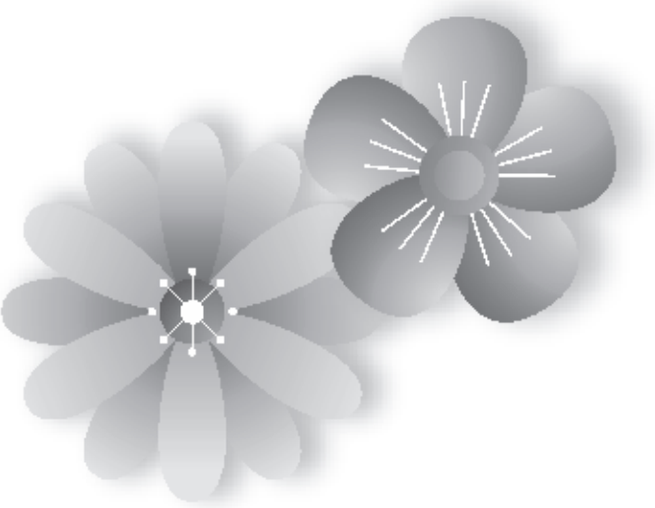
Young Mind

An integrated Term Book Series

Class 5 Term 1

Teacher Manual



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Chapter - 1. The Princess Moon

EXERCISES

A. Tick (✓) the correct answer:

1. (a) ten 2. (c) both
3. (a) The Moon 4. (c) Gold

B. Answer the following questions:

1. The princess wanted the Moon.
2. The king was angry both court doctor and court magician had refused to bring the Moon to the princess. They told the king that Moon was far, far away and it is impossible to get the Moon.
3. The court jester said, "I will get the Moon for the princess." He entered the princess' room and asked, "What can I do to make you well, my dear princess?" The princess replied, "Get me the Moon and I will be well." The jester asked, "How big the you want, princess?"
4. The court jester went to the goldsmith and asked him to make a golden moon as big and as round as the princess' thumb. He then put it on a chain. Next day, the court jester handed over the princess the little golden moon and said, "Here is your lovely Moon, princess."

   The princess was very happy to see the Moon. She clapped her hands with joy and got up and started running around. In this manner, the princess got well again.
5. The court jester was very wise. He made the princess well again.

C. Fill in the blanks:

1. The princess became very sick.
2. The king called the court doctor.
3. The Moon is far away from us.
4. It is impossible to get the moon.
5. The court jester asked the goldsmith to make a golden moon.
6. He ran out to give the happy news to the king.

Using Grammar

A. Join the two sentences with 'but' or 'and' correctly:

1. The princess was ill and was lying on the bend.
2. The king called the court doctor and the court magician.
3. It was raining and was getting dark.
4. The man was not blind but could not see anything.
5. The princess was very happy and the king also became happy.

B. Punctuate the following passage using capital letters, commas, inverted commas and full stops where necessary:

"I want to reach the moon." said Amit to his sister Akriti. "But how do you plan to reach the moon, my naughty brother. It's too far off." asked Akriti.

"I don't care. I want to be the first man to reach the moon." said Amit.

Writing Skills

A. What do you call the following persons?

1. Baker 2. Stationer
3. Tailor 4. Ironsmith

B. Match the Synonyms:

	Column 'I'		Column 'II'
1.	prison	(a)	jail
2.	king	(g)	monarch
3.	glad	(b)	happy
4.	healthy	(f)	strong
5.	sick	(c)	ill
6.	unhappy	(d)	sad
7.	silly	(e)	foolish

C. Change the gender of the following nouns:

1.	King	–	Queen
2.	Prince	–	Princess
3.	Daughter	–	Son
4.	Man	–	Woman
5.	Lion	–	Lioness
6.	Horse	–	Mare
7.	Landlord	–	Landlady
8.	Author	–	Authoress
9.	Boy	–	Girl
10.	Cow	–	Bull

D. Now rewrite the following as the above example:

1. The daughter of the king.

2. The answer of the jester.
3. The thumb of the princess.
4. The name of the cobbler.
5. The watch of the boy.
6. The frock of the girl.

E. Add suitable prefixes to form opposites:

1. well – unwell
2. happy – unhappy
3. real – unreal
4. sure – unsure
5. trained – untrained
6. appear – disappear

F. Make sentences with these words to bring out the difference:

1. beautiful: She is a beautiful girl.
   handsome: He is a handsome boy.
2. princess: The princess was the beloved daughter of the king.
   princes: The king had three able princes.
3. will: I will surely solve this sum.
   well: She isn't feeling well today.
4. jester: The court jester was very funny but intelligent.
   gesture: The students were happy to see the kind gesture of their class teacher.

G. Look at the pictures and write out the story.

Two cats and a Monkey

One day, two cats were passing through a road. They found a piece of bread and cut it into two pieces. But one piece was slightly bigger than the other. Both the cats wanted the bigger piece. They started to quarrel with each other for the bigger piece. As they were fighting, a monkey came up.

"My dear friends! Can I help you?" asked the monkey. The cats told the monkey what the problem was and said, "Why do not you be the judge between us?" When the monkey nodded, the cats said, "Please divide this bread for us and sort out the matter."

The monkey then brought a balance and put the two pieces on the two sides of the balance. One piece of bread was heavier than the other.

The monkey said, "Don't worry. I'll make both the pieces equal." Then it took a bite from the bigger piece. But this made the other piece larger. So, it took a bite from the piece. This continued till the pieces became very small.

Seeing this, the cats pleaded, "We are satisfied. Let us have the pieces now."

The shrewd monkey replied, "This is my fee for sorting out the problem." Saying this, it ran off. The poor hungry cats could do nothing. They just looked at each other sadly.

Chapter - 2. Complicated Man

EXERCISES

A. Tick (✓) the correct answer:

1. (c) trickiest 2. (c) ministers
3. (c) Shankar

B. Answer the following questions:

1. The king ordered his ministers, "Go and find the trickiest man in the world and bring him in my court. We will play tricks on each other. If he loses, he must be my slave or life."
2. The clever men refused to face the king because they didn't want to be slave.
3. No, Shankar didn't really use the tools to trick people. It was just an idea of his mind to trick the king.
4. With horses and camels, Shankar went back to his village. With the help of horses and camels, the villagers ploughed their lands and soon they grew good crops to feed them for many, many years.
5. Shankar tricked the king three times.

Using Grammar

A. Change the following sentences into Negative-Interrogative form:

1. Were the people of the village not very poor?
2. Did the villagers not know how to treat their guests?
3. Will it not take at least six months to collect the tools?
4. Is not this an awful news?
5. Did I not trick you thrice?

B. Read the following sentences:

Now join the following pairs of sentences using 'and' or 'but':

1. I can't see, but I can hear.
2. I love Alisha, but she hates me.
3. The king could not believe him, but he was happy.
4. He spent most of his time eating and sleeping.

5. Rahul is honest and hard-working.

Writing Skills

A. Match the opposites:

Column 'A'		Column 'B'
1. possible	(e)	impossible
2. slave	(d)	master
3. clever	(c)	foolish
4. easy	(a)	difficult
5. agree	(f)	disagree
6. loaded	(b)	unloaded

B. Circle the Adjectives (describing words) in the following sentences:

1. The minister met several clever man.
2. The king received him with warm hands.
3. He decided to trace the trickiest man in the world.
4. The king owned the land and rich forest around it.
5. This is an awful news.

C. Circle the odd word in each set:

1. Slave	2. Stupid
3. Rick	4. Clock

D. Make nouns from the following sentences:

1. poor	–	poor man
2. wise	–	wise girl
3. warm	–	warm welcome
4. strange	–	stranger
5. true	–	truth
6. absent	–	absence
7. thick	–	thick forest
8. long	–	long wait

E. Join the two groups of words and change the spelling whenever necessary:

1. Observable	2. Awful
Presentable	Careful
Changeable	Beautiful
Exchangeable	Wonderful

F. Look at the pictures and write the trick which the cap-seller applied to get back his caps from the monkeys.

One day a cap-seller was passing through a forest. On the way, he got tired. He used to keep red caps in his basket over his head and used to sell them in streets and market. One day it was a hot sunny day. Cap seller was tired and also was perspiring. So, he put his basket of caps under a leafy tree and sat down. Since he was tired, he fell asleep.

On branches of a tree many monkeys used to live. They got tempted by seeing red caps. So, all of them came down and each one took a cap and put it on its head. Then all of them climbed up tree and sat there.

After some time, Cap seller woke up and was astonished to see all caps missing from his basket. He looked around, but could not find anyone there. Later, he heard voice of monkeys on tree. He noticed monkeys were wearing all caps. It was quite difficult for him to climb tree to get caps back.

An idea came into his mind. He hurriedly took off his own cap and threw it on ground. Seeing this action of Cap seller, all monkeys also did same action and each one threw cap on ground. Monkeys have habit to imitate others. In this way, Cap seller got back all his caps and went back happily.

Chapter - 3. All Powerful Spirit

EXERCISES

A. Tick (✓) the correct answer:

1. (a) God (b) Ripe fruits
   (b) lips

B. Answer the following questions:

1. God Almighty has made all things in the world.
2. The colour of the mountains is purple.
3. Almighty God has made the ripe fruits in the garden.
4. We call Him God Almighty because He has made all the things on the mother earth. Almighty God has made wise creatures, flowers, birds, purple mountains, running rivers, morning and evening, cold wind in winter and pleasant summer, ripe fruits in garden. He has also provided us eyes to see the beauty of the mother nature and also lips to describe the beauty. Almighty God is really great.

C. Fill in the blanks:

1. The God Almighty made all the things.
2. All the creatures great and small.
3. He gave us eyes to see them.
4. There are ripe fruits in the garden.
5. He has given us lips to tell.

Using Grammar

A. Change the following sentences into questions:

1. Who has made their tiny wings?
2. Where are many ripe fruits?
3. What brightens up the sky?
4. Who has given us eyes to see?
5. Is God Almighty great?

B. Read following passage carefully.

Now answer the following questions:

1. The hermit lived on the bank of Ganges.
2. The scorpion was floating on the water. The hermit went up to scorpion and took him out. But the scorpion stung him on his palm and scorpion fell into the water again. The hermit again tried to save the scorpion, but it again stung him. He kept on trying and at last the scorpion was saved.
3. The person asked the hermit, "Why did you save the scorpion? It was stinging you all the time."
4. The hermit's reply was that if the scorpion cannot give up its nature of stinging, why should he give up his nature of saving him again and again.
5. (i) evening – morning
   (ii) first – last
   (iii) bad – good
   (iv) question – reply

Writing Skills

A. Match the opposites:

	Column 'A'		Column 'B'
1.	bright	(b)	dull
2.	beautiful	(a)	ugly
3.	small	(h)	big
4.	wise	(g)	foolish
5.	open	(c)	close
6.	sunset	(f)	sunrise
7.	tall	(e)	short
8.	morning	(d)	evening

B. Join the words in Column I with the words in Column II and make compound words.

	Column I	Column II	
1.	Sun	flower	sunflower
2.	Lip	stick	lipstick
3.	Eye	sight	eyesight
4.	Class	room	classroom
5.	Rain	bow	rainbow
6.	Wood	cutter	woodcutter
7.	Chair	man	chairman
8.	Foot	ball	football

C. Find words from the poem which mean the same as these.

1. living things: creatures
2. something which shines: brightens
3. something which gives pleasure: pleasant
4. mature: ripe
5. hot season: summer

D. Use these words to make sentences in two different ways:

1. well: We draw water from a well.
   well: Sangeeta is not feeling well today.
2. state: Maharashtra is a big state of India.
   state: He doesn't state the fact properly.
3. train: India has a large network of trains.
   train: The teacher asked us to train well for the upcoming sports competition.
4. sunset: Kaushambi in Almora is a place where we can view the beautiful sunset every evening.
   sunset: He seems to be at his sunset in life.
5. ripe: There were many ripe fruits in the garden.
   ripe: The crop doesn't seem to be ripe yet.
6. might: He might do this job.
   might: The Chinese showed it extraordinary might on its independence day.
7. see: I wish to see you right now.
   see: She has a very good eyesight to see.

