}$ **7.** $2\frac{2}{3}$ **8.** $\frac{1}{20}$ **9.** $\frac{13}{6}$ **10.** $20\frac{2}{5}$

Ans. 1. $\frac{1}{4}$ **2.** $\frac{1}{8}$ **3.** 9 **4.** 4 **5.** $\frac{4}{15}$

6. $1\frac{7}{18}$ **7.** $\frac{3}{8}$ **8.** 20 **9.** $\frac{6}{13}$ **10.** $\frac{5}{102}$

B. Evaluate the following.

1. $15 \div \frac{3}{4}$ **2.** $12 \div \frac{1}{2}$ **3.** $24 \div 2\frac{2}{3}$ **4.** $40 \div \frac{8}{5}$

5. $16 \div \frac{4}{9}$ **6.** $30 \div 1\frac{1}{4}$ **7.** $40 \div \frac{2}{3}$ **8.** $85 \div 4\frac{1}{4}$

Ans. **1.** 20 **2.** 24 **3.** 9 **4.** 25

5. 36 **6.** 24 **7.** 60 **8.** 20

C. Divide the following.

1. $\frac{4}{9} \div 6$ **2.** $\frac{15}{22} \div 5$ **3.** $\frac{12}{17} \div 48$ **4.** $\frac{1}{4} \div 3$

5. $1\frac{1}{2} \div 9$ **6.** $2\frac{2}{3} \div 12$ **7.** $3\frac{3}{4} \div 15$ **8.** $4\frac{4}{5} \div 60$

Ans. 1. $\frac{2}{27}$ **2.** $\frac{3}{22}$ **3.** $\frac{1}{68}$ **4.** $\frac{1}{12}$

5. $\frac{1}{6}$ **6.** $\frac{2}{9}$ **7.** $\frac{1}{4}$ **8.** $\frac{2}{25}$

D. Divide the following fractions.

1. $\frac{1}{3} \div \frac{1}{9}$ **2.** $\frac{1}{8} \div \frac{1}{48}$ **3.** $\frac{2}{7} \div \frac{3}{28}$ **4.** $\frac{21}{22} \div \frac{7}{11}$

5. $\frac{6}{5} \div \frac{24}{35}$ **6.** $\frac{8}{11} \div \frac{72}{99}$ **7.** $2\frac{1}{2} \div 5\frac{5}{8}$ **8.** $3\frac{3}{5} \div 7\frac{3}{15}$

Ans. 1. 3 **2.** 6 **3.** $2\frac{2}{3}$ **4.** $1\frac{1}{2}$

5. $1\frac{3}{4}$ **6.** 1 **7.** $\frac{4}{9}$ **8.** $\frac{1}{2}$

E. Solve the following word problems.

1. The perimeter of a square is $6\frac{2}{5}$ m. What is the measure of its each side?

Ans. $1\frac{3}{5}$ m

2. There are $\frac{2}{5}$ kg chestnuts in a packet. How many such packets can be packed for 8 kg chestnuts?

Ans. 20 packets

3. A rectangular park is $32\frac{1}{2}$ m long. Find the width of the park if its area is 663 sq. m.

Ans. $20\frac{2}{5}$ m

4. Arnav had ₹480 in his pocket. He spent $\frac{1}{4}$ of the amount for buying a shirt, $\frac{2}{5}$ of the remaining for buying a jeans and $\frac{5}{6}$ of the remaining for purchasing books. How much money was left with Arnav after shopping?

Ans. ₹36

THINK AND ANSWER

Observe the following pattern:

$$\frac{1}{2} = 1 \times \frac{1}{2} = 1 - \frac{1}{2} = \frac{1}{2}$$

$$\frac{2}{3} + \frac{2}{3} = 2 \times \frac{2}{3} = 2 - \frac{2}{3} = 1\frac{1}{3}$$

$$\frac{3}{4} + \frac{3}{4} + \frac{3}{4} = 3 \times \frac{3}{4} = 3 - \frac{3}{4} = 2\frac{1}{4}$$

$$\frac{4}{5} + \frac{4}{5} + \frac{4}{5} + \frac{4}{5} = 4 \times \frac{4}{5} = 4 - \frac{4}{5} = 3\frac{1}{5}$$

Now, write the facts that will appear in 6th, 7th and 10th rows.

Ans.

6th row: $\frac{6}{7} + \frac{6}{7} + \frac{6}{7} + \frac{6}{7} + \frac{6}{7} + \frac{6}{7} = 6 \times \frac{6}{7} = 6 - \frac{6}{7} = 5\frac{1}{7}$

7th row: $\frac{7}{8} + \frac{7}{8} + \frac{7}{8} + \frac{7}{8} + \frac{7}{8} + \frac{7}{8} + \frac{7}{8} = 7 \times \frac{7}{8} = 7 - \frac{7}{8} = 6\frac{1}{8}$

10th row: $\frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} + \frac{10}{11} = 10 \times \frac{10}{11} = 10 - \frac{10}{11} = 9\frac{1}{11}$

PUZZLE

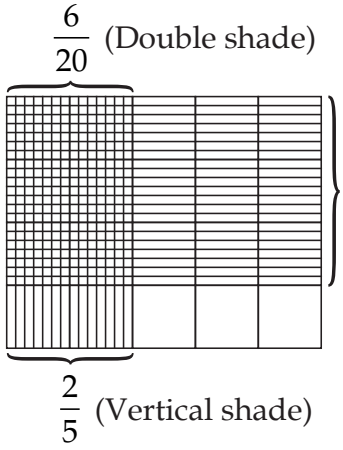
Can you show the multiplication of two proper fractions through a diagram?

Given below is an example for your help.

Multiply $\frac{2}{5}$ by $\frac{3}{4}$.

- A rectangle is divided into 5 equal parts vertically and shaded 2 parts.
- Again, it is divided into 4 equal parts horizontally and shaded 3 out of 4.
- The double shaded part is $\frac{6}{20}$.

Thus, $\frac{2}{5} \times \frac{3}{4} = \frac{6}{20}$



Represent the following:

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

2. $\frac{3}{8} \times \frac{2}{5}$

3. $\frac{5}{6} \times \frac{4}{7}$

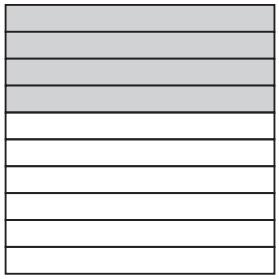
Ans. Do it yourself.

5. Decimals

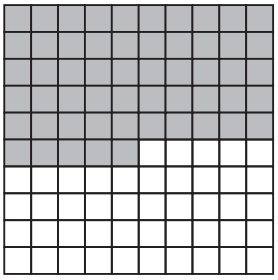
ANSWERS

LET US RECALL

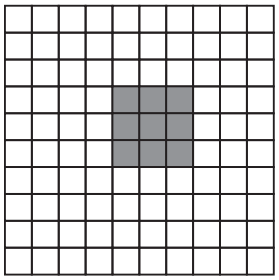
A. What decimal parts of the following figures are shaded? Also, write the fractions for unshaded parts.

1. 

0.4, $\frac{6}{10}$

2. 

0.55, $\frac{45}{100}$

3. 

0.09, $\frac{91}{100}$

B. Read and write the following decimals.

3.2	**Three point two**	1.985	**One point nine eight five**
0.67	Zero point six seven	**8.001**	Eight point zero zero one

C. Tick (✓) the largest decimal and cross-out (✗) the smallest one.

1.

6.5✓	2.01	3.125	0.999✗

2.

1.1	0.11	0.011✗	11✓

D. Fill in the blanks.

1. $6.085 = 6 \times \underline{1} + \underline{0} \times \frac{1}{10} + 8 \times \frac{1}{100} + 5 \times \frac{1}{1000}$

2. **0.509** $= 5 \times 0.1 + 9 \times 0.001$

EXERCISE 5.1

A. Complete the following table by writing decimals in words and figures.

Figure	Word	Figure	Word
2.6	**Two point six**	**4.005**	Four point zero zero five
3.21	Three point two one	0.2	**Zero point two**
81.435	**Eight-one point four three five**	**0.009**	Zero point zero zero nine
106.28	One hundred six point two eight	0.03	**Zero point zero three**

B. Match the following.

Column I	Column II
1. 6.325	(a) 3 at the hundreds place
2. 63.502	(b) 3 at the hundredths place
3. 365.002	(c) 2 at the ones place
4. 65.03	(d) 5 at the tenths place
5. 562.3	(e) 5 at the thousandths place

C. Convert the following decimals into fractions.

1. 1.5 **2.** 0.8 **3.** 0.25 **4.** 1.45

5. 0.725 **6.** 1.05 **7.** 0.005 **8.** 25.625

Ans. 1. $\frac{15}{10}$ or $1\frac{1}{2}$ **2.** $\frac{8}{10}$ or $\frac{4}{5}$ **3.** $\frac{25}{100}$ or $\frac{1}{4}$ **4.** $\frac{145}{100}$ or $1\frac{9}{20}$

5. $\frac{725}{1000}$ or $\frac{29}{40}$ **6.** $\frac{105}{100}$ or $1\frac{1}{20}$ **7.** $\frac{5}{1000}$ or $\frac{1}{200}$ **8.** $\frac{25625}{1000}$ or $25\frac{5}{8}$

D. Convert the following fractions into decimals.

1. $\frac{2}{10}$ **2.** $\frac{265}{100}$ **3.** $\frac{15625}{1000}$ **4.** $\frac{31625}{1000}$

5. $\frac{18}{100}$ **6.** $\frac{9}{1000}$ **7.** $\frac{5}{100}$ **8.** $\frac{13}{10}$

Ans. 1. 0.2 **2.** 2.65 **3.** 15.625 **4.** 31.625

5. 0.18 **6.** 0.009 **7.** 0.05 **8.** 1.3

E. Express the following in decimal form.

1. 20 + 5 + 0.1 + 0.08 + 0.003 **2.** 500 + 0.2 + 0.004

3. $8 + \frac{3}{10} + \frac{6}{100} + \frac{2}{1000}$ **4.** 700 + 60 + 2 + 0.09

Ans. 1. 25.183 **2.** 500.204 **3.** 8.362 **4.** 762.09

EXERCISE 5.2

A. Identify the equivalent decimals.

1. 2.1, 2.01, 2.10, 2.001 **2.** 0.63, 0.630, 6.3, 63.00 **3.** 0.5, 0.05, 0.500, 0.50

Ans. 1. 2.1, 2.10 **2.** 0.63, 0.630 **3.** 0.5, 0.500, 0.50

B. State whether the following decimals are like or unlike.

1. 2.68, 3.2 **2.** 5.81, 0.58 **3.** 0.561, 0.005

4. 5.100, 1.5 **5.** 21.1, 1.12 **6.** 0.4, 0.40, 0.400

Ans. 1. Unlike **2.** Like **3.** Like

4. Unlike **5.** Unlike **6.** Unlike

C. Compare the following decimals using >, < or =.

1. 0.5 (=) 0.500 **2.** 5.1 (>) 5.01 **3.** 92.8 (<) 192

4. 5.61 (>) 5.601 **5.** 0.3 (>) 0.003 **6.** 1 (>) 0.058

D. Arrange the following decimals in ascending order.

1. 8.5, 58, 8.58, 58.5 **2.** 0.105, 0.150, 0.501, 0.51 **3.** 6.8, 6.080, 0.680, 0.86

Ans. 1. 8.5, 8.58, 58, 58.5 **2.** 0.105, 0.150, 0.501, 0.51 **3.** 0.680, 0.86, 6.080, 6.8

E. Arrange the following decimals in descending order.

1. 6.51, 5.61, 1.56, 5.16 **2.** 0.4, 0.44, 0.40, 0.044 **3.** 1.9, 9.1, 91, 0.91

Ans. 1. 6.51, 5.61, 5.16, 1.56 **2.** 0.44, 0.4, 0.40, 0.044 **3.** 91, 9.1, 1.9, 0.91

EXERCISE 5.3

A. Write the decimals in columns and find the sum.

1. 42.32 + 18.75 **2.** 9.123 + 61.597 **3.** 0.155 + 0.32

4. 6.5 + 95.12 + 0.823 **5.** 2.11 + 0.666 + 53 **6.** 0.853 + 0.9 + 3

Ans. 1. 61.07 **2.** 70.72 **3.** 0.475

4. 102.443 **5.** 55.776 **6.** 4.753

B. Add the following.

1. ₹3.25 + ₹5.50 + ₹1.65 **2.** 8.355 L + 16.244 L + 0.999 L

3. 4.6 kg + 29.3 kg + 2.58 kg **4.** 19.1 g + 1.19 g + 0.911 g

5. 2.1 cm + 1.2 cm + 7.5 cm **6.** 2.8 m + 5.35 m + 4.75 m

7. 8.325 km + 25.6 km + 15.85 km **8.** 14.6 kg + 3.25 kg + 9 kg

Ans. 1. ₹10.40 **2.** 25.598 L **3.** 36.48 kg **4.** 21.201 g

5. 10.8 cm **6.** 12.9 m **7.** 49.775 km **8.** 26.85 kg

C. Find the difference.

1. 9.8 – 3.5 **2.** 4.6 – 2.8 **3.** 83.52 – 48.96

4. 17.5 – 9.69 **5.** 3.582 – 0.88 **6.** 453 – 4.789

Ans. 1. 6.3 **2.** 1.8 **3.** 34.56

4. 7.81 **5.** 2.702 **6.** 448.211

D. Subtract.

1. 48.5 from 50.3 **2.** 6.95 from 7.283 **3.** 0.347 from 1.58

4. 6.248 from 8.1 **5.** 0.987 from 3 **6.** 75.576 from 80.4

Ans. 1. 1.8 **2.** 0.333 **3.** 1.233

4. 1.852 **5.** 2.013 **6.** 4.824

E. Evaluate the following.

1. ₹15.25 + ₹13.5 – ₹25.8 **2.** ₹60 – ₹16.5 – ₹18.75

3. 6.123 km – 8.5 km + 3.55 km **4.** 24.3 m + 8.45 m – 30 m

5. 100 L – 7.56 L – 40.8 L **6.** 16.5 kg – 12.85 kg + 3.758 kg – 6.1 kg

Ans. 1. ₹2.95 **2.** ₹24.75 **3.** 1.173 km

4. 2.75 m **5.** 51.64 L **6.** 1.308 kg

F. Solve the following word problems.

1. Prerna purchased 5.3 kg of pulses, 0.265 kg of tea, 1.52 kg of sugar and 14 kg of rice. What is the total weight of these items?

Ans. 21.085 kg

2. The milometer in a bike reads 1224.4 km in the evening. In the morning, it read 995.8 km. How many kilometres did it cover today?

Ans. 228.6 km

3. Mother gave ₹50.50 to Ram. Ram bought a notebook for ₹12.25 and a sketch pen for ₹5.50. How much money was left with him?

Ans. ₹32.75

4. Find a decimal which is 2.15 more than 25.253.

Ans. 27.403

5. Subtract the sum of 6.94 and 0.694 from the sum of 4.96 and 6.04.

Ans. 5. 3.366

6. By how much is 86.693 less than 100.5?

Ans. 13.807

7. A milkman supplied 4.5 L and 3.75 L of milk to two customers. If he had 10 L of milk, how much milk is left with him?

Ans. 1.75 L

EXERCISE 5.4

A. Multiply the following.

1. 6.27 by 2 **2.** 8.967 by 4 **3.** 12.18 by 6
4. 27.5 by 12 **5.** 29.02 by 25 **6.** 0.325 by 32

Ans. 1. 12.54 **2.** 35.868 **3.** 73.08
4. 330 **5.** 725.5 **6.** 10.4

B. Find the product of the following by shifting the decimal point.

1. 8.97 × 10 **2.** 61.325 × 100 **3.** 9.835 × 1000 **4.** 21.6 × 100
5. 724.3 × 1000 **6.** 9.873 × 10 **7.** 4.28 × 1000 **8.** 92.1 × 10

Ans. 1. 89.7 **2.** 6132.5 **3.** 9835 **4.** 2160
5. 724300 **6.** 98.73 **7.** 4280 **8.** 921

C. Find the product of each of the following.

1. 2.3 × 6.4 **2.** 8.34 × 1.2 **3.** 9.74 × 2.68
4. 8.5 × 0.2 **5.** 0.923 × 3.85 **6.** 1.125 × 0.008

Ans. 1. 14.72 **2.** 10.008 **3.** 26.1032
4. 1.7 **5.** 3.55355 **6.** 0.009

D. Insert the decimal point at the correct position in the product.

1. 1.2 × 3.6 = 432 **2.** 1.65 × 4.48 = 73920 **3.** 0.635 × 1.5 = 9525

4. $3.251 \times 0.69 = 224319$ **5.** $0.2 \times 0.4 \times 0.1 = 8$ **6.** $1.3 \times 0.15 \times 0.06 = 1170$

Ans. 1. 4.32 **2.** 7.3920 **3.** 0.9525

4. 2.24319 **5.** 0.008 **6.** 0.01170

E. Solve the following word problems.

1. Potatoes cost ₹24.8 per kg. Find the cost of 25 kg of potatoes.

Ans. ₹620

2. A bottle can hold 0.75 L of milk. How much milk 12 such bottles can hold?

Ans. 9 L

3. A park is 40.5 m long and 24.14 m wide. Find the area of the park.

Ans. 977.67 sq. m

4. A sheet of paper costs ₹0.45. Find the cost of a ream of paper.
(Given, 1 ream = 500 sheets)

Ans. ₹225

5. Find the product of 0.25, 0.52 and 5.2.

Ans. 0.676

6. A gold chain weighs 42.346 g. Find the weight of 10 such gold chains.

Ans. 423.46 g

EXERCISE 5.5

A. Divide the following.

1. 36.54 by 9 **2.** 45.672 by 12 **3.** 123.45 by 15

4. 8.36 by 5 **5.** 469.5 by 8 **6.** 7.596 by 36

Ans. 1. 4.06 **2.** 3.806 **3.** 8.23

4. 1.672 **5.** 58.6875 **6.** 0.211

B. Convert the following into decimals.

1. $\frac{12}{5}$ **2.** $\frac{46}{8}$ **3.** $\frac{1}{2}$ **4.** $\frac{3}{4}$

5. $\frac{13}{16}$ **6.** $\frac{9}{15}$ **7.** $\frac{63}{28}$ **8.** $\frac{135}{18}$

Ans. 1. 2.4 **2.** 5.75 **3.** 0.5 **4.** 0.75

5. 0.8125 **6.** 0.6 **7.** 2.25 **8.** 7.5

C. Find the quotient without doing actual division.

1. $846.5 \div 10$ **2.** $7.25 \div 10$ **3.** $0.964 \div 10$ **4.** $42.6 \div 100$

5. $837.41 \div 100$ **6.** $1.42 \div 100$ **7.** $5837.6 \div 1000$ **8.** $238.4 \div 1000$

Ans. 1. 84.65 **2.** 0.725 **3.** 0.0964 **4.** 0.426

5. 8.3741 **6.** 0.0142 **7.** 5.8376 **8.** 0.2384

D. Divide the following.

1. 5.4 ÷ 0.3 **2.** 8.8 ÷ 1.1 **3.** 15.6 ÷ 0.4 **4.** 6.496 ÷ 0.16

5. 7.284 ÷ 0.12 **6.** 469.5 ÷ 0.15 **7.** 6.8 ÷ 0.017 **8.** 25.2 ÷ 0.063

Ans. 1. 18 **2.** 8 **3.** 39 **4.** 40.6

5. 60.7 **6.** 3130 **7.** 400 **8.** 400

E. Solve the following sums.

1. The product of two numbers is 0.465. If one number is 0.05, find the other.

Ans. 9.3

2. Find the number whose product with the number 3.6 is 4.5.

Ans. 1.25

3. The weight of 4 bags of rice is 86.5 kg. Find the weight of each bag.

Ans. 21.625 kg

4. The cost of one dozen of pencils is ₹45. Find the cost of each pencil.

Ans. ₹3.75

5. There is 1.5 L juice in a jug. It is to be divided equally among 6 friends. What will the share of each friend be?

Ans. 0.250 L

THINK AND ANSWER

1. Shade the block that matches the decimal given inside.

a.	6.295 + 0.01	7.125 – 0.28	6.305 × 100	629.5 ÷ 10	6.845
b.	454.6 ÷ 1000	23.23 + 100	100 – 54.54	200 × 2.223	0.4546
c.	4.5 – 1.952	0.213 × 30	64.28 ÷ 0.4	3.534 + 0.619	4.153
d.	8.1 × 0.05	6.405 ÷ 0.021	0.423 + 0.012	1.123 – 0.678	0.405

Ans.

a.	6.295 + 0.01	7.125 – 0.28	6.305 × 100	629.5 ÷ 10
b.	454.6 ÷ 1000	23.23 + 100	100 – 54.54	200 × 2.223
c.	4.5 – 1.952	0.213 × 30	64.28 ÷ 0.4	3.534 + 0.619
d.	8.1 × 0.05	6.405 ÷ 0.021	0.423 + 0.012	1.123 – 0.678

2. Abhishek ate 0.625 part of 1 kg of apples. What part of apples was left?

Ans. 0.375 part

6. Perimeter, Area and Volume

ANSWERS

LET US RECALL

A. Find the perimeter of the following.

1. Triangle with sides 9 cm, 8 cm and 7 cm.

Ans. 24 cm

2. Quadrilateral with sides 11 cm, 12 cm, 13 cm and 16 cm.

Ans. 52 cm

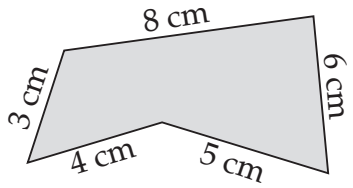
3. Rectangle with adjacent sides 15 m and 11 m.

Ans. 3. 52 m

4. Square with side 13 m.

Ans. 52 m.

5.



Ans. 26 cm

B. Find the area of the following.

1. Square with side 5 cm.

Ans. 25 cm^2

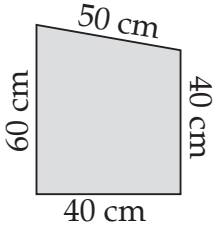
2. Rectangle with sides 5 m and 10 m.

Ans. 50 m^2

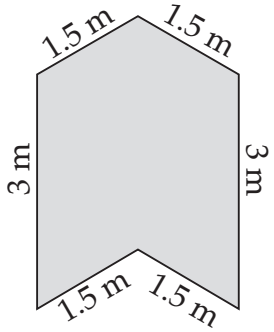
EXERCISE 6.1

A. Find the perimeter of each of the following figures:

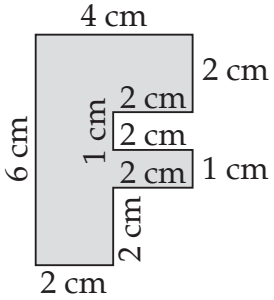
1.



2.



3.



Ans. 1. 190 cm **2.** 12 m **3.** 24 cm

B. Find the perimeter of the triangle whose three sides (*a*, *b* and *c*) are given below.

S. No.	a	b	c	Perimeter
1.	5 cm	5 cm	8 cm	**18 cm**

2.	15 m	15 m	15 m	**45 m**
3.	8 cm	15 cm	17 cm	**40 cm**
4.	9 m	12 m	15 m	**36 m**

C. Complete the table with missing measures of rectangles in each case.

S. No.	Length	Breadth	Perimeter
1.	18 m	12 m	**60 m**
2.	**24 cm**	16 cm	80 cm
3.	17.5 cm	**9.5 cm**	54 cm
4.	8.31 cm	4.27 m	**25.16 m**

D. Complete the table with missing measures of squares in each case.

S. No.	Side	Perimeter
1.	4 cm	**16 cm**
2.	6 m	**24 cm**
3.	**3.5 cm**	14 cm
4.	**44 cm**	176 cm

E. Solve the following word problems.

1. Find the length of the wood required to make the frame of a carom board with each side 80 cm.

Ans. 3 m 20 cm

2. Divya wants to fence her garden with barbed wire twice. How many metres of the wire should she buy, if the garden is 45 m long and 30 m wide?