E. Un-jumble the words to frame meaningful sentences:

1. Birds have glowing colours.
2. The fruits grow ripe in garden.
3. He gave us eyes to see everything.
4. How great is God Almighty!
5. He has made all the things well.

Chapter - 4. Blue Dyed Jackal

EXERCISES

A. Tick (✓) the correct answer:

1. (a) dogs 2. (c) blue
3. (a) king 4. (b) tiger

B. Answer the following questions:

1. Once, the jackal was wandering in search of food. He entered a town, but the dogs started chasing him. He ran for his life. While running, he saw a huge tub of blue dye. The jackal hid himself in the huge tub of blue dye.

When he came out of the tub, he saw that his grey and brown skin had turned in blue colour.

2. When the jackal returned to the forest, no other jackal recognized him. They were afraid of him. He called all other jackals of jungle and said to them, "Friends, don't be afraid of me. I have been sent here by God to be your king. From today onwards, you treat me as your master and protector. It is your duty to feed me well everyday."
3. He told all the animals, "Friends, don't be afraid of me. I have been sent here by God to be your king. From today onwards, you treat me as your master and protector. It is your duty to feed me well every day."
4. One morning, the Jackal King was holding a meeting with his courtiers. He saw a pack of jackals coming noisily towards the meeting place. They suddenly set up a loud howl. This suddenly disturbed and confused the jackal. Unable to control himself, he also raised his head and howled back at them to tell them to shut up. Quickly, the other animals realized that he was actually a jackal. He had been cheating them all along. All of them attacked the Blue Jackal. The tiger jumped on him and killed him on the spot.
5. When other animals realized that the king was actually a jackal. They thought that he had been cheating them all along. Therefore, all of them attacked the Blue Jackal. The tiger jumped on him and killed him on the spot.

Using Grammar

A. Make questions for the following answers:

1. Was he spotted there by some dogs?
2. Did other jackals bow before him?
3. Did he get the best of food?
4. Did the animals go to him for the solution of their problems everyday?
5. Did he howl back at them to tell them to shut up?

B. Circle the verbs in the following sentences:

1. He entered a town.
2. The other jackals agreed and bowed before him.
3. He led an easy-going life.
4. He raised his head and howled back at them.
5. The tiger pounced on him.
6. He killed him on the spot.
7. All of them attacked the blue jackal.

Writing Skills

A. Match the words with their meanings:

	Column 'A'		Column 'B'
1.	wandering	(c)	roaming here and there
2.	fame	(d)	the state of being known
3.	fantastic	(a)	brilliant
4.	chased	(b)	followed someone to catch him/her

Now use the words given in Column I to fill in the following blanks:

1. The kids chased each other around the dining table.
2. She went to Hollywood to get some fame.
3. The weather is absolutely fantastic.
4. The child was found wandering in the streets alone.

B. Pick the odd one out:

1.	Grapes	2.	Snake
3.	Rubber	4.	Guava

C. Some words are commonly used together.

Now make groups choosing the words given in the box:

	Column 'A'			Column 'B'
1.	land	(d)	lord	landlord
2.	every	(f)	day	everyday
3.	head	(a)	master	headmaster
4.	life	(b)	less	lifeless
5.	town	(c)	ship	township
6.	hand	(e)	some	handsome

E. Read the following passage and then answer the following questions that follow:

Now answer the following questions:

1. One day, the wolf found a sheep's skin. He covered himself with the sheep's skin and got mixed into a flock of sheep who were grazing in a field.
2. The wolf thought, The shepherd will shut the sheep in a en after sunset. At night, I will run away with a very fat sheep and eat it."
3. The unexpected thing that happened in the night was that one of the servants entered the pen at night. His master had sent him to bring a fat sheep for dinner that night. As luck

would have it, the servant picked up the wolf dressed in the sheep's skin. So, the shepherd and his guests had the wolf killed for dinner that night.

4. At night, one of the servants entered the pen at night. His master had sent him to bring a fat sheep for dinner that night. As luck would have it, the servant picked up the wolf dressed in the sheep's skin. So, the shepherd and his guests had the wolf killed for dinner that night.

5. (i) sunrise – sunset
   (ii) expected – unexpected
   (iii) uncovered – covered

F. Do it yourself.

G. We say a clump of trees. What do you call these groups?

1. a pack of jackals. 2. a fleet of buses.
3. a swarm of bees. 4. a flock of sheep.

Activity

Look at the pictures and solve the animal puzzle.

1. Rhinoceros 2. Crocodile
3. Dog 4. Peacock
5. Elephant 6. Butterfly
7. Tiger 8. Frog
9. Jackal

Chapter - 5. True Friendship

EXERCISES

A. Tick (✓) the correct answer:

1. (c) both 2. (c) lion's
3. (a) friends 4. (b) dog

B. Answer the following questions:

1. The circus manager used to give the dogs and cats to the hungry animals of the circus.
2. The manager put the dog into a lion's cage.
3. No, the lion didn't kill the dog. Instead he became friendly with the poor dog.
4. The lion-keeper had to return without the dog because the lion didn't allow him to take away the dog. When the lion-keeper went near the cage to take the dog, the lion roared. The lion-keeper again tried to go near, but the lion didn't even let him touch the cage. So, the lion keeper had to return without the dog.
5. When the dog died because of sickness, the lion had tears in his eyes. He licked the dog many times to make him move. But he was dead. The lion was very upset because of his friend's death. He lashed his tail in anger. He roared loudly. He didn't eat anything for many days. Soon the lion also died. The lion gave his life for his friend. So, the lion was really a true friend of the dog.

Using Grammar

A. Make Interrogative sentences for these answers:

1. Who came to see the circus one day?
2. Who brought a stray dog?
3. Did the little dog wag his tail?
4. Who licked the dog many times to make him move?
5. Who was very upset because of his friend's death?

B. Change the following sentences into Plural form:

1. The wolves chased the children.
2. The lions had tears in their eyes.
3. The potatoes were cut by knives.
4. The owls sat on the trees.
5. The kangaroos are fast runners.

C. Write the following sentences in proper order:

1. I met Ajay on the way.
2. He was going to his friend's house.
3. I requested him to accompany me.
4. He agreed to do so.
5. So, we went together on the park.

Writing Skills

A. Complete the table.

I	II	III
see	saw	seen
give	gave	given
bring	brought	brought
stand	stood	stood
steal	stole	stolen
agree	agreed	agreed
touch	touched	touched

B. Match the opposite genders:

Column 'A'		Column 'B'
1. lion	(e)	lioness
2. dog	(a)	bitch
3. bull	(b)	cow
4. horse	(f)	mare
5. drake	(c)	duck
6. gander	(d)	goose

C. Write the opposites of the following words:

1. poor – rich
2. full – empty
3. near – far
4. fearful – kind
5. true – false

6. friend – enemy
7. longer – shorter
8. dead – alive

D. Write another word for each of the following which sounds the same but has different spellings and meanings.

1. not – knot
2. tall – toll
3. piece – peace
4. meat – meet
5. week – weak
6. two – too
7. some – sum
8. see – sea

E. Here are names of five animals, but they are scrambled. Can you work them out:

1. crocodile 2. hippopotamus
3. jackal 4. elephant
5. donkey

F. Find two smaller words in each of the following words:

1.	Many	any
		man
2.	lashed	shed
		ash
3.	frighten	ten
		right
4.	nothing	not
		thing
5.	bookshop	book
		shop
6.	calendar	end
		lend
7.	blackboard	black
		board
8.	teleprinter	print
		printer

Chapter - 6. Loving Mother

EXERCISES

A. Tick (✓) the correct answer:

1. (a) loving 2. (c) both
3. (c) both 4. (a) Yes

B. Answer the following questions:

1. No, my mother never stops loving me.
2. The mother is special in many ways as follows:
   a. She looks after me everyday.
   b. She never stops loving me.
   c. She never stops caring me when I am bad, happy or sad.
3. Yes, I love my mother very much. My mother is more precious to me than a gem.
4. Mother is compared to gem but she is more precious than a gem.

Using Grammar

A. Change the following sentences into Negative and Interrogative:

1. (a) The moon gives us heat and light.
   (b) The moon does not give us heat and light.(Negative)
   (c) Does the moon give us heat and light? (Interrogative)
2. (a) The soldiers are coward.
   (b) The soldiers are not coward. (Negative)
   (c) Are the soldiers are coward? (Interrogative)
3. (a) The doctor killed the patient.
   (b) The doctor did not kill the patient. (Negative)
   (c) Did the doctor kill the patient?(Interrogative)
4. (a) The clock strikes ten.
   (b) The clock does not strike ten. (Negative)
   (c) Does the clock strike ten? (Interrogative)
5. (a) Indian team won the match.
   (b) Indian team did not win the match.(Negative)
   (c) Did Indian team win the match? (Interrogative)

B. Use 'or' and join these sentences:

1. Was she a singer or a painter?
2. Was Rahul a doctor or an actor?
3. Were they dancing or playing?
4. Was Pooja writing a poem or cooking the food?
5. Were they directors or producers?

C. Fill in the blanks with correct Prepositions given in the box:

1. Where are you coming from?
2. Whom are you talking to?
3. Who is at the door?
4. Whose books are kept on the table?
5. Which toys are in your bag?

Writing Skills

A. Write the words of opposite meaning given in the balloon:

1. special – ordinary
2. stop – start
3. happy – sad
4. love – hate

5. more – less
6. never – always

B. The following words can be used in two different ways. Look at the pictures and fill in the blanks with suitable words.

1. The bus stop was full of people waiting for the bus.
   Please stop at the red light.
2. The king rules over the country.
   The children know the rules of the game.
3. The children wear a uniform in the school.
   Ajay cannot uniform himself yet.
4. We live on the ground floor.
   The flour was ground in the mill.

C. Find out two words given in each of the following words.

1.	Mother	other her
2.	Caring	car ring
3.	Everyday	every day
4.	Forest	for rest

D. Look at the pictures and write out the story:

A fox and a crane were two friends. One day, the cunning fox invites the crane and serves soup in a flat dish. But unfortunately, due to long beak, the crane couldn't drink the delicious soup and hence, remains hungry. The crane became angry and he wanted to teach a lesson to the cunning fox.

On an another occasion, the crane invites his friend fox to the dinner and serves him boiled rice in a long necked jar. The cunning fox couldn't eat and, therefore, remained hungry.

Chapter - 7. Donkey and Jackal

EXERCISES

A. Tick (✓) the correct answer:

1. (b) fragile 2. (c) jackal
3. (b) donkey 4. (b) Donkey

B. Answer the following questions:

1. The donkey had grown weak and fragile because his master washerman didn't feed him well. The donkey had to work hard all day long. He used to carry heavy loads of clothes on his back everyday.
2. The donkey and a jackal made friends with each other.
3. The donkey and the jackal enjoyed in the field eating soft, juicy and delicious cucumbers. They made a habit of visiting the field every night and eating the delicious cucumbers.
4. The jackal's advice to the donkey was that he should not sing a song out of joy. He advised him that they should remain silent, otherwise they would be caught by the farmer.
5. The donkey was very foolish because he didn't pay attention to the advice of his friend jackal. The jackal had advised him not to sing a song, but he didn't obey him. He sang the song and as a result, he was not only caught by the farmer, but also got beaten soundly by him.

C. Fill in the blanks:

1. The washer-man had donkey.
2. One night, the donkey met a jackal.
3. They entered the field of cucumbers.
4. The donkey brayed loudly.
5. The donkey was ashamed at his great folly.

Using Grammar

A. Correct the following sentences. Replace the words in italics with the correct words:

1. The humming bird is the smallest bird in the world.
2. The whale is the largest animal in the world.
3. The fox is the cleverest animal.
4. The snake is the most dangerous animal.
5. The peacock is the most beautiful bird.

B. Rewrite the following sentences using 'used to':

1. He used to return to the washerman on time.
2. They used to enjoy eating soft, juicy and delicious cucumbers.
3. The donkey used to bray very loudly.
4. The washerman used to wash the clothes.
5. The farmer used to work on the farm.

C. Make the Negative sentences for the given Affirmative sentences:

1. We should not be unkind to the poor.
2. We should not dislike our friends.
3. We should not talk in the class.
4. We should not misbehave in front of our elders.
5. We should not cry loudly.

Writing Skills

A. A person who washes our clothes is called a washerman. What are the following people called?

1. Farmer 2. Tailor

3. Pilot 4. Doctor
5. Potter 6. Fruit-seller

B. Match the opposites:

	Column 'A'		Column 'B'
1.	weak	(d)	strong
2.	ripe	(a)	raw
3.	bright	(f)	dull
4.	thick	(b)	thin
5.	easy	(e)	difficult
6.	reward	(c)	punishment

C. Fill in the clouds with the sound of the following animals:

1. I bray. 2. I neigh.
3. I bleat. 4. I moo.
5. I trumpet.

D. Read the following sentences carefully.
Now make sentences using the following words:

1. (a) Tide : The tide occurs in the ocean.
   (b) Tied : The goat was firmly tied by the girl.
2. (a) Weak: She has grown weak because of illness.
   (b) Week: There are seven days in a week.
3. (a) Night: We enjoy the night when there are moon and stars in the sky.
   (b) Knight: He was made a knight by the king of England.
4. (a) Ate: The donkey ate delicious and juicy cucumbers in the field at night.
   (b) Eight: There are eight planets in our Solar System.
5. (a) Cot : He was tired and laid himself on the cot.
   (b) Caught : The thief was caught by the police.

E. List out six words using the letters given in the box:

1. Mad 2. Donkey
3. Jackal 4. Neck
5. Eye 6. Camel

Activity
Do it yourself.

Grammar : Term-1

Chapter - 1. Letters in Alphabetical Order

EXERCISES

A. Tick (✓) the correct answer.

1. (a) 26 2. (a) V
3. (c) r

B. Put the following words in the alphabetical order.

1.	cake	candy	caramel	cookie	cup
2.	able	add	air	apple	art
3.	each	east	easy	egg	ever
4.	radish	ring	root	rose	round

C. Write the Olympic games in alphabetical order.

1. athletic 2. badminton
3. boxing 4. cycling
5. hockey 6. judo
7. sailing 8. swimming
9. tennis 10. weightlifting
11. wrestling 12. yachting

D. Write the names of the months in an alphabetical order.

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

E. Put the following water animals in an alphabetical order.

1. dolphin 2. fish
3. jellyfish 4. lobster
5. octopus 6. seahorse
7. shark 8. starfish

Fun Time

The word that is longest is: aegilops ✓

Chapter - 2. Letters in Alphabetical Order

EXERCISES

A. Tick (✓) the correct answer.

1. (a) pencil 2. (b) Sachin
3. (c) Truth

B. Write three proper nouns for each of the following common nouns.

1. Mahatma Gandhi, Lala Lajapat Rai, Lal Bahadur Shastri
2. Ganga, Yamuna, Godavari

3. Japan, Australia, England
4. Jabalpur, Faridabad, Jaipur
5. The Andes, the Himalayas, The Rocky

C. Fill in the blanks with the abstract nouns of the words given in colour.

1. length,
2. truth
3. kindness
4. honesty
5. wisdom

D. Write three proper nouns for the following common nouns.

1. Diego Marading, Lionel Messi, Ronaldo
2. Ali Baba & 40 Thieves, The Farmer and His Sons, The Golden Hen.
3. Alto, Swift Desire, Honda city
4. Sony, National Geographic, History
5. Nepal, Australia, France
6. Mr. Prashant, Mr Sanjay, Mr. Pradeep
7. Mars, Jupiter, Venus

E. Write down the name of material nouns.

1. sugar, milk, rice
2. brick, cement, iron
3. wood,
4. milk, water
5. coal, wood

F. Match the proper noun with the common noun.

1. planet
2. building
3. festival
4. city
5. car
6. month
7. book
8. girl

G. The words in each of the following rows are specific examples of a larger class. Write the names of the class they belong to:

1. colour
2. birds
3. sports
4. drinks
5. furniture
6. planets

H. Form abstract nouns from the words given in the brackets to complete the sentences.

1. strength
2. wisdom
3. happiness
4. innocence
5. disappointment
6. confidence

I. Fill in the blanks with the correct collective Nouns:

1. clump
2. bunch
3. warren
4. gang
5. hive
6. cluster
7. pride
8. team
9. shoal
10. flock
11. herd
12. Kennel

Fun Time

Do it yourself.

Chapter - 3. Nouns: Singular and Plural

EXERCISES

A. Tick (✓) the correct answer.

1. (a) lice
2. (a) teeth
3. (a) Salmon

B. Change the following sentences into plural. Also make necessary changes, if any. One is done for you.

2. These countries have great leaders.
3. Children are playing in the park.
4. There are monkeys on these trees.
5. The babies are crying for their.
6. The thieves had sharp knives.

C. Make plural of the following nouns.

1. shelves
2. benches
3. radios
4. deer
5. branches
6. tomatoes
7. puppies
8. essays
9. berries
10. watches

D. Change the following sentences into singular. Also make necessary changes, if any. One is done for you.

2. The prince lives in a palace.
3. Please put this map on the table.
4. The mare gave birth to a foal.
5. The woman wore traditional dress.
6. The dwarf were friendly creatures.

Fun Time

A. Alisha is going to the market with her mother. Rewrite their shopping list by giving the plural of the nouns in colour:

At the fruit shops:

two bunches of grapes, three mangoes
ten pears one bunch of bananas

At the stationary shop:

two boxes of crayons three erasers
five pencils three rulers

At the chemist shop:

three rolls of cotton two bottles of cough syrup
two tins of baby food two tubes of skin cream.

B. Choose a small word from the box to complete the names of these nouns:

1. low, 2. top 3. test
4. pot 5. mint

Chapter - 4. Nouns: Gender

EXERCISES

A. Tick (✓) the correct answer.

1. (a) Negro 2. (b) Niece
3. (b) Student

B. Write the gender of the coloured nouns.

1. Wizard – Masculine
2. drone – masculine
3. witch – feminine
4. doctors – common
5. teachers – common

C. Match the opposite genders.

1. actress 2. queen
3. mistress 4. aunt
5. nun 6. goose
7. mare 8. madam

D. Rewrite the following sentences by changing the gender of the coloured words.

1. He was name the emperor of India.
2. The sportswomen have made a complaint.
3. The police woman chased a thief.
4. The priestess blessed the poet.
5. The peahen is a colourful bird.

E. Put the following nouns in the appropriate box.

Common Gender:

engineer pilot child officer
driver singer

Neuter Gender:

kite shoes book bulb
pen house

Fun Time

A. Complete the following glidogram with the help of names of the pictures:

1. ARROW 2. CAMEL
3. KOALA 4. WOMAN
5. WHALE 6. MANGO
7. APPLE

B. Write the names of one male and one female:

1. Atal Behati Vajpayee ad Mrs. Indira Gandhi
2. Dr. Rajendra Prasad and Dr. Pratibha Patil
3. Balram Jakhar and Meira Kumar
4. Rakesh Sharma and Kalpana Chawla
5. Shri Kalyan Singh and Mayawati

Chapter - 5. Kinds of Pronouns

EXERCISES

A. Tick (✓) the correct answer.

1. (a) who 2. (b) that
3. (c) whom

B. Fill in the blanks with suitable pronouns.

1. It 2. He 3. They
4. It 5. her

C. Which nouns are referred to by the pronouns in colour? One is done for you.

2. The Eiffel Tower 3. Dad and Sunil
4. The Cyclone 5. Computers
6. Arun and Tarun

D. Tick (✓) the correct reflective pronouns.

1. ourselves 2. herself
3. themselves 4. himself
5. myself

E. Choose the correct interrogative pronouns.

1. Who 2. Whom
3. Which 4. What
5. Which

F. Describe these people using relative pronouns. One is done for you.

2. A person who makes our furniture.
3. A person who treats the sick people.
4. A person who teaches in a school.
5. A person who delivers mail to us.
6. A person who mends our shoes.

G. Choose the correct pronouns.

1. My, you 2. Ours, yours
3. hers, theirs 4. our, yours
5. their, ours

H. Circle the demonstrate pronouns.

1. This 2. That
3. Those 4. These
5. That

Fun Time

Do it Yourself.

Chapter - 6. Adjectives

EXERCISES

A. Tick (✓) the correct answer.

1. (c) torn 2. (b) sharp
3. (c) strange

B. Tick (✓) the correct adjective.

1. sensitive 2. first
3. industrious 4. smooth
5. an urban

C. Use clues to write sentences with correct superlative adjectives. One is done for you.

2. Giraffe is the tallest animal in the world.
3. Cheetah is the fastest runner on the earth.
4. The dog is the most faithful animal in the world.
5. The Ganga is the holiest river of India.
6. The cobra is the most poisonous snake in the world.

D. Fill in the blanks with the comparative Degree of the adjectives given in the brackets.

better, bigger, more beautiful, cheaper, hotter, nearer, more dangerous, worse, more boring, smaller, safer, cleaner

E. The table below compares the age, height and weight of five children. Fill in the blanks using the correct form of the adjectives in the brackets.

1.	eldest	2.	youngest
3.	tallest	4.	old
5.	shorter	6.	heaviest
7.	taller	8.	lighter

9. elder / older, younger
10. lighter, heavier

F. Match these animals with the most suitable adjectives:

fox	–	cnning	snail	–	slow
eel	–	slippery	lion	–	brave
monkey	–	tricky	owl	–	wise
mule	–	timid	elephant	–	strong

Chapter - 7. Verbs

EXERCISES

A. Tick (✓) the correct answer.

1.	(a)	need	2.	(b)	wants
3.	(b)	died			

B. Choose the correct verbs.

1.	rises	2.	bought
3.	go	4.	baking
5.	understand		

C. Fill in the blanks with the past tense of the verbs given in brackets:

1.	married	2.	ate
3.	sang	4.	rained
5.	finished		

D. Circle the participles in the following sentences:

1.	finished	2.	played
3.	spent	4.	slept
5.	lost		

E. Complete the table:

1.	know	–	knew	–	known
2.	fly	–	flew	–	flown
3.	arise	–	arose	–	arisen
4.	catch	–	caught	–	caught
5.	wish	–	wished	–	wished

F. Complete this paragraph with the past tense of the verbs given in brackets:

was,	worked,	lived,	had,
were,	got,	went,	was,
did,	walked,	started	

Chapter - 8. Tenses

EXERCISES

A. Tick (✓) the correct answer.

1.	(a)	moves	2.	(a)	baked
3.	(b)	finished			

B. Use the Present Continuous Tense to complete three sentences about each picture.

2. The bird is flying. The deer is eating grass. The tiger is drinking water.
3. The boy is reading a book. The girl is playing with her Teddy Bear, The lady is cutting an apple.
4. The baby is crying. The girl is smiling. The bear is riding a bicycle.
5. The fish is swimming in water. The frog is lying on the land. The snake is crawling on the ground.