Ans. 300 m

3. If the perimeter of a square is 102 cm, then find its side.

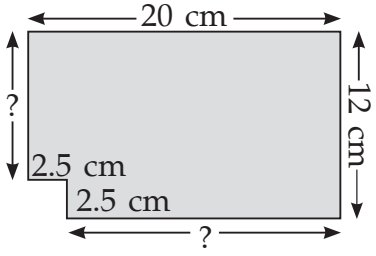
Ans. 25.5 cm

4. The perimeter of a rectangular platform is 124 m. If its length is 42 m, find its width.

Ans. 20 m

5. Neeti walks around a square park of length 60 m twice while Venu walks around a rectangular park of length 50 m and width 30 m thrice. Who walks more distance?

Ans. Both walk equal distance 480 m.



6. To make a stamp, Ashok cuts a square from a corner of the postcard. Find the perimeter of the remaining portion of the postcard after finding the length of the missing sides.

Ans. 12 cm – 2.5 cm = 9.5 cm, 20 cm – 2.5 cm = 17.5 cm, Perimeter = 64 cm

EXERCISE 6.2

A. Find the area of the rectangle in each case.

1. l = 8 cm, b = 5 cm **2.** l = 15 cm, b = 12 cm

3. l = 2.5 m, b = 1.5 m **4.** l = 20.4 cm, b = 18.5 cm

Ans. 1. 40 sq cm **2.** 180 sq cm **3.** 3.75 sq m **4.** 377.4 sq cm

B. Find the area and perimeter of squares whose sides are given below.

1. 6 m **2.** 40 cm **3.** 12.5 m **4.** 24.4 cm

Ans. 1. 36 sq m, 24 m **2.** 1600 sq cm, 160 cm **3.** 156.25 sq m, 50 m **4.** 595.36 sq cm, 97.6 cm

C. Solve the following word problems.

1. Find the area of a rectangular field whose length and breadth are 75 m and 40 m respectively. Also, find its perimeter.

Ans. 3000 sq m, 230 m

2. Find the area of a chessboard whose each side is 32 cm long.

Ans. 1024 sq cm

3. The floor of a hall is 6 m long and 4 m wide. How many square tiles of side 50 cm each would be required for flooring the hall?

Ans. 96 tiles

4. The perimeter of a rectangle is 144 cm. If its length is 48 cm, find the area of the rectangle.

Ans. 1152 sq cm

5. Which has greater area—a rectangle of sides 16 cm by 10 cm or a square of side 13 cm?

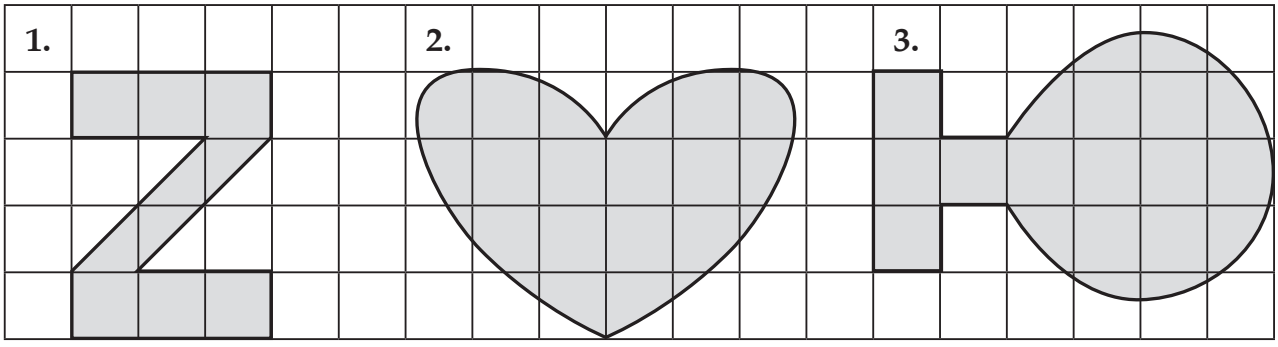
Ans. A square of 13 cm each side

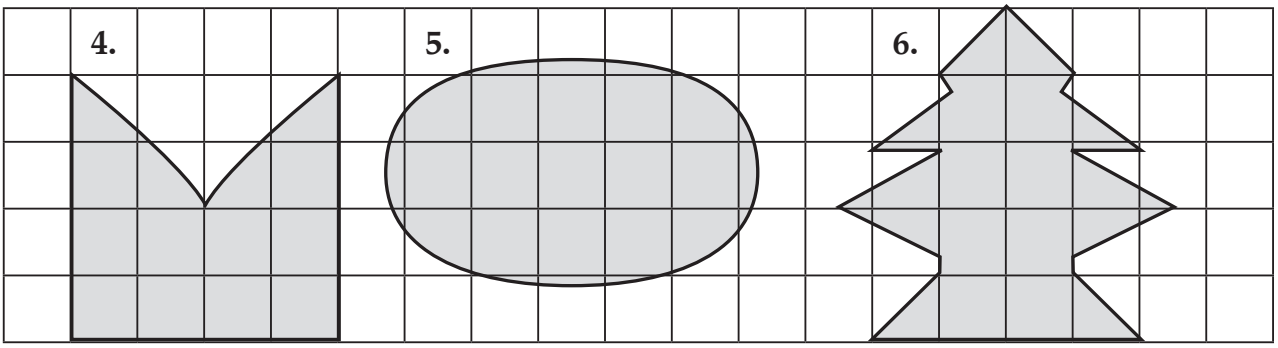
6. The area of a rectangle is equal to the area of a square. If each side of the square is 12 cm and width of the rectangle is 9 cm, find the length of the rectangle. Have the two shapes equal perimeter? Justify.

Ans. Length of a rectangle = 16 cm; Perimeter of a square = 48 cm, Perimeter of a rectangle = 50 cm; No, the two shapes do not have equal perimeter.

EXERCISE 6.3

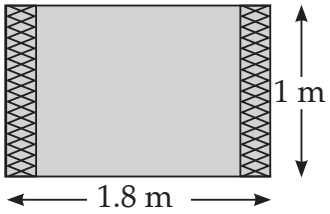
A. Find the area of the figures given below on the graph paper.

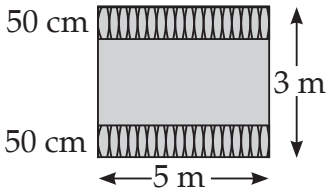


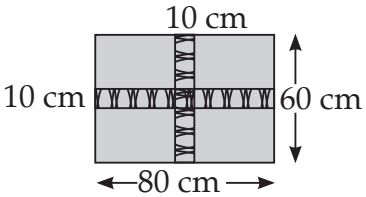


Ans. **1.** 8 sq units **2.** 17 sq units **3.** 16 sq units
4. 12 sq units **5.** 15 sq units **6.** 12 sq units

B. Calculate the area of borders shown below.

1.


2.


3.


Ans. **1.** 0.4 sq m **2.** 5 sq m **3.** 1300 sq cm

C. Solve the following word problems.

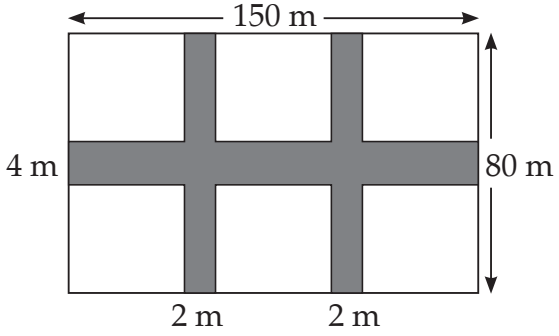
1. In a square plot of side 80 m, a building is constructed in its middle. If the length and breadth of the building are 60 m and 56 m respectively, find the area of the open space.

Ans. 3040 sq m

2. A board of Ludo with each side 32 cm has a border of uniform width 2 cm. Find the area of the border.

Ans. 240 sq cm

3. Find the area of the shaded portion in the given figure. If all the six plots are of equal size, find the area of each plot.



Ans. 904 sq. m, $1849\frac{1}{3}$ sq. m

4. The size of a photo is 30 cm by 20 cm. A frame of width 2.5 cm is made around the photo. Find the area of the photo and area of the frame.

Ans. 600 sq. cm, 275 sq. cm

5. A rectangular stadium is of length 200 m and breadth 180 m. A gallery of width 12 m is made all around the stadium for the viewers. Find the expenses on the construction of the gallery at the rate of ₹125 per sq. m.

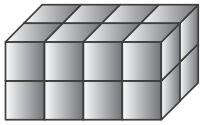
Ans. ₹10,68,000

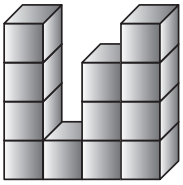
6. A square lawn is of side 80 m. There are four flowerbeds of size 6 m by 2 m in the middle and four square flowerbeds of size 4 m by 4 m at the four corners. Calculate the cost of laying the grass in the lawn at the rate of ₹20 per sq. m.

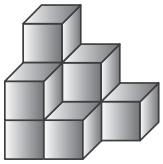
Ans. ₹1,25,760

MENTAL TEST

Find the volume of following stacks of cubes. (Each one of 1 cu. cm)

1. 

2. 

3. 

Ans. 1. 16 cu cm **2.** 12 cu cm **3.** 9 cu cm

EXERCISE 6.4

A. Find the volume of cuboids whose length, breadth and height are given below.

1. 4 cm, 3 cm, 2 cm **2.** 8 cm, 6 cm, 4 cm **3.** 4.5 m, 3 m, 2.4 m

4. 40 cm, 30 cm, 50 cm **5.** 6 m, 4.8 m, 8 m **6.** 2 m, 0.8 m, 0.5 m

Ans. 1. 24 cu cm **2.** 192 cu cm **3.** 32.4 cu cm

4. 60000 cu cm **5.** 230.4 cu cm **6.** 0.8 cu m

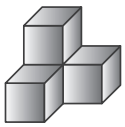
B. Find the volume of a cube whose each edge is:

1. 2 m **2.** 12 cm **3.** 3.5 m **4.** 80 cm

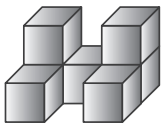
Ans. 1. 8 cu m **2.** 1728 cu cm **3.** 42.875 cu m **4.** 512000 cu cm

C. How many more small cubes are required to make it a:

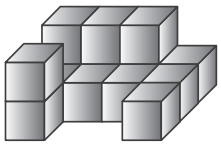
1. Cube of size 2 units each edge



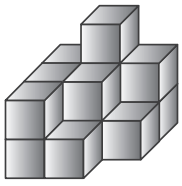
2. Cuboid of size 3 × 2 × 2 units



3. Cuboid of size 4 × 3 × 2 units



4. Cube of size 3 units each edge



Ans. 1. 4 cubes **2.** 5 cubes **3.** 10 cubes **4.** 12 cubes

D. Solve the following word problems.

1. Find the volume of a block whose each edge is 8 cm.

Ans. 512 cu cm

2. Find the volume of a shoebox whose dimensions are 24 cm by 12 cm by 10 cm.

Ans. 2880 cu cm

3. How many cubes of side 3 cm can be cut from a block of size 15 cm × 12 cm × 9 cm?

Ans. 60 cubes

4. A water tank is of length 1 m 80 cm, breadth 1 m 25 cm and height 1 m. How many litres of water can it hold?

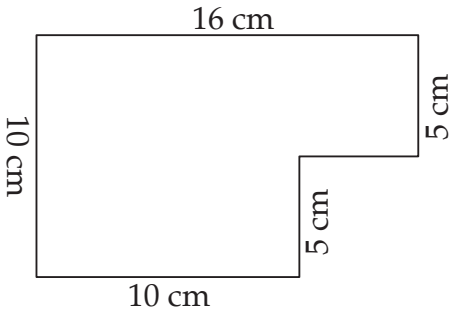
Ans. 2250 L

5. How many bricks of size 25 cm × 10 cm × 5 cm will be required to make a wall of size 6 m × 4 m × 15 cm?

Ans. 2880 bricks

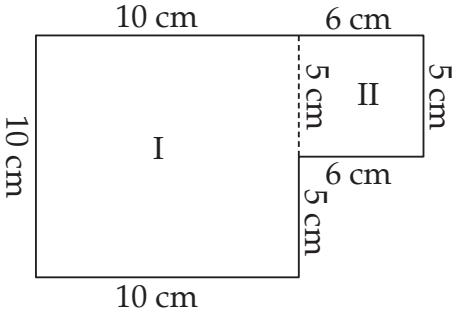
PUZZLE

A. Find the area of the adjoining shape by dividing it into squares/rectangles.



Think about the area of the given figure.