C. Look at the information in the following table. Write the sentences what each child likes and does not like. Make sure that you use the present tense. One is done for you.

2. Sooraj is very good at English.
   He likes drama but does not like badminton.
3. Prem is weak at English.
   He neither likes drama nor badminton.
4. Gaurav is good at English.
   He likes drama but does not like badminton.
5. Mary is weak at English.
   She likes both drama and badminton
6. Geeta is very good at English.
   She does not like drama but likes badminton.
7. Simran is very good at English.
   She does not like drama but likes badminton.

D. Put the words in the right order to make sentences in the Present Perfect Tense. One is done for you.

2. I have already taken lots of pictures.
3. Have you seen the Eiffel Tower?
4. They have not taken their lunch yet.
5. She has already seen the museum.

E. Using the words given below, make questions and answers in the Present Tense or Present Continuous Tense. One is done for you.

2. What is Martha doing?
   She is swimming in the pool.
3. What language are you speaking?
   I am speaking Hindi and English.
4. How many sisters do you have?
   I have two sisters.
5. Where are you going now?
   I am going to school.

F. Underline the verbs in the Past Continuous Tense in the given paragraph.

was crowding, were dancing,
were clapping were walking,
yelling, were trying,
were singing, dancing,
were laughing, joking,
was crying

Fun Time

Solve the following puzzle with the help of the clue below. Note that all the words to be filled are the simple present tense of a verb.

Across: 2. SHINE
5. WORSHIP
8. FALLS
9. SING
10. TEACH

Down: 1. KNOWS
3. HITS
4. FLIES
6. REACH
7. RISES
8. FIGHT

Chapter - 9. Kinds of Adverbs

EXERCISES

A. Tick (✓) the correct answer.

1. (b) rarely 2. (c) slowly
3. (b) politely

B. Circle the adverbs in the following sentences.

1. very 2. carelessly
3. late 4. heavily
5. loudly

C. Look at these words, Are they adjectives or adverbs? Put a Tick (✓) in the correct box:

		Adjective	Adverb
1.	lovely	✓	
2.	ugly	✓	
3.	bravely		✓
4.	friendly		✓
5.	curly	✓	
6.	closely		✓

D. Make adverbs from the following adjectives:

1. nicely 2. roughly
3. angrily 4. wrongly
5. cheerfully 6. silently
7. happily 8. quickly
9. rudely 10. smartly

E. Read the following letter and circle all the adverbs that tell 'How Often':

usually, once, often, never,
seldom, sometimes

F. Fill in the blanks with the suitable adverbs formed form the words in the brackets.

1. politely 2. hard
3. late 4. rarely
5. sincerely 6. extremely
7. completely 8. carefully
9. neatly 10. fast

G. Read this paragraph carefully.

screamed – loudly
went out – quietly
run – quickly
said – noisily
climbed – slowly
blew – suddenly

Maths : Term-1

Chapter-1 : Bigger Number

Exercise 1.1

1. Compare the following numbers and put > or < in the boxes :

a) > b) > c) >

d) < e) < f) <

2. Arrange the following in ascending order :

a) 295227, 718659, 817442

b) 504797, 524999, 548378, 594872

c) 4695227, 7184659, 8178042

d) 5234378, 5464999,5477997,5484572

3. Arrange the following in descending order :

a) 587649, 328589,325529

b) 974829, 778720, 735827

c) 5864149, 3252529, 2857489

d) 4297829, 4278720, 4277727, 4273827

4. Write each of the following numbers in words :

a) Thirty four lakh twenty six thousand and five.

b) Ninety two lakh forty two thousand six hundred and two.

c) Five crore eighty seven thousand two hundred thirty eight.

d) Ninety seven lakh forty three thousand two hundred sixty six.

e) Fifty three lakh ninety six thousand seven hundred forty two

f) Twenty eight lakh twenty thousand five

5. Write the following number in the short form :

a) 3677630 b) 8084335

c) 9005080 d) 7045845

6. Build the smallest and the greatest number using the digits only once :

	Greatest number	Smallest number
a)	85320	20358
b)	95210	10259

7. Give the expanded notation of the following numbers :

a) 30000000 + 1000000 + 900000 + 40000 + 100 + 50 + 6

b) 900000 + 80000 + 5000 + 300 + 3

c) 5000000 + 600000 + 30000 + 9000 + 800 + 70 + 4

d) 60000000 + 4000000 + 30000 + 100 + 40 + 7

8. Look at the pattern and write the next three numbers :

a) 5,32,000; 6,32,000; 7,32,000

b) 56,72,815 ; 57,72,815; 58,72,815

c) 5,14,88,651; 5,14,89,651; 5,14,90,651

9. Write the following numbers in figures :

a) 50200059 b) 2715642

c) 80725900 d) 5208492

10. Make the largest and the smallest 6-digit numbers using each digit only once :

a) 876341, 143678

b) 987421, 124789

c) 976510, 105679

11. Make the largest and the smallest 7-digit numbers using each digit only once :

a) 8654321, 1234568

b) 9764321, 1234679

c) 9876320, 2036789

12. Make the largest and the smallest 6-digit numbers using the given digits. You may repeat the digits :

a) 7777777, 111111 b) 999999, 111111

c) 888888, 100000

13. Make the largest and the smallest 7-digit numbers using the given digits. You many repeat the digits :

a) 7777777, 1111111

b) 9999999, 1111111

c) 9999999, 200000

Exercise 1.2

1. Round the following numbers to the nearest tens :

a) 532260 b) 743850

c) 2436780 d) 9758250

2. Round the following numbers to the nearest hundreds :

a) 854700 b) 976900

c) 7258500 d) 7469800

3. Round the following numbers to the nearest thousands :

a) 824000 b) 737000

c) 7521000 d) 9737000

4. Round the following numbers to the nearest ten thousands :

a) 870000 b) 250000

c) 7520000 d) 9740000

Exercise 1.3

1. Write the following numbers in the International place value chart :

	Billions			Millions			Thousands		Ones			
	Hundred Billions	Ten Billions	Billions	Hundred Millions	Ten Millions	Millions	Hundred Thousands	Ten Thousands	Thousands	Hundreds	Tens	Ones
a)						6	8	9	3	5	2	6
b)					7	1	5	2	8	6	1	0
c)					6	7	8	9	3	8	2	8
d)					1	2	3	5	6	4	9	8
e)				6	7	8	3	1	6	2	1	8
f)					1	2	0	0	9	8	1	6
g)				3	2	1	0	7	7	8	6	1
h)					2	9	5	3	8	1	0	9

2. Separate into periods according to the International system of numeration :

a) 5,123,618 b) 3,365,128

c) 81,987,619 d) 72,289,369

e) 783,693,607 f) 78,931,086

g) 41,627,913 h) 36,481,293

3. Give number names for the following numerals according to the International system of numeration :

a) Seventy one million six hundred seventy two thousand eight hundred ninety six

b) Seventy six million one hundred eighty nine thousand three hundred sixty nine

c) Sixty seven million six hundred ninety three thousand one hundred sixty nine

d) One hundred twenty three million four hundred fifty six thousand seven hundred eighty nine

e) Seventy million five hundred sixty one thousand eight hundred seventy six

f) Seventy nine million one hundred two thousand nine hundred thirty four

g) Five hundred seventy five million eight hundred twelve thousand nine hundred thirty

h) Two hundred seventy million fifty six thousand seventy five.

4. Write the following numbers in figures :

a) 56000000 b) 25002305

c) 5002036 d) 62000205

e) 23036506

Exercise-1.4

1. Write the following in Roman numerals :

a) LV b) XLIII c) LXVII

d) LXXIX e) LXXXVII f) XCVI

g) XCIX h) C

2. Write the following in Hindu-Arabic numerals :

a) 42 b) 29 c) 91

d) 43 e) 77 f) 88

g) 49 h) 92

3. Compare the following using '<', '>' or '=' in boxes :

a) < b) > c) < d) >

Chapter - 2 Fundamental Operations

Exercise 2.1

1. Add the following :

a) 573693 b) 132953 c) 7172698
d) 281539 e) 284832 f) 107960

2. Subtract the following questions and check :

a) 31398 b) 4807 c) 13223
d) 11254 e) 150266 f) 18108

Exercise 2.2

Simplify the following expressions :

1. 35128612 – 12362169 + 12365182
   22766443 + 12365182 = 35131625
2. 75238389 + 21236123 – 61238125
   96474512 – 61238125 = 35236387
3. 67812389 – 1266121 + 21238161
   55186268 + 21238161 = 76424429
4. 98351239 – 12361211 – 23612381
   85990028 – 23612381 = 62377647
5. 66123816 + 100023 – 61035216
   66223839 – 61035216 = 5188623
6. 77835238 + 16673218 – 61238816 – 1612386
   94508456 – 61238816 – 1612386
   33269640 – 1612386 = 31657254
7. 98326168 – 1283526 + 77665522 – 70636
   97042642 + 77665522 – 70636
   174708164 – 70636 = 174637528

Exercise 2.3

1. The sum of two numbers is 6,78,39,616. One of them is 3,87,83,619. Find the other number.

Sum of numbers = 67839616
One number = 38783619
Other number = 67839616 – 38783619
= 29055997

2. John owed ₹ 1,68,38,976 to Prem in the beginning of the year. He repaid ₹ 35,76,287 by the end of the year. How much amount has he still to pay to Prem?

Total amount owed by John = 16838976
Amount repaid by John = 3576287
The total amount still to pay
= 16838976 – 3576287
= ₹ 13262689

3. How much more is 6,51,79,876 than 3,12,67,619?

65179876 – 31267619 = 33912257
then, 65179876 is 33912257 more than 31267619.

4. Add the difference of 6,78,93,651 and 5,23,61,819 from 1,68,93,775.

= 67893651 – 52361819 + 16893775
= 15531832 + 10893775
= 32425607

5. Subtract the sum of 6,75,52,615 and 1,65,38,969 from 9,98,86,677.

The sum of 67552615 and 16538969
= 67552615 + 16538969
= 84091584
Then we have to subtract 84091584 from 99886677
= 99886677 – 84091564
= 15795093

6. A businessman spent ₹ 7,35,61,610 for purchasing land to set up a factory. He spent ₹1,65,75,000 for purchasing machines and ₹1,36,57,000 for construction of the factory building. Find his total investment in the venture.

Amount for purchasing land to set up a factory
= 73561610
Amount for purchasing machine = 16575000
Amount for construction of the factory building
= 13657000
Total amount investment in the venture
= 73561610 + 16575000 + 1365700
= 103793610

7. A stadium has a sitting capacity of 1,50,734. During a match, 1,28,195; 1,21,615; 97,438; 47,463 and 1,35,676 people respectively inside the stadium. How many people registered their attendance during the entire match ?