We divide the figure into a square of side 10 cm and a rectangle of dimensions 6 cm by 5 cm as shown below.



Area of the square I = 10 cm × 10 cm = 100 sq. cm.

and area of the rectangle II = 6 cm × 5 cm

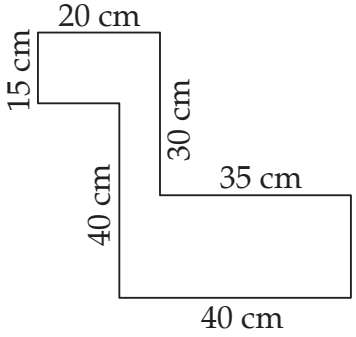
= 30 sq. cm.

Thus, area of the given figure = 100 sq. cm + 30 sq. cm.

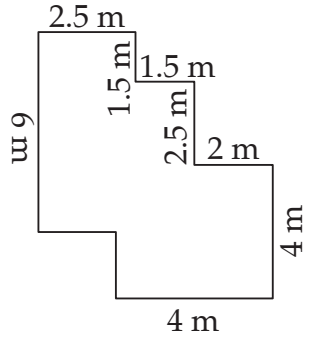
= 130 sq. cm.

Now, find the perimeter and area of the following shapes by dividing them into convenient rectangles and squares.

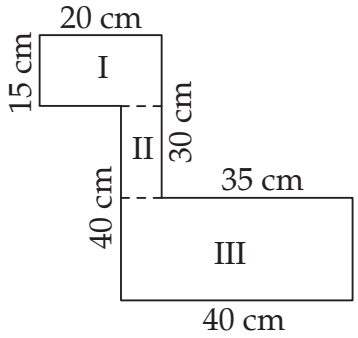
1.



2.



Ans. **1.**



Hint:

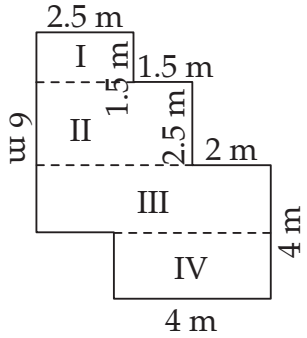
Ar I = 15 × 20

Ar II = 15 × 5

Ar III = 25 × 40

1375 sq cm

2.



Hint:

Ar I = 2.5 × 1.5

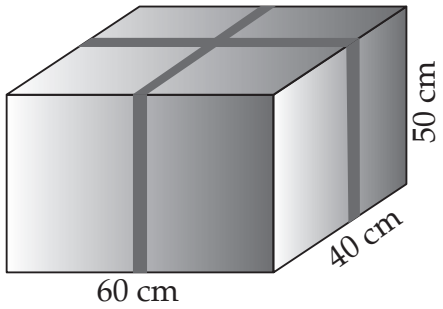
Ar II = 4.0 × 2.5

Ar III = 6.0 × 2.0

Ar IV = 4.0 × 2.0

33.75 sq m

B. How many metres and centimetres of tape is required to pack a carton of dimensions 60 cm × 40 cm × 50 cm as shown in the figure?



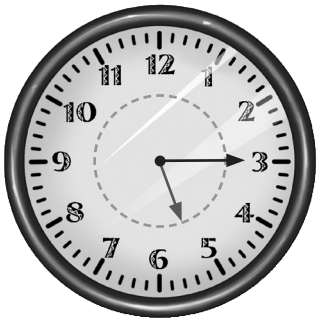
Ans. 3 m

7. Time

ANSWERS

LET US RECALL

A. Read the clock and write the time correctly in the space provided.



5:15

Quarter past 5

7:28

32 minutes to 8

11:08

8 minutes past 11

3:48

12 minutes to 4

4:04

4 minutes past 4

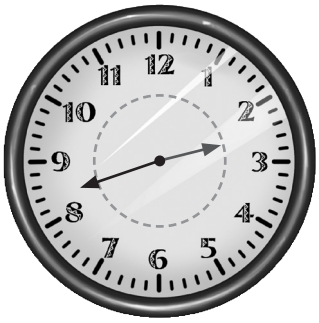
11:19

19 minutes past 11

B.Draw the hands on the clock to show the correct time.

7 o′ clock	8:05	3:04
		
22 minutes to 6	1:27	42 minutes past 2





C. Write time using a.m./p.m. for the following.

1. Half past seven in the morning. **7:30 a.m.**

2. Quarter past eight in the evening. **8:15 p.m.**

D. How many days are there between April 19, 2014 to May 26, 2014?
36 days

EXERCISE 7.1

A. Express the following in 12-hour clock.

1. 08:40 hours **2.** 15:15 hours **3.** 24:00 hours
4. 06:05 hours **5.** 20:20 hours **6.** 12:30 hours

Ans. 1. 8:40 a.m. **2.** 3:15 p.m. **3.** 12:00 midnight
4. 6:05 a.m. **5.** 8:20 p.m. **6.** 12:30 p.m.

B. Express the following in 24-hour clock.

1. 2:05 a.m. **2.** 5:45 p.m. **3.** 7:30 a.m.
4. 12 noon **5.** 12 midnight **6.** 8:25 p.m.

Ans. 1. 02:05 hours **2.** 17:45 hours **3.** 07:30 hours
4. 12:00 hours **5.** 24:00 hours or 00:00 hours **6.** 20:25 hours

C. The table given below shows the trains' timings for Chennai from Delhi.

Train No.	Train Name	Origin	Departure Time	Destination	Arrival Time	Travel Time	Days of Run						
							M	T	W	T	F	S	S
12642	Thirukkural Express	H Nizamuddin	07:20	Tambaram	18:55	35:35	Y	N	N	N	N	Y	N
12688	DDN MDU SF Express	H Nizamuddin	14:47	Chennai Central	02:15	35:28	Y	N	N	N	Y	N	N
22688	CDG MDU SF Express	H Nizamuddin	14:47	Chennai Central	02:15	35:28	Y	N	N	N	Y	N	N
12612	Mas Garib Rath	H Nizamuddin	16:00	Chennai Central	20:15	28:15	Y	N	N	N	N	N	N

12616	G T Express	New Delhi	18:40	Chennai Central	06:15	35:35	Y	Y	Y	Y	Y	Y	Y
12622	Tamil Nadu Express	New Delhi	22:30	Chennai Central	07:15	32:45	Y	Y	Y	Y	Y	Y	Y

Observe the table and answer the following questions.

1. Thirukkural Express departs at **7:20 a.m.** (a.m./p.m.) from H Nizamuddin and arrives Tambaram at **6:55 p.m.** (a.m./p.m.).
2. Tamil Nadu Express, that leaves on Wednesday from New Delhi, arrives Chennai Central at **7:15 a.m.** a.m./p.m. on **Friday**.
3. **Mas Garib Rath** takes 28 hours 15 minutes only during the journey from **H Nizamuddin** to Chennai Central.
4. The trains **G T Express** and **Tamil Nadu Express** are available every day at the time **1840 hours** and **2230 hours** respectively for Chennai Central.
5. All the trains are available on **Monday** either from New Delhi or from **H Nizamuddin**.

EXERCISE 7.2

A. Express the following into seconds.

1. 10 minutes **2.** 2 hours **3.** 4 hours 15 minutes
4. 2 days **5.** 5 hours 20 minutes 40 seconds

Ans. 1. 600 seconds **2.** 7200 seconds **3.** 15300 seconds
4. 172800 seconds **5.** 19240 seconds

B. Express the following into hours, minutes and seconds.

1. 1940 seconds **2.** 4820 seconds **3.** 250600 seconds
4. 42825 seconds **5.** 80420 seconds **6.** 720500 seconds

Ans. 1. 32 minutes 20 seconds **2.** 1 hour 20 minutes 20 seconds
3. 69 hours 36 minutes 40 seconds **4.** 11 hours 53 minutes 45 seconds
5. 22 hours 20 minutes 20 seconds **6.** 200 hours 8 minutes 20 seconds

C. Express the following into days.

1. 720 hours **2.** 3600 hours **3.** 18 weeks
4. 9 months **5.** 6 years **6.** 4 years 11 months 3 weeks

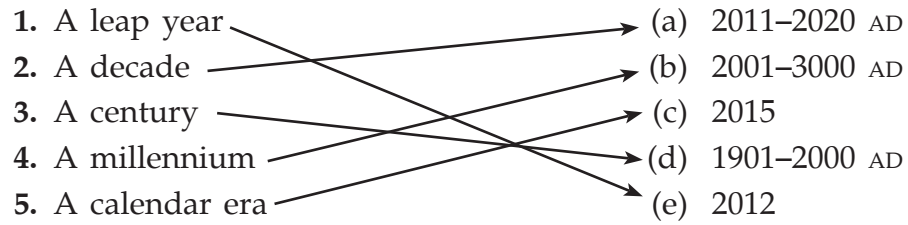
Ans. 1. 30 days **2.** 150 days **3.** 126 days
4. 270 days **5.** 2190 days **6.** 1811 days

D. Express the following into years, months, weeks and days.

1. 500 days **2.** 1835 days **3.** 4000 days
4. 9658 days **5.** 46968 hours **6.** 216576 hours

Ans. **1.** 1 year 4 months 2 weeks 1 day
2. 5 years 1 week 3 days
3. 10 years 4 months 2 weeks 6 days
4. 26 years 5 months 2 weeks 4 days
5. 5 years 4 months 1 week 5 days
6. 24 years 8 months 3 weeks 3 days

E. Match the following.



F. Calculate the following time periods.

1. From 25th February 2012 to 9th September 2012

Ans. 6 months 14 days or 196 days

2. From 8th December 2013 to 26th January 2014

Ans. 49 days

3. Vinay started going to public school on 21-03-2013.
How long would he study here till 31-03-2015?

Ans. 2 years 10 days

4. Mr Tiwari went to Canada on 6th July 2012 and returned to India on 18th November 2014. How much time did he spend in Canada?

Ans. 2 years 4 months 12 days

5. For how much time have you been studying in your present school?

Ans. Do it yourself.

EXERCISE 7.3

A. Add the following.

1. 2 h 10 min 20 s and 5 h 40 min 20 s

Ans. 7 h 50 min 40 s

2. 16 h 38 min 29 s and 18 h 36 min 45 s

Ans. 35 h 15 min 14 s

3. 6 weeks 5 days 12 hours and 4 weeks 4 days 4 hours

Ans. 11 weeks 2 days 16 hours

4. 8 years 4 months 14 days and 7 years 8 months 20 days

Ans. 16 years 1 month 4 days

B. Subtract the following.

1. 16 h 35 min 28 s from 30 h 40 min 50 s

Ans. 14 h 5 min 22 s

2. 35 h 45 min 24 s from 50 h 40 min 10 s

Ans. 14 h 54 min 46 s

3. 6 weeks 4 days 12 hours from 10 weeks 3 days 10 hours

Ans. 3 weeks 5 days 22 hours

4. 5 years 6 months 2 weeks from 8 years 5 months 3 weeks

Ans. 2 years 11 months 1 week

C. Multiply.

1. 4 h 8 min 10 s by 4

Ans. 16 h 32 min 40 s

2. 6 h 15 min 20 s by 9

Ans. 60 h 3 min

3. 2 weeks 3 days 4 hours by 8

Ans. 19 weeks 4 days 8 hours

4. 5 years 3 months 8 days by 6

Ans. 31 years 7 months 18 days

D. Divide.

1. 40 h 32 min 48 s by 8

Ans. 5 h 4 min 6 s

2. 55 h 40 min 39 s by 9

Ans. 6 h 11 min 11 s

3. 5 months 1 week 6 days by 3

Ans. 1 month 3 weeks 2 days

4. 8 years 9 months 15 days by 5

Ans. 1 year 9 months 3 days

FUN ZONE

FLYING FUN

The table given below shows the schedule of Airlines from Delhi to Chennai for a particular day. Study the table and answer the questions based on it.

Flight	Depart	From	Arrive	To
AI 439	06:55	Delhi (DEL)	09:45	Chennai (MAA)
AI 429	10:30	Delhi (DEL)	13:15	Chennai (MAA)
AI 142	12:35	Delhi (DEL)	15:15	Chennai (MAA)
AI 42	17:15	Delhi (DEL)	20:00	Chennai (MAA)
AI 540	20:55	Delhi (DEL)	23:45	Chennai (MAA)

A. What is the duration of journey of these flights?

1. AI 439 **2 h 50 min** **2.** AI 42 **2 h 45 min** **3.** AI 540 **2 h 50 min**

B. Display the timetable according to 12-hour clock.

Ans.