People respectively inside the stadium during the match = 128195 ; 121615 ; 97438 ; 47,463 and 135676
Then, total attendance during the entire match
= 128195 + 121615 + 97438 + 47463 + 135676
= 530387

8. Out of 72,39,416 fish caught on a certain day, 35,69,810 were exported and 24,31,060 were sold in the domestic market. Find the number of fish remained unsold.

Total number of fish caught = 7239416

Number of fish exported = 3569810

Number of fish sold in domestic market

= 2431060

Total number of fish sold = 3569810 + 2431060

= 6000870

Then, total number of fish remained

= 7239416 – 6000870

= 1238546

Exercise 2.4

1. Find the product :

a) 256 × 47

```
  2 5 6
  × 4 7
-------
  1 7 9 2
1 0 2 4 ×
-------
1 2 0 3 2
```

b) 58 × 92

```
    5 8
  × 9 2
-------
    1 1 6
  5 2 2 ×
-------
  5 3 3 6
```

c) 79 × 37

```
    7 9
  × 3 7
-------
    5 5 3
  2 3 7 ×
-------
  2 9 2 3
```

d) 835 × 69

```
    8 3 5
  × 6 9
-------
  7 5 1 5
5 0 1 0 ×
-------
5 7 6 1 5
```

e) 747 × 87

```
    7 4 7
  × 8 7
-------
  5 2 2 9
5 9 7 6 ×
-------
6 4 9 8 9
```

f) 720 × 52

```
    7 2 0
  × 5 2
-------
  1 4 4 0
3 6 0 0 ×
-------
3 7 4 4 0
```

g) 274 × 69

```
    2 7 4
  × 6 9
-------
  2 4 6 6
1 6 4 4 ×
-------
1 8 9 0 6
```

h) 591 × 42

```
    5 9 1
  × 4 2
-------
  1 1 8 2
2 3 6 4 ×
-------
2 4 8 2 2
```

i) 458 × 57

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

j) 337 × 72

```
    3 3 7
  × 7 2
-------
    6 7 4
2 3 5 9 ×
-------
2 4 2 6 4
```

k) 306 × 57

```
    3 0 6
  × 5 7
-------
  2 1 4 2
1 5 3 0 ×
-------
1 7 4 4 2
```

l) 275 × 63

```
    2 7 5
  × 6 3
-------
    8 2 5
1 6 5 0 ×
-------
1 7 3 2 5
```

m) 2421 × 209

```
  2 4 2 1
  × 2 0 9
---------
  2 1 7 8 9
  0 0 0 0 ×
4 8 4 2 ×
---------
5 0 5 9 8 9
```

n) 2060 × 817

```
  2 0 6 0
  × 8 1 7
---------
  1 4 4 2 0
  2 0 6 0 ×
1 6 4 8 0 ×
---------
1 6 8 3 0 2 0
```

o) 860 × 707

```
  8 6 0
  × 7 0 7
---------
  6 0 5 0
  0 0 0 0 ×
6 0 2 0 ×
---------
6 0 8 0 2 0
```

p) 9242 × 382

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

2. Multiply the following :

a) 2912 × 187

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

b) 4052 × 405

```
  4 0 5 2
  × 4 0 5
---------
  2 0 2 6 0
  0 0 0 0 ×
1 6 2 0 8 ×
---------
1 6 4 1 0 6 0
```

c) 784 × 738

```
    7 8 4
  × 7 3 8
---------
    6 2 7 2
  2 3 5 2 ×
5 4 8 8 ×
---------
5 7 8 5 9 2
```

d) 7243 × 254

```
  7 2 4 3
  × 2 5 4
---------
  2 8 9 7 2
3 6 2 1 5 ×
1 4 4 8 6 ×
---------
1 8 3 9 7 2 2
```

e) 2236 × 345

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

f) 262 × 457

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

g) 4390 × 107

```
  4 3 9 0
  × 1 0 7
---------
  3 0 7 3 0
  0 0 0 0 ×
4 3 9 0 ×
---------
4 6 9 7 3 0
```

h) 941 × 304

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

i) 286 × 296

```
    2 8 6
  × 2 9 6
---------
    1 7 1 6
  2 5 7 4 ×
5 7 2 ×
---------
8 4 6 5 6
```

j) 428 × 5413

```
  5 4 1 3
  × 4 2 8
---------
  4 3 3 0 4
1 0 8 2 6 ×
2 1 6 5 2 ×
---------
2 3 1 6 7 6 4
```

k) 193×903

$$\begin{array}{r} 193 \\ \times\ 903 \\ \hline 579 \\ 000\times \\ 1737\times \\ \hline 174279 \end{array}$$

l) 379×179

$$\begin{array}{r} 379 \\ \times\ 179 \\ \hline 3411 \\ 2653\times \\ 379\times \\ \hline 67841 \end{array}$$

Exercise 2.5

1. There are 2278 schools in a state. If average number of students in a school is 1250, find the total number of students studying in the schools of the state.

Number of schools in state = 2278

Average number of students in a school = 1250

Total number of students studying in the schools of the state = 2278×1250

$= 2847500$

Working steps

$$\begin{array}{r} 2278 \\ \times\ 1250 \\ \hline 0000 \\ 11390\times \\ 4556\times \\ 2278\times \\ \hline 2847500 \end{array}$$

2. A furniture merchant bought 3728 chairs for his showroom. If he paid ₹ 325 for each chair, what total amount was paid by the merchant for buying the chairs?

Total number of chairs = 3728

Price of each chair = 325

Total amount was paid by the merchant to buy the chairs = $3728 \times$ ₹ 325

= ₹ 1211600

Working steps

$$\begin{array}{r} 3728 \\ \times\ 325 \\ \hline 18640 \\ 7456\times \\ 11184\times \\ \hline 1211600 \end{array}$$

3. A factory of stationery products produces 7125 envelopes during a week. Find the total number of envelopes produced in 5 years (1 year has 52 weeks).

Total number of envelopes produced in a weak = 7125

Total number of envelopes produced in 5 years

1 year has 52 weeks

So, $5 \times 52 = 260$ weeks

Total number of envelopes produced

$= 7125 \times 260$

= 1852500 envelopes

Working steps

$$\begin{array}{r} 7125 \\ \times\ 260 \\ \hline 0000 \\ 42750\times \\ 14250\times \\ \hline 1852500 \end{array}$$

4. Find the product of the largest 4-digit number and the largest 3-digit number.

4 digit largest number is 9999.

3 digit largest number is 999.

$= 9999 \times 999$

$= 9989001$

So, the product of largest 4-digit number and the largest 3-digit number is 9989001.

Working steps

$$\begin{array}{r} 9999 \\ \times\ 999 \\ \hline 89991 \\ 89991\times \\ 89991\times \\ \hline 9989001 \end{array}$$

5. A factory has 375 workers. Each worker is paid ₹ 3750 as monthly salary. What total amount is to be paid to the workers as salary at the end of a month?

Number of workers in factory = 375

One worker monthly salary is = ₹ 3750

Total amount is to be paid to all worker is

$=$ ₹ 3750×375

= ₹ 1406250

Working steps

$$\begin{array}{r} 3750 \\ \times\ 375 \\ \hline 18750 \\ 26250\times \\ 11250\times \\ \hline 1406250 \end{array}$$

6. A rice godown owner purchased 21695 quintals of rice at the rate of ₹ 526 per quintal. Find the total cost of the rice purchased.

Total rice in a godown is = 21695 quintal.

One quintal rate is = ₹ 526

Total cost of the rice purchased is

$= 21695 \times$ ₹ 526

= ₹ 11411570

Working steps

$$\begin{array}{r} 21695 \\ \times\ 526 \\ \hline 130170 \\ 43390\times \\ 10847\,5\times \\ \hline 11411570 \end{array}$$

7. A factory manufactured 375 scooters during a week. If one scooter is sold for ₹ 33725. What amount of money the owner get after selling the scooters manufactured during the week?

Number of scooters in a factory is = 375

One scooter price is = ₹ 33725

Total amount of all scooter is

$=$ ₹ 33725×375

= ₹ 12646875

Working steps

$$\begin{array}{r} 33725 \\ \times\ 375 \\ \hline 168625 \\ 236075\times \\ 10117\,5\times \\ \hline 12646875 \end{array}$$

8. Find the product of the greatest 4-digit number and 333.

The greatest 4-digit number = 9999

The product = 9999 × 333

= 3329667

Working steps

```
    9 9 9 9
  × 3 3 3
-----------
  2 9 9 9 7
2 9 9 9 7 ×
2 9 9 9 7 ×
-----------
3 3 2 9 6 6 7
```

9. In a factory 2,550 bottles are manufactured in a day. How many bottles will be manufactured in the factory in a normal year if there are 65 non-working days in that year?

Number of bottles manufactured per day = 2550

Total number of bottles manufactured in a year

1 year = 365 days

In factory 65 non working days are in a year.

Total working days in factory in a year. = 365 – 65 = 300 days

Total manufactured bottles is = 2550 × 300

= 765000 bottles

```
  2 5 5 0
  × 3 0 0
-----------
  0 0 0 0
0 0 0 0 0
7 6 5 0 0 0
-----------
7 6 5 0 0 0
```

10. The average annual income of a man in a colony is ₹ 78695. There are 376 earning men in the colony. What is the total income of all earning men in the colony ?

Annual income of a man = ₹ 78695

Earning men in the colony = 376

Total income of earning men = 78695 × 376

= ₹ 29589320

Exercise 2.6

1. Divide and verify the result :

a) 87631 ÷ 371

Verify the result

Dividend = (Quotient × Divisor) + Remainder

Here, Dividend = 87631

Divisor = 371

Quotient = 236

Remainder = 75

= (236 × 371) + 75

= 87556 + 75

= 87631

Hence, result of divisor is correct.

```
      236
371 ) 87631
    – 742↓
      1343
    – 1113↓
       2301
      –2226
         75
```

b) 3780 ÷ 92

Dividend = (Quotient × Divisor) + Remainder

Here, Dividend = 3780

Divisor = 92

Quotient = 41

Remainder = 8

= (41 × 92) + 8

= 3772 + 8

= 3780

Hence, result of divison is correct.

```
      41
92 ) 3780
   – 368↓
     100
     – 92
       8
```

c) 4220 ÷ 25

Dividend = (Quotient × Divisor) + Remainder

Here, Dividend = 4220

Divisor = 25

Quotient = 168

Remainder = 20

= (168 × 25) + 20

= 4200 + 20

= 4220

Hence, result of divison is correct.

```
      168
25 ) 4220
   – 25↓
     172
     150↓
      220
     –200
       20
```

d) 4036792 ÷ 258

Dividend = (Quotient × Divisor) + Remainder

Here,

Dividend = 4036792

Divisor = 258

Quotient = 15646

Remainder = 124

= (15646 × 258) + 124

= 4036668 + 124

= 4036792

Hence, result of divison is correct.

```
        15646
258 ) 4036792
    – 258↓
      1456
      1290↓
       1667
      –1548↓
        1199
        1032↓
         1672
         1548
          124
```

e) 47348 ÷ 36

Dividend = (Quotient × Divisor) + Remainder

Here,

Dividend = 47348

Divisor = 36

Quotient = 1315

Remainder = 8

$= (1315 \times 36) + 8$

$= 47340 + 8$

$= 47348$

Hence, result of divison is correct.

$$\begin{array}{r|l} & 1315 \\ 36 & 47348 \\ -\ 36\downarrow & \\ \hline 113 & \\ 108\downarrow & \\ \hline 54 & \\ -36\downarrow & \\ \hline 188 & \\ 180 & \\ \hline 8 & \end{array}$$

f) $262907 \div 409$

Dividend

= (Quotient × Divisor) + Remainder

Here,

Dividend = 262907

Divisor = 403

Quotient = 652

Remainder = 151

$= (652 \times 403) + 151$

$= 262756 + 151$

$= 262907$

Hence, result of divison is correct.

$$\begin{array}{r|l} & 652 \\ 403 & 262907 \\ -\ 2418\downarrow & \\ \hline 2110 & \\ -\ 2015\downarrow & \\ \hline 957 & \\ -806 & \\ \hline 151 & \end{array}$$

2 a) Dividend

= (Quotient × Divisor) + Remainder

$= (24367 \times 213) + 67$

$= 5190171 + 67$

$= 5190238$

b) Dividend

= (Quotient × Divisor) + Remainder

$= (76392 \times 476) + 402$

$= 36362592 + 402$

$= 36362994$

Exercise 2.7

1. How many minutes are there in 8,60,400 seconds?

Number of seconds = 860400

1 minute = 60 seconds

So, $860400 \div 60$

$= 14340$

$$\begin{array}{r|l} & 14340 \\ 60 & 860400 \\ -\ 60\downarrow & \\ \hline 260 & \\ -240\downarrow & \\ \hline 204 & \\ -180\downarrow & \\ \hline 240 & \\ -\ 240 & \\ \hline \times\times\times & \end{array}$$

2. The cost of 125 bicycle is ₹ 1,23,125. Find the cost of one bicycle.

Number of bicycle = 125

Cost of total bicycle = ₹ 123125

Cost of one bicycle = $123125 \div 125$

= ₹ 985

Thus, the cost of one bicycle is ₹ 985.

$$\begin{array}{r|l} & 985 \\ 125 & 123125 \\ -\ 1125\downarrow & \\ \hline 1062 & \\ -1000\downarrow & \\ \hline 625 & \\ -\ 625 & \\ \hline 00 & \end{array}$$

3. The product of two numbers is 1,02,35,445. If one number is 445, find the other number.

Product of the numbers

= 10235445

One number = 445

Other number = $1023545 \div 445$

= 23001

Thus, the required number = 23001

$$\begin{array}{r|l} & 23001 \\ 445 & 10235445 \\ -\ 890\downarrow & \\ \hline 1335 & \\ -1335 & \\ \hline 445 & \\ -\ 444 & \\ \hline \times\times\times & \end{array}$$

4. The product of two numbers is 15,62,500. If one number is 625, find the other number.

Product of the numbers = 1562500

One number = 625

Other number = $1562500 \div 625$

= 2500

This the required number = 2500

$$\begin{array}{r|l} & 2500 \\ 625 & 1562500 \\ -\ 1250\downarrow & \\ \hline 01325 & \\ -\ 01325 & \\ \hline 00000 & \end{array}$$

5. What should be multiplied by 584 to get 4,91,728?

Product of the numbers = 491728

One number = 584

Multiplied number = $491728 \div 584$

= 842

Thus, the required number = 842

$$\begin{array}{r|l} & 842 \\ 584 & 491728 \\ -\ 4672\downarrow & \\ \hline 2452 & \\ -2336\downarrow & \\ \hline 1168 & \\ -1168 & \\ \hline 0000 & \end{array}$$

6. 175 toffees are to be packed in a poly-pack. How many poly-packs are required to pack 2,22,075 toffees?

Total number of toffees = 222075

Number of toffees are to be packed in a poly-pack = 175

Number of poly-packs required

$= 222075 \div 175$

$= 1269.$

Thus, 1269 poly packs are required.

$$\begin{array}{r} 1269 \\ 175 \overline{)\,222075} \\ -\,175 \\ \hline 470 \\ -\,350 \\ \hline 1207 \\ -1050 \\ \hline 1575 \\ -\,1575 \\ \hline 0000 \end{array}$$

7. Product of two numbers is 3,16,665. If one number is 155, find the other number.

Product of two numbers $= 316665$

One number $= 155$

Other number $= 316665 \div 155$

$= 2043$

Thus, the required number $= 2043$

$$\begin{array}{r} 2043 \\ 155 \overline{)\,316665} \\ -\,310 \\ \hline 666 \\ -\,620 \\ \hline 465 \\ -\,465 \\ \hline 000 \end{array}$$

8. What least number should be subtracted from 3,16,579 to make it exactly divisible by 375?

The number $= 316579$

One number $= 375$

Other number $= 316579 \div 375$

$= 844$

Thus, 79 should be subtracted to make exactly divisible.

$$\begin{array}{r} 844 \\ 155 \overline{)\,316579} \\ -\,3000 \\ \hline 1657 \\ -1500 \\ \hline 1579 \\ -1500 \\ \hline 79 \end{array}$$

9. A grain merchant paid ₹ 4,79,400 for buying a certain quantity of rice. If the rice was purchased at the rate of ₹ 1275 per quintal, how much rice did he buy?

Rate of total rice = ₹ 479400

Rate per quintal rice = ₹ 1275

Total quantity of rice

$= 479400 \div 1275$

= 376 quintal

Thus, the total quantity of rice 376 quintal

$$\begin{array}{r} 376 \\ 1275 \overline{)\,479400} \\ -\,3825 \\ \hline 9690 \\ -\,8925 \\ \hline 7650 \\ -\,7650 \\ \hline 0000 \end{array}$$

10. If 128 sticks are tied in a bundle, how many such bundles can be made out of 9,58,080 sticks?

Number of total sticks $= 958080$

Number of sticks in a bundle is $= 128$

Number of bundles can be made

$= 958080 \div 128$

= 7485 bundles

Thus, 7485 bundles can be made.

$$\begin{array}{r} 7485 \\ 128 \overline{)\,958080} \\ -\,896 \\ \hline 620 \\ -\,512 \\ \hline 1088 \\ -1024 \\ \hline 640 \\ -\,640 \\ \hline 000 \end{array}$$

Exercise 2.8

Frame word problems for the following solutions :

1. In a city, there are 276728 men, 256668 women and 578589 children. What is the total population of the city?
2. A factory produced 7835609 cricket balls during 2008. and 9638590 cricket balls during 2009. How many cricket balls did it produce, together during both the years.
3. Find the sum of the greatest 7-digit number and 7289356.
4. Find the subtraction of the greatest 8-digit number and 68325976.
5. In a country 1600880 tonnes wheat was produced during 2009 and 1900000 tonnes wheat was produced during 2010. How much wheat production was increased in 2010?
6. The sum of two numbers is 78396298. If one number is 39987675, find the other number.
7. A furniture merchant bought 1670 tables for his showroom. If he paid ₹ 750 for each table, what total amount was for each table, what total amount was paid by the merchant to buy the tables?
8. A publisher published 1735 copies of a book in a year. If one book contained 378 pages, what was the total number of pages in all the books.

Exercise 2.9

1. Evaluate the following expressions :

a) $20 \times 15 \div 5 - 20 + 5$

$= 20 \times 3 - 20 + 5$

$= 60 - 20 + 5$

$= 65 - 20 = 45$

b) $375 - 50 \times 25 \div 5 + 60$

$= 375 - 50 \times 5 + 60$

$= \quad 375 - 250 + 60$

$= \quad 435 - 250 = 185$

c) $30 + 70 \div 35 \times 5 - 10$

$= \quad 30 + 2 \times 5 - 10$

$= \quad 30 + 10 - 10$

$= \quad 40 - 10 = 30$

d) $600 + 80 \div 2 - 10 \times 8$

$= \quad 600 + 40 - 10 \times 8$

$= \quad 600 + 40 - 80$

$= \quad 640 - 80 = 560$

e) $18 \div 6 \times 20 - 20 + 120$

$= \quad 3 \times 20 - 20 + 120$

$= \quad 60 - 20 + 120$

$= \quad 180 - 20 = 160$

f) $125 - 25 \times 125 \div 25 + 25$

$= \quad 125 - 25 \times 5 + 25$

$= \quad 125 - 125 + 25$

$= \quad 150 - 125 = 25$

g) $75 \times 25 \div 25 + 5 - 25$

$= \quad 75 \times 1 + 5 - 25$

$= \quad 75 + 5 - 25$

$= \quad 80 - 25 = 55$

h) $144 \times 12 \div 12 + 12 - 12$

$= \quad 144 \times 1 + 12 - 12$

$= \quad 144 + 12 - 12$

$= \quad 156 - 12 = 144$

2. If 50 is divided by 25, and quotient is multiplied by 71, what number do we get?

Number we get

$= \quad 50 \div 25 \times 71$

$= \quad 2 \times 71 \quad = \quad 142$

3. Three cartons of chalk boxes having 120 chalk boxes in each are distributed equally in 5 wings of school. How many packets of chalk boxes does each wing get?

Total number of chalk cartons = 3

Number of chalk boxes in cartons = 120

Total wings of school = 5

Total number of packets of chalk boxes for each wing.

$= \quad (3 \times 120) \div 5$

$= \quad 360 \div 5$

$= \quad 72$ packets

4. Find the number which is one-sixth of the product of 56 and 36.

The number is

$= \quad \frac{1}{6} \times (56 \times 36)$

$= \quad \frac{1}{6} \times 2016$

$= \quad 336$

5. A number when divided by 216, we get 31 as quotient and 65 as remainder. Find the number.

The number is

$= \quad 216 \times 31 + 65$

$= \quad 6696 + 65 \quad = \quad 6761$

6. If 965 is multiplied by 27 and the product is divided by 45 and the difference of 61 and 35 is added to the quotient. Find the number obtained.