Flight	Depart	From	Arrive	To
AI 439	6:55 a.m.	Delhi (DEL)	9:45 a.m.	Chennai (MAA)
AI 429	10:30 a.m.	Delhi (DEL)	1:15 p.m.	Chennai (MAA)
AI 142	12:35 p.m.	Delhi (DEL)	3:15 p.m.	Chennai (MAA)
AI 42	5:15 p.m.	Delhi (DEL)	8:00 p.m.	Chennai (MAA)
AI 540	8:55 p.m.	Delhi (DEL)	11:45 p.m.	Chennai (MAA)

C. Express the duration of journey by AI 142 in seconds.

Ans. 9600 seconds

D. Multiply the travelling time of AI 429 by 5.

Ans. 13 h 45 min

E. Divide the time taken by the flight AI 540 by 3.

Ans. 56 minutes 40 seconds

PERIODIC TEST 2

A. Match the following.

1. Perimeter of a triangle with sides 8 cm, 15 cm and 17 cm — (a) 23.80 sq. m

2. Area of a square with side 4.2 m — (b) 96 cu. cm

3. Area of a rectangle with length 6.8 m and width 3.5 m — (c) 40 cm

4. Volume of a cuboid with dimensions 8 cm × 6 cm × 2 cm — (d) 17.64 sq. m

B. Fill in the blanks.

1. 500 thousands = **5** lakhs.

2. **odd** ÷ odd = odd.

3. $20 + \frac{1}{10} + \frac{5}{1000} =$ **20.105**.

4. $2 - \frac{\mathbf{3}}{\mathbf{4}} = 1\frac{1}{4}$.

5. 0.032 × 1000 = **32**.

6. **23.5** ÷ 100 = 0.235.

C. Put >, < or = in the following boxes.

1. 8,97,65,431 [<] 12,34,56,789

2. $\frac{1}{2} + \frac{2}{3}$ [=] $2 - \frac{5}{6}$

3. $40 \times \frac{5}{8}$ [<] $40 \div \frac{5}{8}$

4. 0.2 + 0.02 + 0.002 [<] 0.3 − 0.03 − 0.003

5. 20 minutes − 40 seconds [=] 8 minutes 15 seconds + 11 minutes 5 seconds

6. 4 weeks 3 days × 2 [<] 201 days ÷ 3

D. The product of two numbers is 2,535 and their HCF is 13. Find the LCM of two numbers.

Ans. L.C.M = 195

E. The weight of 4 bags of rice is 86.5 kg. Find the weight of each bag.

Ans. 21.625 kg

F. Express the following into seconds.

1. 10 minutes

2. 2 days

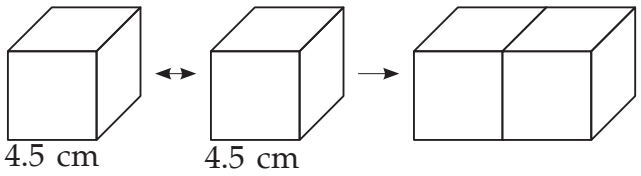
Ans. 1. 600 seconds

2. 172800 seconds

G. Who is the eldest? Dates of birth are given in brackets.
Madhu (15.04.2004), Malaika (11.10.2005), Daniel (06.01.2003)

Ans. Daniel

H. Two cubes of edge 4.5 cm each are joined face to face. Find the dimensions and hence the volume of a cuboid so formed.



Ans. $l = 9$ cm, $b = 4.5$ cm, $h = 4.5$ cm, volume = 182.25 cu. cm

I. How many bricks of size 25 cm × 10 cm × 5 cm will be required to make a wall of size 6 m × 4 m × 15 cm?

Ans. 2880 bricks

SOCIAL STUDIES – 5

SEMESTER

1

Contents

1. Globes and Maps

ANSWERS

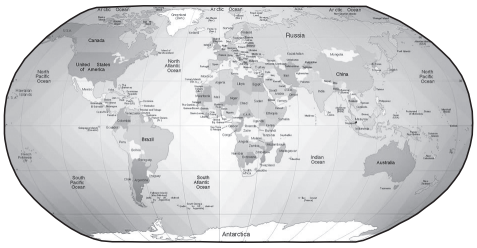
WARM UP

1. Map 1 is one of the first maps of the world. It was circular in form and it showed the known lands of the world grouped around the Aegean Sea at the centre. The land was all surrounded by the ocean.

2. Map 2 is the present world map.

1.

2.



Now, what difference do you find between the two? Discuss in the class.

Ans. More lands have been discovered and mapped.

CHECK POINT

Answer these questions.

1. Which is the largest country in the world?

Ans. Russia.

2. What is the shape of the Earth?

Ans. Spherical.

3. Write a quality of a good map.

Ans. It should have a legend or index.

4. What does the title of a map tell us?

Ans. It tells us what the map is about.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. It helps us see the whole Earth at a time.

(a) Satellite pictures ☐ (b) A sketch ☐ (c) A globe ☑

2. Which of the following shows an accurate physical shape of the Earth?

(a) Globe ☑ (b) Map ☐ (c) None of these ☐

3. An atlas is a collection of

(a) Maps ☑ (b) Globes ☐ (c) Countries ☐

B. Answer these questions.

1. How are globes useful to us?

Ans. Globes show the actual shape of the Earth.

2. What are the disadvantages of a globe?

Ans. Globes cannot be made very large. They cannot be handled easily.

3. What are the differences between a map and a globe?

Ans. A map shows the Earth's features in detail whereas a globe does not show details.

4. What are the advantages of maps?

Ans. Maps are easier to carry. They can help in studying the Earth's features in detail. Different types of maps can be used to show a variety of information such as political boundaries, relief features, etc.

5. How is the scale useful on a map?

Ans. The scale helps measure distance on the map and the ground.

6. What is the difference between ground distance and map distance?

Ans. When the distance between two given points on the ground is measured, it is called the ground distance. The distance between the same two points on the map measured along a straight line is called the map distance.

THINK AND ANSWER

C. Why is it necessary to show the directions on a map? Discuss in the class.

Ans. **Hint:** To identify the location of a place with respect to the parallels and medians.

LET US DO

D. Activity

Draw an outline map of your State/Union Territory and try to point the district/area you belong to.

Ans. Do it yourself.

VALUE CORNER

E. Imagine you are about to trek a peak on the Vindhya Range. Which map would you take?

(a) political map of the area ☐

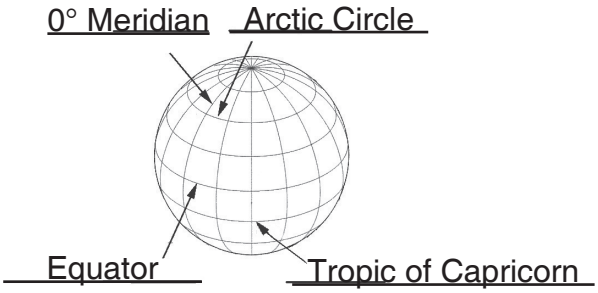
(b) physical map of the area ✓

2. Parallels and Meridians

ANSWERS

WARM UP

Label the following picture.



CHECKPOINT

Fill in the blanks with information from the text.

1. The Earth rotates on its ___axis___.
2. The North Pole is on the ___90°N___ of the globe.
3. The largest circle on the Earth is ___equator___.
4. The parallels are drawn at ___equal___ distance from each other.
5. The Arctic Circle is on ___66½°___ N.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. The meridian which passes through Greenwich is marked as
   (a) 5° ☐ (b) 0° ✓ (c) 1° ☐
2. The total number of parallels is
   (a) 90 ☐ (b) 180 ☐ (c) 181 ✓
3. The two endpoints of the axis of a globe are called the
   (a) Poles ✓ (b) Parallels ☐ (c) Equator ☐
4. In which country is Greenwich located?
   (a) India ☐ (b) Russia ☐ (c) England ✓
5. The parallels and meridians cut each other at
   (a) 150° ☐ (b) 180° ☐ (c) 90° ✓
6. What is the total number of important parallels on the globe?
   (a) 5 ☐ (b) 7 ✓ (c) 9 ☐
7. The equator is marked as _____ latitude.

(a) 90° ☐ (b) 180° ☐ (c) 0° ☑

B. Fill in the blanks with information from the text.

1. The equator divides the Earth into two parts called Northern Hemisphere and Southern Hemisphere.

2. The angular distance north or south of the equator is called latitude.

3. The distance between two meridians is maximum at equator.

4. The lines of longitudes are also known as the meridians.

5. A grid on a map is the network of latitudes and longitudes.

C. Write short notes on the following topics.

1. Axis of the Earth

Ans. The Earth rotates around its axis. The axis is an imaginary line joining the North Pole and the South Pole. The end points of the axis are fixed. The Earth is inclined at an angle of 23½°.

2. Parallels

Ans. The equator and the smaller circles drawn parallel to the equator in both the hemispheres are called parallels. The angular distance north or south of the equator is called latitude. It is measured in degrees. Parallels are also called the lines of latitude. The parallels give the north-south direction.

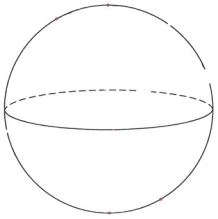
3. Great circle

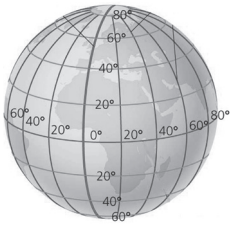
Ans. The equator is called the great circle. This imaginary line divides the Earth into equal parts called hemispheres.

4. Prime Meridian

Ans. According to an agreement, the meridian passing through Greenwich near London in the UK has been taken as the starting point. This meridian is named as the Prime Meridian. The Prime Meridian is marked as 0°.

D. Identify the following lines on the Earth.





1. Axis **2.** Equator **3.** Prime Meridian

E. Answer the following questions.

1. Distinguish between parallels and meridians.

Ans. Parallels

(i) The equator and the smaller circles drawn parallel to the equator in both the

hemispheres are called parallels.

(ii) The angular distance north or south of the equator is called latitude.

(iii) Parallels are also called lines of latitude.

(iv) The parallels give the north-south direction.

(v) The parallels are drawn at equal distance from each other.

(vi) The parallels are complete circles, except the poles, which are points.

(vii) The equator is the longest parallel.

(viii) The length of other parallels decreases as we move away from the equator towards the poles.

(ix) The equator is a great circle, while others are small circles.

(x) The equator is marked as 0° latitude.

(xi) Thus, the North Pole and the South Pole are 90° N and 90° S, respectively.

(xii) If one draws parallels at an interval of 1° from North Pole to South Pole, the total number of parallels, including the equator, will be 181.

Meridians

(i) The semicircular lines on the globe that join the North Pole and the South Pole are named as meridians.

(ii) They are equal in length.

(iii) The distance between any two meridians is the maximum at the equator, which is about 111 kilometres for one degree.

(iv) The distance decreases towards the north and south of the equator.

(v) The meridians cross the parallels at right angles (90°).

(vi) They help us find the east-west direction.

(vii) The meridian which passes through Greenwich near London in the UK, is named as the Prime Meridian.

(viii) The angular distance east or west of the Prime Meridian is called longitude.

(ix) The meridians are also called lines of longitude.

(x) The Prime Meridian is marked as 0°.

(xi) The meridian of 180° lies just opposite to the Prime Meridian. Thus, there are 180 meridians towards the east and 180 meridians towards the west of the Prime Meridian (at an interval of 1°). The total number of meridians is 360, because 180° E and 180° W is the same line.

2. Distinguish between latitude and longitude.

Ans. The angular distance north or south of the equator is called latitude. It is measured in degrees. The parallels are also called lines of latitude. The angular distance east or west of the Prime Meridian is called longitude. The meridians are also called lines of longitude.

3. How are the parallels and the meridians numbered on a globe?

Ans. Parallels are drawn at an equal distance towards north and south of the equator. Parallels are drawn at 1° intervals. Parallels are numbered 1° N and 1° S above and below the equator, respectively.

Meridians are drawn at an equal distance towards the east and west of the Prime Meridian. Meridians are drawn at 1° intervals. Meridians are numbered 1° E and 1° W of the Prime Meridian, respectively.