The number obtained

$= \quad (965 \times 27) \div 45 + (61 - 35)$

$= \quad 26055 \div 45 + 26$

$= \quad 579 + 26 \quad = \quad 605$

7. How many minutes are left if from one-fifth part of a year, sum of 65 minutes and 85 minutes is subtracted?

1 year = 525600

minutes one left

$= \quad 5 \div 525600 - (65 + 85)$

$= \quad 105120 - 150$

$= \quad 104970$ minutes

Chapter - 3 Factors and multiples

Exercise 3.1

1. a) 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80

b) 8, 16, 24, 32, 40, 48, 56, 64

c) 52, 65, 78

d) 41, 43, 45, 47, 49, 51, 53, 55, 57, 59

e) 23, 29, 31, 37

2. Write 'P' for prime and 'C' for composite numbers :

a) P b) C c) C d) P

e) C f) C g) C h) C

i) Neither prime nor composite

j) C k) C l) P

3. Find out the following numbers are divisible by 2,3,5 and 10 :

b and e

4. Test whether the following are divisible by 6 :

a, d and e

5. Test if the following numbers are divisible by 4 and 8.

a, b, e, f

6. Test which of the following are divisible by 9:

c,d

7. Test which of the following numbers are divisible by 11 :

a, e, f

8. Which of the following numbers are divisible by 12?

a, b, e

9. Which of the following numbers are divisible by 15?

a, b, d, e

10. Replace * by the smallest whole number to make the following divisible by 11 :

a) 0 b) 8 c) 1 d) 6

11. a) 100 b) 9999 c) 102

Exercise 3.2

1. Find all the prime factors for the following numbers :

a) 100

2	100
2	50
5	25
	5

Thus, prime factors of 100 is $2 \times 2 \times 5 \times 5$

b) 1600

2	1600
2	800
2	400
2	200
2	100
2	50
5	25
	5

Thus, prime factors of 1600 is $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 5 \times 5$

c) 2500

2	2500
2	1250
5	625
5	125
5	25
	5

Thus, prime factors of 2500 is $2 \times 2 \times 5 \times 5 \times 5 \times 5$

d) 30000

2	30000
2	15000
2	7500
2	3750
3	1875
5	625
5	125
5	25
	5

Thus, prime factors of 30000 is $2 \times 2 \times 2 \times 2 \times 3 \times 5 \times 5 \times 5 \times 5$

e) 61225

5	61225
5	12245
	2449

Thus, prime factors of 61225 is $5 \times 5 \times 2449$

f) 1728

2	1728
2	864
2	432
2	216
2	108
2	54
3	27
3	9
	3

Thus, prime factors of 1728 is $2 \times 2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$

g) 1729

7	1729
13	247
	19

Thus, prime factors of 1729 is $7 \times 13 \times 19$

h) 81000

2	81000
2	40500
2	20250
3	10125
3	3375
3	1125
3	375
5	125
5	25
	5

Thus, prime factors of 81000 is $2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 5 \times 5 \times 5$

i) 22886

2	22886
	11443

Thus, prime factors of 22886 is 2×11443

j) 315625

5	315625
5	63125
5	12625
5	2525
5	505
	101

Thus, prime factors of 315625 is $5 \times 5 \times 5 \times 5 \times 5 \times 5$

k) 826612

2	826612
2	413306
197	206653
	1049

Thus, prime factors of 826612 is $2 \times 2 \times 197 \times 1049$

l) 100000

2	100000
2	50000
2	25000
2	12500
2	6250
5	3125
5	625
5	125
5	25
	5

Thus, prime factors of 100000 is $2 \times 2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 5 \times 5 \times 5$

2. Find the quotients by factorising the dividend and the divisor (estimate your answer):

a) $2000 \div 16$

$$= \frac{\cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times 5 \times 5 \times 5}{\cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2}}$$

$$= 5 \times 5 \times 5$$

$$= 125$$

2	16
2	8
2	4
	2

2	2000
2	1000
2	500
2	250
5	125
5	25
	5

b) $8000 \div 256$

$$= \frac{\cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times 5 \times 5 \times 5}{\cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times \cancel{2} \times 2 \times 2}$$

$$= \frac{125}{4} = 31$$

2	256
2	128
2	64
2	32
2	16
2	8
2	4
	2

2	8000
2	4000
2	2000
2	1000
2	500
2	250
5	125
5	25
	5

c) $13625 \div 625$

$$= \frac{\cancel{5} \times \cancel{5} \times \cancel{5} \times 109}{\cancel{5} \times \cancel{5} \times \cancel{5} \times 5}$$

$$= \frac{109}{5} = 3.8$$

5	625
5	125
5	25
	5

5	13625
5	2725
5	545
	109

d) Do it yourself

e) Do it yourself

f) Do it yourself

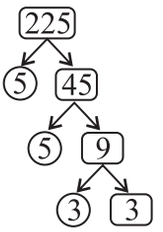
g) Do it yourself

h) Do it yourself

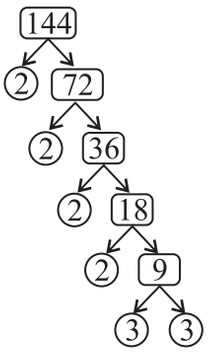
Exercise – 3.3

1. Construct the factor tree for the following numbers:

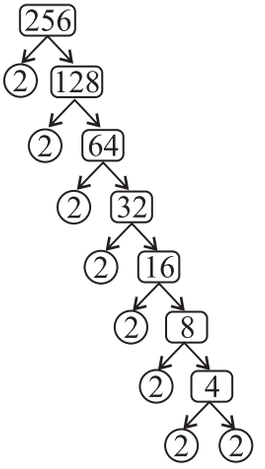
a) 225



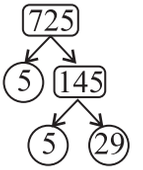
b) 144



c) 256



d) 725



2. Find prime factors of following numbers and express them in index form

a)

5	125
5	25
5	5
	1

$125 = 5 \times 5 \times 5 = 5^3$

b)

5	230
2	46
23	23
	1

$230 = 2 \times 5 \times 23$

c)

5	105
3	21
7	7
	1

$105 = 3 \times 5 \times 7$

d)

5	95
19	19
	1

$95 = 5 \times 19$

e)

2	116
2	58
29	29
	1

$116 = 2 \times 2 \times 29 = 2^2 \times 29$

f)

5	255
3	51
17	17
	1

$255 = 3 \times 5 \times 17$

g)

5	735
3	147
7	49
7	7
	1

$735 = 3 \times 5 \times 7 \times 7 = 3 \times 5 \times 7^2$

h)

5	110
2	22
11	11
	1

$110 = 2 \times 5 \times 11$

i)

5	250
5	50
5	10
2	2
	1

$250 = 2 \times 5 \times 5 \times 5 = 2 \times 5^3$

j)

5	725
5	145
29	29
	1

$725 = 5 \times 5 \times 29 = 5^2 \times 29$

k)

5	13625
5	2725
5	545
109	109
	1

l)

5	2000
5	400
5	80
2	16
2	8
2	4
2	2
	1

$13625 = 5 \times 5 \times 5 \times 109 = 5^3 \times 109$

$2000 = 2 \times 2 \times 2 \times 2 \times 5 \times 5 \times 5 = 2^4 \times 5^3$

Exercise – 3.4

1. Write the common factors of:

a) 26, 39
$26 = 2 \times 13$
$39 = 3 \times 13$
Common factor $= 13$

b) 100, 175
$100 = 2 \times 2 \times 5 \times 5$
$175 = 7 \times 5 \times 5$
Common factor $= 5 \times 5$

c) 140, 56
$140 = 2 \times 2 \times 5 \times 7$
$56 = 2 \times 2 \times 2 \times 7$
Common factor $= 2 \times 2 \times 7$

d) 200, 225
$200 = 2 \times 2 \times 2 \times 5 \times 5$
$225 = 3 \times 3 \times 5 \times 5$
Common factor $= 5 \times 5$

e) 44, 99
$44 = 2 \times 2 \times 11$
$99 = 3 \times 3 \times 11$
Common factor $= 11$

2. Find H.C.F. of following using prime factorization method:

a) 25, 175
$25 = 5 \times 5$
$175 = 7 \times 5 \times 5$
H.C.F. $= 5 \times 5$
$= 25$

b) 16, 80
$16 = 2 \times 2 \times 2 \times 2$
$80 = 2 \times 2 \times 2 \times 2 \times 5$
H.C.F. $= 2 \times 2 \times 2 \times 2$
$= 16$

c) 100, 500
$100 = 2 \times 2 \times 5 \times 5$
$500 = 2 \times 2 \times 5 \times 5 \times 5$
H.C.F. $= 2 \times 2 \times 5 \times 5$
$= 100$

d) 150, 750
$150 = 2 \times 3 \times 5 \times 5$
$750 = 2 \times 3 \times 5 \times 5 \times 5$
H.C.F. $= 2 \times 3 \times 5 \times 5$
$= 150$

e) 33, 660
$33 = 3 \times 11$
$660 = 2 \times 2 \times 3 \times 5 \times 11$
H.C.F. $= 3 \times 11$
$= 33$

f) 150, 225
$150 = 2 \times 3 \times 5 \times 5$
$225 = 3 \times 3 \times 5 \times 5$
H.C.F. $= 3 \times 5 \times 5$
$= 75$

g) 210, 525
$210 = 2 \times 3 \times 5 \times 7$
$525 = 5 \times 5 \times 3 \times 7$
H.C.F. $= 3 \times 5 \times 7$
$= 105$

h) 85, 240
$85 = 5 \times 17$
$240 = 2 \times 2 \times 2 \times 2 \times 3 \times 5$
H.C.F. $= 5$
$= 5$

i) 144, 132 & 120
$144 = 2 \times 2 \times 2 \times 2 \times 3 \times 3$
$132 = 2 \times 2 \times 3 \times 11$
$120 = 2 \times 2 \times 2 \times 3 \times 5$
H.C.F. $= 2 \times 2 \times 3$
$= 12$

3. Find H.C.F. by long division method:

a) 11, 13

$$\begin{array}{r} 1 \\ 11\overline{)\,13} \\ -\,11 \\ \hline 2\overline{)\,11\,(5} \\ -\,10 \\ \hline 1\overline{)\,2\;\;(2} \\ 2 \\ \hline 0 \end{array}$$

H.C.F. of 11, 13 = 1

b) 17, 19

$$\begin{array}{r} 1 \\ 17\overline{)\,19} \\ -\,17 \\ \hline 2\overline{)\,17\,(8} \\ -\,16 \\ \hline 1\overline{)\,2\;\;(2} \\ -\,2 \\ \hline 0 \end{array}$$

H.C.F. of 17, 19 = 1

c) 27, 31

$$\begin{array}{r} 1 \\ 27\overline{)\,31} \\ -\,27 \\ \hline 4\overline{)\,27\,(6} \\ -\,24 \\ \hline 3\overline{)\,4\;\;(1} \\ -3 \\ \hline 1\overline{)\,3\,(3} \\ -3 \\ \hline 0 \end{array}$$

H.C.F. of 27, 31 = 1

d) 55, 51

$$\begin{array}{r} 1 \\ 51\overline{)\,55} \\ -\,51 \\ \hline 4\overline{)\,51\,(12} \\ -\,48 \\ \hline 3\overline{)\,4\;\;(1} \\ -3 \\ \hline 1\overline{)\,3\;\;(3} \\ -3 \\ \hline 0 \end{array}$$

H.C.F. of 55, 51 = 1

e) 161, 171

$$\begin{array}{r} 1 \\ 161\overline{)\,171} \\ -\,161 \\ \hline 10\overline{)\,161\,(16} \\ -\,160 \\ \hline 1\overline{)\,10\;\;(10} \\ -\,10 \\ \hline 0 \end{array}$$

H.C.F. of 161, 171 = 1

f) 140, 350

$$\begin{array}{r} 2 \\ 140\overline{)\,350} \\ -\,280 \\ \hline 70\overline{)\,140\,(2} \\ -\,140 \\ \hline 0 \end{array}$$

H.C.F. of 140, 350 = 70

g) 121, 132

$$\begin{array}{r} 1 \\ 121\overline{)\,132} \\ -\,121 \\ \hline 11\overline{)\,121\,(11} \\ -\,121 \\ \hline 0 \end{array}$$

H.C.F. of 121, 132 = 11

h) 288, 216

$$\begin{array}{r} 1 \\ 216\overline{)\,288} \\ -\,216 \\ \hline 72\overline{)\,216\,(3} \\ -\,216 \\ \hline 0 \end{array}$$

H.C.F. of 288, 216 = 72

i) 900, 1125, 1350

$$\begin{array}{r} 1 \\ 900\overline{)\,1125} \\ -\,900 \\ \hline 225\overline{)\,900\,(4} \\ -\,900 \\ \hline 0 \end{array}$$

H.C.F. of 900 and 1125 = 225

Now let's find H.C.F. of 225 and 1350

$$\begin{array}{r} 225\overline{)\,1350\,(6} \\ -\,1350 \\ \hline 0 \end{array}$$