4. Name a few important lines of latitude on the globe.

Ans. Some important latitudes on the globe are as under:

(i) North Pole	– 90° N	(ii) Arctic Circle	– 66.5° N
(iii) Tropic of Cancer	– 23.5° N	(iv) Equator	– 0°
(v) Tropic of Capricorn	– 23.5° S	(vi) Antarctic Circle	– 66.5° S
(vii) South Pole	– 90° S		

5. What is a grid?

Ans. The network of parallels and meridians on the globe is called the grid or the graticule. We can locate all places on the Earth's surface with the help of the grid.

THINK AND ANSWER

F. What does the following statement mean? Explain in the class.

Mysuru is located at 12.30°N 76.65°E.

Ans. Hint: The position of Mysuru on the globe is 12.30° N latitude and 76.65° E longitude.

LET US DO

G. Activity

Prepare a globe on your own. Follow the steps.

1. Take a white plastic ball.

2. Draw important longitudes and lattitudes on the ball using a black marker.

3. Insert a stick/spoke vertically through the ball.

4. Suspend the stick/spoke. Now, your globe is ready.

Ans. Do it yourself.

H. Project

Using an atlas, find out the latitude and longitude of

1. Allahabad (Prayagraj)

Ans. 25.45° N 81.85° E

2. Delhi

Ans. 28°36′36″ N 77°13′48″ E

3. Kolkata

Ans. 22°34′ N 88°22′ E

4. Mumbai

Ans. 18°58′30″ N 72°49′33″ E

VALUE CORNER

I. On this outline map of India, mark the Tropic of Cancer and 82½°E longitude.

Ans. Do it yourself.

3. Major Landforms

ANSWERS

WARM UP

Which type of landform gives birth to a waterfall?

Mountains

CHECKPOINT

Cross (✗) the wrong statements.

1. The Himalayas are young mountains. ☐
2. The Rockies in North America are a vast plain land. ✗
3. The Plateau of Tibet is surrounded by water on all sides. ✗
4. The plain areas are thickly populated. ☐

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. The average minimum height of a mountain should be about
   (a) 500 metres ☐ (b) 800 metres ☐ (c) 900 metres ✓
2. Which of the following is not a mountain range?
   (a) Rockies ☐ (b) Mt Everest ✓ (c) Andes ☐
3. Which of the following is a plateau?
   (a) Alps ☐ (b) Tibet ✓ (c) Andes ☐
4. What is the main agent for the formation of plains?
   (a) River ✓ (b) Weathering ☐ (c) Earthquake ☐

B. Answer in one word.

1. What makes the surface of the Earth?

Ans. Land and water.

2. What percentage of the landmass is covered by mountains?

Ans. 20 per cent

3. What are the features of an old mountain?

Ans. An old mountain is low and rounded.

4. Which plateau is surrounded by mountains on all sides?

Ans. Plateau of Tibet.

5. Which landform is highly populous?

Ans. Plains.

C. Write differences between the following.

1. Continent and relief features

Ans. **Continents:** Continents are big landmasses. There are seven continents.

Relief features: Variations in the Earth's surface are called its relief features. The main types of relief features or landforms are mountains, plateaus, plains, deserts and river valleys.

2. Mountain and plateau

Ans. **Mountains:** Mountains are elevated parts of the Earth's surface. They are about 900 metres higher than the sea level. Mountains have steep slopes, sharp ridges and peaks. These are the highest landforms on the surface of the Earth.

Plateaus: Plateaus also rise suddenly from the surrounding areas, but have flat tops. They have steep sides and are deeply cut by rivers and streams. Generally, plateaus are found near mountains or surrounded by mountains. Most of the plateaus are very large and spread out over hundreds of kilometres.

3. Desert and plain

Ans. **Deserts:** Deserts are lands covered by sand and rock with almost no vegetation. They receive low rainfall.

Plains: Plains are generally low and flat areas on the surface of the Earth. These are also called lowlands. The plain areas are generally less than 200 metres in height, but the slope is very gentle.

4. Upper course and lower course of a river

Ans. **Upper course of a river:** In the upper course, the typical features are rapids, waterfalls or canyons. The river flows swiftly, but has less water.

Lower course of a river: In the lower course, the river flows slowly and most of the rivers form deltas before joining the sea.

D. Match the columns.

Column A	Column B
1. Mountains	(a) level land
2. Plateau	(b) a landform
3. Plain	(c) Himalayas
4. Desert	(d) Ganga
5. River Valley	(e) Tibet

E. Answer these questions.

1. List the main types of relief features.

Ans. Mountains, plateaus and plains are main types of relief features.

2. How are plateaus useful to us?

Ans. Plateaus are very useful for us. We can list their importance as follows:

(i) Some old plateaus are rich in minerals such as iron, copper, silver, gold, mica, coal and precious stones.

(ii) Plateaus in tropical areas are good for growing crops.

(iii) Waterfalls provide suitable sites for producing hydroelectricity.

(iv) Some plateaus have rich grasslands which are used for rearing cattle and sheep.

(v) The natural landscape attracts tourists from all over the world.

3. What do rivers form before joining a sea?

Ans. Deltas.

THINK AND ANSWER

F. What is the economic value of a plateau? Write a few lines on it.

Ans. Hint: Storehouses of minerals.

LET US DO

G. Project

Complete the following table based on the three courses of the Ganga.

THREE COURSES OF THE GANGA

Course	From	To	Important cities	Important factories
Upper	Gangotri	Haridwar	Rishikesh, Haridwar	Mining of stone
Middle	Haridwar	Prayagraj (Allahabad)	Kanpur, Varanasi, etc.	Different industries
Lower	Prayagraj (Allahabad)	Bay of Bengal	Patna, Kolkata, etc.	Different industries

H. Survey

Visit any river. Answer the following based on your visit to the particular place of the river.

Course: _____

Flow of water: _____

Bank (sandy/clayey, etc.): _____

Agriculture (crops): _____

Factory: _____

Pollution level: _____

Ans. Do it yourself.

VALUE CORNER

I. What are the skills required to climb a mountain? List any two skills.

1. Physical strength and training.

2. Mental strength.

5. Weather and Climate

ANSWERS

WARM UP

Tick (✓) the season that causes it.

Summer	
Winter	
Rainy	✓
Spring	

CHECKPOINT

Answer the following questions orally.

1. Name an element of weather.

Ans. Rainfall.

2. Name a factor that affects the climate of a region.

Ans. Distance from the sea.

3. What is the relation of temperature with the height of a place?

Ans. As height increases, temperature decreases.

4. What is humidity?

Ans. The moisture in the air is called humidity.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. The climate of a place depends on the temperature of

(a) wind ☐ (b) land ✓ (c) water ☐

2. Which part of the Earth experiences a hot and humid climate throughout the year?

(a) Temperate zone ☐ (b) Frigid zone ☐ (c) Tropical zone ✓

3. Which is not an element of weather?

(a) Temperature ☐ (b) Pressure ☐ (c) Water bodies ✓

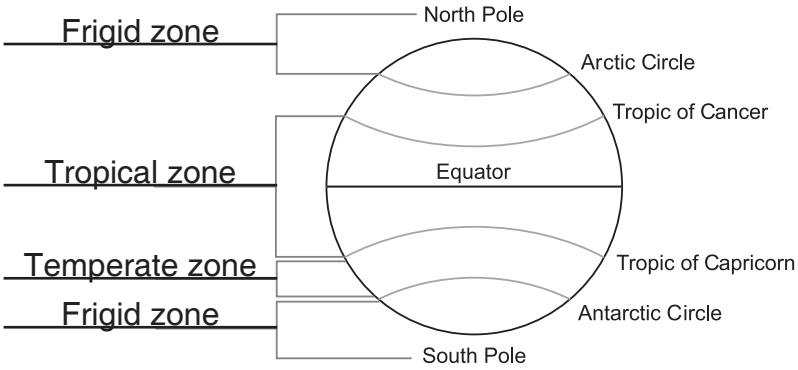
4. Which cannot cause global warming?

(a) Burning of coal ☐ (b) Recycling of paper ✓ (c) Releasing of CFCs ☐

5. Which of the following is a greenhouse gas?

(a) Carbon dioxide ✓ (b) Nitrogen ☐ (c) Oxygen ☐

B. Label the heat zones in the following picture.



C. Write short notes on the following.

1. Climate

Ans. Climate is the average weather conditions of a place over a long period of time. The climate of a place remains more or less the same year after year.

2. Humidity

Ans. The moisture in the air is called humidity.

3. Heat zones

Ans. Depending upon the amount of heat received from the sun, the Earth has been divided into three climatic or Heat Zones. These zones are the Tropical, the Temperate and the Polar Zones.

D. Answer these questions.

1. Name the factors that influence the climate of a place.

Ans. A number of factors determine the climate of a place. It is largely dependent upon the temperature of air and the amount of rainfall. Some of these factors are as under: (i) Distance from the equator (ii) Height above the sea level (iii) Distance from the sea (iv) Prevailing winds (v) Moisture in the air

2. What are the main elements of weather and climate?

Ans. The main elements of weather are temperature, air pressure, movement of air and moisture in the air.

3. Why are the areas near the equator hot and humid throughout the year?

Ans. The area near the equator extends on both sides of equator from the Tropic of Cancer in the north up to the Tropic of Capricorn in the south. This part of the Earth receives the maximum heat and moisture. Thus, the climate throughout the year is hot and humid.

4. Describe the location and extent of the Heat Zones on the Earth.

Ans. Depending upon the amount of heat received from the sun, the Earth has been divided into three climatic or Heat Zones. These are the Tropical, the Temperate and the Polar Zones.

The Tropical Zone: The Tropical Zone is also known as the Torrid Zone. It extends on both sides of equator from the Tropic of Cancer in the north up to the Tropic of Capricorn in the south.

The Temperate Zone: The Temperate Zone lies in both the hemispheres. In the Northern Hemisphere, it extends from the Tropic of Cancer to the Arctic Circle, and in the Southern Hemisphere, from the Tropic of Capricorn to the Antarctic Circle.

The Polar Zone: The Polar Zone is also known as the Frigid Zone. It also lies in both the hemispheres. In the Northern Hemisphere, it extends from the Arctic Circle to the North Pole and in the Southern Hemisphere, from the Antarctic Circle to the South Pole.

5. What are the main causes of global warming?

Ans. Recently, it has been noticed that the mean temperature of the Earth and of the atmosphere is increasing due to the greenhouse effect, which is causing global warming. The main greenhouse gases are carbon dioxide, methane and CFCs (chlorofluorocarbons). The increase of greenhouse gases in the atmosphere is due to pollution, which is caused by nature and human activity.

Carbon dioxide is added to the atmosphere by burning of wood, coal and petroleum. It is also added by vehicles and industries. Methane gas is added to the atmosphere by the digestive system of herbivores such as cows, horses, goats and sheep. CFCs are released from perfume and deodorant sprays. CFCs are also used in refrigerators.

THINK AND ANSWER

E. 1. Industrialised nations are more responsible than the others in making the Earth warm. How?

Ans. Hint: Industrialised nations have many industries and hence cause pollution.

2. To fight against global warming, we need help of all the countries. Why?

Ans. Hint: It is a global problem.

LET US DO

F. Experiment

Do the following experiment.

Air contains water vapour (humidity)

Step 1: Take an empty glass.

Step 2: Put the glass in the fridge for an hour or so.

Step 3: After an hour, take the glass out and keep it outside the fridge.

Observation: After a few minutes, you will notice that tiny drops of water gather all around the glass.

Conclusion: Since the glass is very cold, the water vapour present in the air becomes

cool which comes close to the glass. The cool water vapour turns into water drops.

Ans. Do it yourself.

VALUE CORNER

G. To save the Earth is the responsibility of

1. people ✓

2. government

PERIODIC TEST 1

A. Tick (✓) the correct answers.

1. The smallest continent on the Earth is

(a) Australia ✓ (b) South America

(c) Europe (d) Antarctica

2. Which is the largest country in the world?

(a) India (b) Canada (c) USA (d) Russia ✓

3. The total number of meridians at 1 degree intervals are

(a) 361 (b) 360 ✓ (c) 181 (d) 180

4. Which of the following is not a relief feature?

(a) Soil ✓ (b) Mountain

(c) River valley (d) Plateau

5. Which of the following is not an element of weather?

(a) Temperature (b) Water bodies ✓

(c) Pressure (d) Moisture

B. Fill in the blanks.

1. In ancient times, maps were drawn on animals' skins and cloth.

2. The equator divides the Earth into two equal parts.

3. The shape of the Earth is like a sphere.

4. Land covers about 29 per cent of the Earth's surface.

5. The climate of a place remains the same year after year.

C. State whether True or False.

1. We can see the whole Earth at a time. False

2. Atlas was a Greek mythological hero. True

3. In ancient times, there was no system of addresses for locating places. True

4. The Grand Canyon is a mountain range. False

5. The Torrid Zone receives the maximum heat from the sun. True

D. Match the following.

Column A	Column B
1. The ratio between the map distance and ground distance is called the	(a) experience a cool climate.
2. The Earth rotates around its	(b) lowlands.
3. Places at high altitude	(c) 0° latitude.
4. Plains are also called	(d) axis.
5. The Equator is marked as	(e) scale of the map.

E. Answer the following questions.

1. What is the use of signs and symbols and why are they necessary on a map?

Ans. The signs and symbols help us read and understand the information given on the map. We can show physical or cultural features on a map with the help of signs and symbols. We can show features such as temples, mosques, churches, forts, rivers, bridges, lakes, etc., with the help of signs and symbols. Most of these symbols are used by all countries.

2. What are the limitations of a globe?

Ans. The globe shows continents and oceans in their true shape and size. But the globe has some limitations, such as

(a) A large-sized globe cannot be made easily.

(b) It is also difficult to handle a large-sized globe.

(c) The small globe does not show the details of the Earth's surface.

3. What is the difference between parallels and meridians?

Ans. Parallels

(i) The equator and the smaller circles drawn parallel to the equator in both the hemispheres are called parallels.

(ii) The angular distance north or south of the equator is called latitude.

(iii) Parallels are also called lines of latitude.

(iv) The parallels give the north-south direction.

(v) The parallels are drawn at equal distance from each other.

(vi) The parallels are complete circles, except the poles, which are points.

(vii) The equator is the longest parallel.

(viii) The length of other parallels decreases as we move away from the equator towards the poles.

(ix) The equator is a great circle, while others are small circles.

(x) The equator is marked as 0° latitude.

(xi) Thus, the North Pole and the South Pole are 90° N and 90° S, respectively.

(xii) If one draws parallels at an interval of 1° from North Pole to South Pole, the total

number of parallels, including the equator, will be 181.

Meridians

(i) The semicircular lines on the globe that join the North Pole and the South Pole are named as meridians.

(ii) They are equal in length.

(iii) The distance between any two meridians is the maximum at the equator, which is about 111 kilometres for one degree.

(iv) The distance decreases towards the north and south of the equator.

(v) The meridians cross the parallels at right angles (90°).

(vi) They help us find the east-west direction.

(vii) The meridian which passes through Greenwich near London in the UK, is named as the Prime Meridian.

(viii) The angular distance east or west of the Prime Meridian is called longitude.

(ix) The meridians are also called lines of longitude.

(x) The Prime Meridian is marked as 0°.

(xi) The meridian of 180° lies just opposite to the Prime Meridian. Thus, there are 180 meridians towards the east and 180 meridians towards the west of the Prime Meridian (at an interval of 1°). The total number of meridians is 360, because 180° E and 180° W is the same line.

4. What is global warming?

Ans. Recently, it has been noticed that the mean temperature of the Earth and of the atmosphere is increasing due to the greenhouse effect, which is causing global warming. The main greenhouse gases are carbon dioxide, methane and CFCs (chlorofluorocarbons). The increase of greenhouse gases in the atmosphere is due to pollution, which is caused by nature and human activity.

Carbon dioxide is added in the atmosphere by burning of wood, coal and petroleum. It is also added by vehicles and industries. Methane gas is added in the atmosphere by the digestive system of herbivores such as cows, horses, goats and sheep. CFCs are released from perfume and deodorant sprays. CFCs are also used in refrigerators.

5. What is the difference between weather and climate?

Ans. Weather is the condition of the atmosphere at a particular place and time. The climate is the average weather conditions of a place over a long period of time. The climate of a place remains more or less the same year after year.

5. Life in the Evergreen Forests (The Democratic Republic of the Congo)

ANSWERS

WARM UP

Which of the following animals is found in the evergreen forest?

✓

CHECKPOINT

Fill in the blanks with information from the text.

1. Evergreen forests grow around the equator.
2. The Democratic Republic of the Congo was previously known as Zaire.
3. The Democratic Republic of the Congo is the third largest country in Africa.
4. The capital of Democratic Republic of the Congo is Kinshasa.
5. Tse-tse is a poisonous fly of the evergreen forest.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. This parallel passes through the Democratic Republic of the Congo.
   (a) Tropic of Cancer ☐
   (b) Tropic of Capricorn ☐
   (c) Equator ✓
2. Which country is not around the Democratic Republic of the Congo?
   (a) Egypt ✓ (b) Sudan ☐ (c) Angola ☐
3. This tree is not found in the Democratic Republic of the Congo.
   (a) Mahogany ☐ (b) Rosewood ☐ (c) Pine ✓

B. Cross (✗) the wrong statements.

1. The tropical rainforest is an evergreen forest. ✓

2. There are many lakes along the eastern boundary of DRC. ✓

3. DRC lies only in the Southern Hemisphere. ✗

C. Name the following about the Democratic Republic of the Congo (DRC).

1. Any two countries around DRC

Ans. Angola, Zambia.

2. Any two cash crops produced

Ans. Coffee, rubber.

3. Any two minerals produced

Ans. Cobalt, copper.

4. Any two animals found

Ans. Leopards, zebras.

D. Answer these questions.

1. What is the extent of DRC?

Ans. The Democratic Republic of the Congo is surrounded by Sudan and the Central African Republic in the north, Republic of Congo in the west, Angola and Zambia in the south, and Tanzania, Burundi, Rwanda and Uganda in the east. There are many lakes along the eastern boundary of the DRC.

2. What is the total annual rainfall here?

Ans. 200 cm.

3. Describe the climate of DRC.

Ans. The climate is hot and humid almost throughout the year due to its location near the equator. The sun shines brightly and the heat is unbearable during the daytime. The hilly regions experience comparatively low temperature. In the afternoon, the sky is full of dark clouds, which provides heavy rainfall almost every day. The total rainfall is about 200 cm per year.

4. Why is the transport system not well-developed in DRC?

Ans. The country has a poor system of transport. Roads and railways are difficult to construct due to thick forests and many rivers. Water transport along some of the rivers is now easily available. Air transport is now becoming popular.

5. Describe the lifestyle of Bantu Negroes and Pygmies.

Ans. The Democratic Republic of the Congo is sparsely populated. Most of the people live in villages. Most of the people are Bantu Negroes, who are tall and have curly hair. They speak Bantu language and are fond of music and dance. They follow traditional lifestyles and wear colourful dresses.

The original tribals are pygmies, who are short in height. They live mostly in Ituri forests in the north-east. They still lead a primitive life and move about in search of food.

After independence, the government is developing the resources. The progress is slow but the lifestyle and standard of living are improving.

THINK AND ANSWER

E. Since DRC is on the equator, evergreen forests are found in the country. But evergreen forests are also found in the North-Eastern States of India, which are far away from the equator. Why? Discuss the reason for it in the class.

Ans. **Hint:** Because both regions experience nearly the same amount of rainfall.

LET US DO

F. Project

With the help of your school library and the Internet, briefly describe the ethnic people of DRC.

Ans. **Hint:** Visit site www.classicafrica-com/content/bantu Tribes of Southern Africa-asp

G. Name and collect pictures of five animals that are conserved in different national parks in DRC.

Ans. Do it yourself.

VALUE CORNER

H. Do you think the ethnic people living in different forests should be modernised?

1. Yes ☐

2. No ✓

6. The Land of Ice and Snow (Greenland)

ANSWERS

WARM UP

Name this animal.

Ans. Reindeer

CHECKPOINT

Answer the following questions.

1. Where is Antarctica situated?

Ans. At South Pole.

2. Who discovered Greenland?

Ans. Eric the Red.

3. Who named Greenland?

Ans. Eric the Red.

4. What is the ice cover on this island called?

Ans. Ice-cap.

5. What is an umiak?

Ans. It is a large boat used by Eskimos.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. Greenland is located towards the _____ of Canada.

(a) north-west ☐ (b) north-east ✓ (c) south-east ☐

2. Which European country controls Greenland?

(a) Iceland ☐ (b) Ireland ☐ (c) Denmark ✓

3. The winter season here is for almost _____ months.

(a) six ☐ (b) seven ☐ (c) nine ✓

4. What are no longer used by Eskimos for hunting and fishing?

(a) Harpoons ☐ (b) Kayaks ☐ (c) Huskies ☑

5. Which one of the following is not associated with the Eskimos?

(a) Seals ☐ (b) Igloo ☐ (c) Farming ☑

B. Fill in the blanks with information from the text.

1. Nuuk is the capital of Greenland.

2. Rifle and harpoon are the weapons.

3. Greenland was discovered in the 10th century.

4. The temperature in Greenland is generally below 0°C.

5. Eskimos are also called Inuits.

C. Write in one word.

1. Main occupation of the Eskimos — Hunting

2. Main animals found in Greenland — Polar bear, reindeer, musk, ox, etc.

3. Main types of vegetation found in Greenland — Mosses, lichens, etc.

D. Answer these questions.

1. Describe the location of Greenland.

Ans. Greenland is located towards the North-East of Canada in North America. Greenland lies mostly within the Arctic Circle. The total area of Greenland is about 22 lakh square kilometres. About seventy per cent area of Greenland is towards the north of the Arctic Circle. The island is surrounded by the Greenland Sea in the north-east, Denmark Strait in the south-east, Davis Strait in the south-west, Baffin Bay in the north-west and the Arctic Ocean in the north.

2. Describe natural vegetation found in Greenland.

Ans. Due to the cold climate and frozen land, the vegetation in this region is limited. Plants with deep roots do not grow. The main types of vegetation are shrubs, mosses, lichens and grasses. Some flowering plants grow during the summer months. There are no trees or crops.

3. Why is normal life not comfortable in Greenland?

Ans. In Greenland, the climate is very cold throughout the year. The winter season is for about nine months. Very cold and chilly winds blow during this season. The sun is also not visible for many weeks. There is heavy snowfall and the temperature is generally below freezing point (0°C). This type of climate is not suitable for living. No vegetation can grow. All these factors make living in the region very difficult.

4. Describe the climatic conditions in Greenland.

Ans. In Greenland, the climate is very cold throughout the year. The winter season is for about nine months. Very cold and chilly winds blow during this season. The sun is also not visible for many weeks. There is heavy snowfall and the temperature is generally below freezing point (0°C). During the summer season, there is bright sunshine for many weeks and the sun never sets. We also call this area the Land of the Midnight Sun. The general weather is bright and sunny. However, rainfall is scanty. At many places, the ice melts in this season, but the temperature is near the freezing point (0°C).

5. What changes are taking place in the lifestyle of the Eskimos?

Ans. Nowadays, the lifestyle of the Eskimos is changing fast. Today, Greenland is not an isolated place. These days Eskimos use rifles in place of harpoons for hunting. People

use radios and televisions. They buy goods made in other countries to meet their daily needs. Many of them are now working in mines and oilfields.

THINK AND ANSWER

E. What type of industry can grow in Greenland? Explain your answer.

Ans. **Hint:** Tourist industry.

LET US DO

F. Project

Imagine your school has decided to arrange an excursion to Greenland. Using the Internet, prepare a tour plan to Greenland. Focus on the following points.

(a) Transport (route), (b) Means of transport, (c) Food habit,

(d) Physical fitness, (e) Approximate cost

Ans. Do it yourself.

G. Activity

Collect a picture of a dog-drawn sledge. Is it an adventure to ride a sledge? Can it be used on normal roads? Discuss in the class.

Ans. Do it yourself.

VALUE CORNER

H. How can we keep the wildlife intact in Greenland? Suggest a way.

Ans. **Hint:** Banning the killing of animals by outsiders.

LIFE SKILLS

I. If you go to visit to Greenland, which of the following activity will you do?

☐

☑

7. The Land of Hot Sand (Saudi Arabia)

ANSWERS

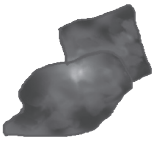
WARM UP

Which of the following is the base of the Saudi economy?

☐

☐

✓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CHECKPOINT

Fill in the blanks with information from the text.

1. The Sahara Desert is in Africa.
2. Riyadh is the capital of Saudi Arabia.
3. The term, 'Rub al khali' means 'empty area'.
4. Saudi Arabia is not rich in wildlife.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. The largest desert in the world is the
   (a) Arabian Desert ☐ (b) Atacama Desert ☐ (c) Sahara Desert ✓
2. Saudi Arabia occupies the Arabian
   (a) islands ☐ (b) peninsula ✓ (c) mountains ☐
3. Temporary streams, formed after the rains, are called
   (a) wadis ✓ (b) oases ☐ (c) streams ☐
4. It is a seaport in Saudi Arabia.
   (a) Jeddah ✓ (b) Riyadh ☐ (c) Mecca ☐

B. Fill in the blanks with information from the text.

1. Most of the deserts are found on the western side of the continents.
2. The winter season in Saudi Arabia is from October to April.
3. The Tropic of Cancer passes through the Arabian peninsula.

4. The holy city of ___Mecca___ is situated in Saudi Arabia.

5. The people in Saudi Arabia wear a long cloak over a ___smock___.

C. Write in one word.

1. A nomadic tribe inhabiting Saudi Arabia. ___Bedouin___

2. A spot in a desert where water comes out from an underground spring. ___Oasis___

3. Hills of loose sand. ___Sand dunes___

D. Answer these questions.

1. Name the neighbouring countries of Saudi Arabia.

Ans. The neighbouring countries of Saudi Arabia are Jordan, Iraq, Kuwait, Qatar, Oman, UAE and Yemen.

2. What is the importance of petroleum in Saudi Arabia?

Ans. There are limited economic activities in the sparsely populated Saudi Arabia. The country is very rich in petroleum. It is known as liquid gold due to its economic value in the world. After refining, the crude petroleum gives us petrol, diesel, kerosene, lubricants and gas. Today, Saudi Arabia is the largest producer and exporter of petroleum in the world. The discovery of petroleum has completely changed the life of people in Saudi Arabia.

3. Describe the climatic conditions in Saudi Arabia.

Ans. The climate of Saudi Arabia is hot and dry almost throughout the year. During the daytime, the sun shines very brightly. During the summer season (from May to September), the days are very hot and the nights are cool. The temperature during the daytime can be more than 50°C. During the winter season (from October to April), the days are warm and the nights are very cold. There is a great difference between the day and night temperatures. There is hardly any rainfall. The most common feature in all seasons are the dust storms. The coastal areas have mild climate. Abha, a hill station, is cool in the summer.

4. What is the importance of oases in the desert regions?

Ans. At some places in the hot and dry desert, underground water reaches the surface through a permanent spring. These are called oases. These are the fertile areas in the desert where farming can be done. Date-palms are grown in and around the oasis. Other crops are wheat and barley. Small villages develop around oases.

5. Who are Bedouins and what is their traditional lifestyle?

Ans. Some people in the villages of Saudi Arabia still enjoy the traditional lifestyle. Most of them are nomads, who travel from one place to another in search of water, food and shelter for their animals. They are the Bedouins. They move in groups, forming long rows of camels, called caravans. The Bedouins breed camels, which give them, milk, meat, skin and hair. The Bedouins exchange their goods for dates, foodgrains and other useful things. Now the lifestyle of Bedouins is also changing. Many of them use

jeeps and cars for moving in the desert.

THINK AND ANSWER

E. Saudi Arabia has only one industry—petroleum industry. Why do other industries, e.g., agro-based industry, iron and steel industry and IT industry not develop in Saudi Arabia in spite of it being one of the richest countries?

Ans. **Hint:** Lack of mineral resources and water.

LET US DO

F. Project

Write a few lines on the modernisation of Saudi Arabia.

Ans. Do it yourself.

G. Activity

Collect pictures of different cities in Saudi Arabia.

Ans. Do it yourself.

VALUE CORNER

H. Imagine you have landed on the Riyadh airport. Your eyes fall on the following banner. Write at least two ways that you can help Arabia save water.

Ans. Do it yourself.

8. The Temperate Grasslands (Prairies in North America)

ANSWERS

WARM UP

Identify the following animal found in Prairies.

Ans. Prairie dog

CHECKPOINT

Answer the following questions.

1. What is the extent of Temperate zone?

Ans. Between 23½° and 66½° latitudes in both the hemispheres.

2. In which season does rain occur in Prairies?

Ans. Summer season.

3. Which river flows through American Prairies?

Ans. Mississippi river.

CHECK YOUR STUDY

A. Tick (✓) the correct answers.

1. Which crop is not important in the Prairies?

(a) Wheat ☐ (b) Rice ☑ (c) Oats ☐

2. Large areas where cattle are kept and bred are called

(a) homestead ☐ (b) ranches ☑ (c) fazendas ☐

3. Which of the following is not a temperate grassland?

(a) Steppes ☐ (b) Downs ☐ (c) Savanna ☑

4. Who converted the Prairies into farmlands?

(a) Europeans ☑ (b) Americans ☐ (c) Canadians ☐

B. Fill in the blanks with information from the text.

1. The total annual rainfall in the Prairies region is about 50 cm.

2. ___Corn___ is grown extensively here.
3. Trees are found only along the _banks of rivers_ here.
4. ___Beef___ is the staple diet of Americans.
5. In the Prairies, farming is done by __machines__.

C. Write in one word.

1. A French word meaning 'grassland' ___Prairie___
2. Very tall bins used for storing cereals ___Silos___
3. A large area where cattle is bred ___Ranch___

D. Answer these questions.

1. What are the main features of the climate in the temperate grassland?

Ans. The entire Prairie region or the temperate grassland is an endless plain area with no obstruction in sight. The average climatic conditions are hot in the summer season and very cold during the winter season. The total annual rainfall is about 50 centimetres. Most of it is during the summer season. There are mild showers during the winter season. Due to its location in the interior of North America, the climate is not affected by the sea. The amount of rainfall also varies greatly from year to year. The northern parts remains under the snow during the winter season.

2. Describe the location and extent of the Prairies in North America.

Ans. The Prairies are situated wholly in the Northern Hemisphere. They are surrounded by the Rocky Mountains in the west and the Great Lakes in the east. The Prairies stretch from Canada in the north, up to Mexico in the south. Thus, the Prairies are almost midway between the equator and the North Pole.

3. Why are the Prairies called the 'wheat basket of the world'?

Ans. The fertile plains of the Prairies are extensively cultivated. The main cereal crops grown in the Prairies are corn (maize), wheat, barley, rye, soyabeans, etc. This region is known as the 'Wheat Basket of the World'. Corn is mostly grown in the eastern part and cotton is the main crop in the southern part of the Prairies. A large part of the total production is exported.

4. What is the importance of cattle in the economy of the Prairie region?

Ans. The western part of the Prairie grasslands is hilly and less fertile. Cattle is reared in the open grasslands. It is reared mostly for meat. Large cattle grazing areas are called ranches. Near the cities, dairy farming is more popular. The milking of cows is done by machines. Beef is the staple diet of the Americans. Thus, most of the beef produced is consumed locally. Chicago is an important centre for slaughtering cattle.

THINK AND ANSWER

E. Who do you think are responsible behind the change in prairies from grasslands to farmlands? What was the effect of this change?

Ans. Hint: Europeans; economic development but environmental degradation.

LET US DO

F. Project

The Dust Bowl, also known as the Dirty Thirties, was a period of severe dust storms that greatly damaged the ecology and agriculture of the US and Canadian Prairies during the 1930s. Collect information about the incident.

Ans. Do it yourself.

VALUE CORNER

G. How can man live in harmony with nature?

Ans. Hint: Through sustainable development.

PERIODIC TEST 2

A. Tick (✓) the correct answers.

1. What can help in locating places on a globe or a map?

(a) Grid [✓] (b) Parallels [ ] (c) Axis [ ] (d) Meridians [ ]

2. Which of the following countries is not a neighbour of the Democratic Republic of the Congo?

(a) Uganda [ ] (b) Zambia [ ] (c) Rwanda [ ] (d) Cameroon [✓]

3. Which of the following is the main product of Saudi Arabia?

(a) Coal [ ] (b) Petroleum [✓] (c) Sugarcane [ ] (d) Salt [ ]

4. Greenland is located towards the northeast of

(a) North Pole [ ] (b) Iceland [ ] (c) Canada [✓] (d) Sweden [ ]

5. Which of the following is not a greenhouse gas?

(a) Hydrogen [✓] (b) Carbon dioxide [ ]

(c) Methane [ ] (d) CFC [ ]

B. Fill in the blanks.

1. The distance between any two meridians is ___maximum___ at the Equator.

2. The Prairies were originally the grazing grounds for ___bisons___.

3. The dense forests in the equatorial region are called _tropical rainforests_.

4. The Polar regions are the _____coldest_____ part of our Earth.

5. The holy city of Medina is in _Saudi Arabia_.

C. State whether True or False.

1. The Tropic of Cancer is marked at 23½°N. ___True___

2. The main language spoken by the people of Saudi Arabia is Persian. ___False___

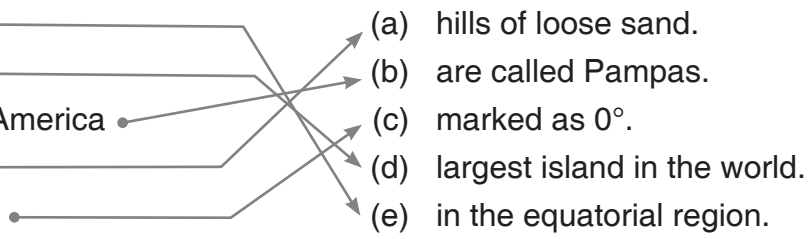
3. The Prairies are called the 'wheat basket of the world'. ___True___

4. One consequence of global warming is the melting of snow at the

Polar regions. True

5. In a map, lowlands are shown in dark brown colour. False

D. Match the following.



Column A		Column B
1. DRC is located	(a)	hills of loose sand.
2. Greenland is the	(b)	are called Pampas.
3. Grasslands of South America	(c)	marked as 0°.
4. Sand dunes are	(d)	largest island in the world.
5. The Prime Meridian is	(e)	in the equatorial region.

E. Answer the following questions.

1. Why is a map less accurate than a globe?

Ans. Unlike a map, a globe can show us the whole Earth at a glance.

2. What is the importance of petroleum for Saudi Arabia?

Ans. Saudi Arabia is very rich in petroleum. It is known as liquid gold due to its economic value in the world. After refining, the crude petroleum gives us petrol, diesel, kerosene, lubricants and gas. Today, Saudi Arabia is the largest producer and exporter of petroleum in the world. The discovery of petroleum has completely changed the life of people in Saudi Arabia.

3. What are the main causes of global warming?

Ans. Recently, it has been noticed that the mean temperature of the Earth and of the atmosphere is increasing due to the greenhouse effect, which is causing global warming. The average increase in the temperature on the Earth and also in the atmosphere is one degree in the last 100 years.

The main greenhouse gases are carbon dioxide, methane and CFCs (Chlorofluorocarbons). The increase of the greenhouse gases in the atmosphere is due to pollution, which is caused by nature and human activity. These gases can easily trap the heat of the sun, and this is called the greenhouse effect.

4. What are the main economic activities in the Prairies?

Ans. European settlers converted these grasslands into farmlands. Now these fertile plains are extensively cultivated. The main cereal crops grown in the Prairies are corn (maize), wheat barley, rye, soyabeans, etc. This region is known as the Wheat Basket of the World. Corn is mostly grown in the eastern part and cotton is the main crop in the southern part of Prairies. A large part of the total production is exported.

5. What is the importance of plateaus?

Ans. A plateau rises suddenly from the surrounding areas and has a flat top. It has steep sides and they are deeply cut by rivers and streams.

The plateaus are very useful for us for the following reasons:

(i) Some old plateaus are rich in minerals, such as iron, copper, silver, gold, mica,

coal and precious stones.

(ii) Plateaus in tropical areas are good for growing crops.

(iii) The waterfalls provide suitable sites for producing hydroelectricity.

(iv) Some plateaus have rich grasslands which are used for rearing cattle and sheep.

(v) The natural landscape attracts tourists from all over the world.