So, H.C.F. of 900, 1125 & 1350 = 225

Exercise – 3.5

1. Find L.C.M. of following numbers:

a) 50, 65

5	50, 65
5	10, 13
2	2, 13
13	1, 13
	1, 1

LCM of 50, 65 = $2 \times 5 \times 5 \times 13 = 650$

b) 48, 80, 96

2	48, 80, 96
2	24, 40, 48
2	12, 20, 24
2	6, 10, 12
2	3, 5, 6
3	3, 5, 3
5	1, 5, 1
	1, 1, 1

LCM of 48, 80, 96 = $2 \times 2 \times 2 \times 2 \times 2 \times 3 \times 5 = 480$

c) 60, 72, 90, 108

2	60, 72, 90, 108
2	30, 36, 45, 54
2	15, 18, 45, 27
3	15, 9, 45, 27
3	5, 3, 15, 9
3	5, 1, 5, 3
5	5, 1, 5, 1
	1, 1, 1, 1

LCM of 60, 72, 90, 108
$= 2 \times 2 \times 2 \times 3 \times 3 \times 3 \times 5 = 1080$

d) 18, 27, 36, 63

2	18, 27, 36, 63
2	9, 27, 18, 63
3	9, 27, 9, 63
3	3, 9, 3, 21
3	1, 3, 1, 7
7	1, 1, 1, 7
	1, 1, 1, 1

LCM of 18, 27, 36, 63
$= 2 \times 2 \times 3 \times 3 \times 3 \times 7 = 756$

e) 75, 125, 375

5	75, 125, 375
5	15, 25, 75
5	3, 5, 15
3	3, 1, 3
	1, 1, 1

LCM of 75, 125, 375
$= 3 \times 5 \times 5 \times 5 = 375$

f) 100, 125, 600

5	100, 125, 600
5	20, 25, 120
5	4, 5, 24
2	4, 1, 24
2	2, 1, 12
2	1, 1, 6
3	1, 1, 3
	1, 1, 1

LCM of 100, 125, 600
$= 2 \times 2 \times 2 \times 3 \times 5 \times 5 \times 5 = 3000$

g) 715, 810, 100

5	715, 810, 100
5	143, 162, 20
2	143, 162, 4
2	143, 81, 2
3	143, 81, 1
3	143, 27, 1
3	143, 9, 1
3	143, 3, 1
143	143, 1, 1
	1, 1, 1

LCM of 715, 810, 100
$= 2 \times 2 \times 3 \times 3 \times 3 \times 3 \times 5 \times 5 \times 143 = 1158300$

h) 130, 650, 920

2	130, 650, 920
2	65, 325, 460
2	65, 325, 230
5	65, 325, 115
5	13, 65, 23
13	13, 13, 23
23	1, 1, 23
	1, 1, 1

LCM of 130, 650, 920
$= 2 \times 2 \times 2 \times 5 \times 5 \times 13 \times 23 = 59800$

i) 20, 30, 40

2	20, 30, 40
2	10, 15, 20
2	5, 15, 10
5	5, 15, 5
3	1, 3, 1
	1, 1, 1

LCM of 20, 30, 40 $= 2 \times 2 \times 2 \times 3 \times 5 = 120$

2. Find H.C.F. and L.C.M. of numbers and verify whether their product is equal to product of numbers:

a) 75, 125

LCM : $75 = 3 \times 5 \times 5$

$125 = 5 \times 5 \times 5$

LCM = 375 $[3 \times 5 \times 5 \times 5]$

HCF : $25 = (5 \times 5]$

Product of LCM & HCF $= 25 \times 375 = 9375$

Product of Numbers $= 75 \times 125 = 9375$

So, Product of LCM & HCF = Product of Numbers

b) 108, 144

LCM : 108 = $2 \times 2 \times 3 \times 3 \times 3$

144 = $2 \times 2 \times 2 \times 2 \times 3 \times 3$

LCM = 432 [$2 \times 2 \times 2 \times 2 \times 3 \times 3 \times 3$]

HCF : 36 = [$2 \times 2 \times 3 \times 3$]

Product of LCM & HCF = 36×432

= 15,552

Product Numbers = 108×144

= 15,552

So, Product of LCM & HCF = Product of Numbers

c) 110, 1331

LCM : 110 = $2 \times 5 \times 11$

1331 = $11 \times 11 \times 11$

LCM = 13310 [$2 \times 5 \times 11 \times 11 \times 11$]

HCF : 11

Product of LCM & HCF = $11 \times 13{,}310$

= 146410

Product of Numbers = 110×1331

= 146410

So, Product of LCM & HCF = Product of Numbers

d) 510, 190

LCM : 510 = $2 \times 3 \times 5 \times 17$

190 = $2 \times 5 \times 19$

LCM = 9690 [$2 \times 3 \times 5 \times 17 \times 19$]

HCF : 10 = [2×5]

Product of LCM & HCF = 9690×10

= 96900

Product of Numbers = 510×190

= 96900

So, Product of LCM & HCF = Product of Numbers

e) 750, 165

LCM : 750 = $2 \times 3 \times 5 \times 5 \times 5$

165 = $5 \times 3 \times 11$

LCM = 8250 [$2 \times 3 \times 5 \times 5 \times 5 \times 11$]

HCF : 15 = [3×5]

Product of LCM & HCF = 15×8250

= 123750

Product Numbers = 750×165

= 123750

So, Product of LCM & HCF = Product of Numbers

f) 777, 888

LCM : 777 = 7×111

888 = $2 \times 2 \times 2 \times 111$

LCM = 6216 [$2 \times 2 \times 2 \times 7 \times 111$]

HCF : 111

Product of LCM & HCF = 111×6216

= 689976

Product of Numbers = 777×888

= 689976

So, Product of LCM & HCF = Product of Numbers

g) 16, 24

LCM : 16 = $2 \times 2 \times 2 \times 2$

24 = $2 \times 2 \times 2 \times 3$

LCM = 48 [$2 \times 2 \times 2 \times 2 \times 3$]

HCF : 8 = [$2 \times 2 \times 2$]

Product of LCM & HCF = 8×48

= 384

Product of Numbers = 16×24

= 438

So, Product of LCM & HCF = Product of Numbers

h) 44, 55

LCM : 44 = $2 \times 2 \times 11$

55 = 5×11

LCM = 220 [$2 \times 2 \times 5 \times 11$]

HCF : 11

Product of LCM & HCF = 11×220

= 2420

Product of Numbers = 44×55

= 2420

So, Product of LCM & HCF = Product of Numbers

i) 25, 50

LCM : 25 = 5×5

50 = $2 \times 5 \times 5$

LCM = 50 [$2 \times 5 \times 5$]

HCF : 25 = [5×5]

Product of LCM & HCF = 25×50

= 1250

j) Product of Numbers = 25×50

= 1250

So, Product of LCM & HCF = Product of Numbers

j) 15, 45

LCM : 15 = 3×5

45 = 3 × 3 × 5

LCM = 45 [3 × 3 × 5]

HCF : 15 = (3 × 5]

Product of LCM & HCF = 15 × 45

= 675

Product of Numbers = 15 × 45

= 675

So, Product of LCM & HCF = Product of Numbers

k) 30, 45

LCM : 30 = 2 × 3 × 5

45 = 3 × 3 × 5

LCM = 90 [2 × 3 × 3 × 5]

HCF : 15 = (3 × 5]

Product of LCM & HCF = 15 × 90

= 1350

Product Numbers = 30 × 45

= 1350

So, Product of LCM & HCF = Product of Numbers

l) 39, 156

LCM : 39 = 3 × 13

156 = 2 × 2 × 3 × 13

LCM = 156 [2 × 2 × 3 × 13]

HCF : 39 = (3 × 13]

Product of LCM & HCF = 39 × 156

= 6084

Product Numbers = 39 × 156

= 6084

So, Product of LCM & HCF = Product of Numbers

Exercise – 3.6

1. Three bells toll at interval of 9, 12, 15 minutes respectively. If they start tolling together, after what time will they next toll together?

LCM of 9, 12, 15 = 2 × 2 × 3 × 3 × 5 = 180 minutes = 3 hours.

So, the 3 bells will toll together after 3 hours.

3	9, 12, 15
3	3, 4, 5
2	1, 4, 5
2	1, 2, 5
5	1, 1, 5
	1, 1, 1

2. Three colour lamps glow at interval of 10, 12 and 15 seconds. After what time, all three bulbs glow together?

2	10, 12, 15
2	5, 6, 15
3	5, 3, 15
5	5, 1, 5
	1, 1, 1

LCM of 10, 12, 15 = 2 × 2 × 3 × 5

= 60 seconds = 1 minute

3. Two ropes of 18 m and 24 are to be cut into smaller pieces of equal length. What will be the maximum length of each piece?

18 = 2 × 3 × 3

24 = 2 × 2 × 2 × 3

HCF = 6 [2 × 3]

Maximum length of each piece = 6 m

4. There are 36, 48 and 60 flower pots in a nursery. These flower pots can be arranged in rows having same number of flower pots. Find out the maximum number of flower pots that can be arranged in a single row.

36 = 2 × 2 × 3 × 3

48 = 2 × 2 × 2 × 2 × 3

60 = 2 × 2 × 3 × 5

HCF = 12 [2 × 2 × 3]

Maximum number of flower pots in a single row

= 12

5. A milkman has cans of milk having capacity of 165 litres and 121 litres. Find capacity of largest container which can be used to fill both containers completely.

165 = 5 × 3 × 11

121 = 11 × 11

HCF = 11

Largest container capacity = 11 litres

6. Find smallest number which when divided by 66, 77 and 88 leaves 2 as remainder.

LCM of 66, 77, 88

= 2 × 2 × 2 × 3 × 7 × 11 = 1848

So, smallest number leaving 2 as remainder

= 1850 [1848+2]

2	66, 77, 88
2	33, 77, 44
2	33, 77, 22
3	33, 77, 11
7	11, 77, 11
11	11, 11, 11
	1, 1, 1

7. Find greatest number which divides 165, 245 and 325 leaving 5 as remainder.

$165-5 = 160 = 2\times2\times2\times2\times2\times5$

$245-5 = 240 = 2\times2\times2\times2\times3\times5$

$325-5 = 320 = 2\times2\times2\times2\times2\times2\times5$

HCF = 80 $[2\times2\times2\times2\times5]$

8. Product of two numbers is 108. If H.C.F. of the numbers is 4, find their L.C.M.

Let 2 numbers be A and B

As per question: $A\times B = 108$

HCF = 4

Formula: LCM x HCF = $A\times B$

$$LCM = \frac{A\times B}{HCF}$$

$$= \frac{108}{4}$$

LCM = 27

9. Find smallest number that can be divided by 16, 24 and 28 without leaving a remainder.

2	16, 24, 28
2	8, 12, 14
2	4, 6, 7
2	2, 3, 7
3	1, 3, 7
7	1, 1, 7
	1, 1, 1

LCM of 16, 24, 28 = $2\times2\times2\times2\times3\times7 = 336$

Smallest Number divisible by 16, 24, 28 without remainder = 336

10. L.C.M. and H.C.F. of two numbers are 54 and 9 respectively. If one of the numbers is 18, find the other number.

Let 2 numbers be A and B

As per question: A = 18

LCM = 54

HCF = 9

B = ?

Formula: LCM x HCF = $A\times B$

$$B = \frac{LCM\times HCF}{A}$$

$$= \frac{54\times9}{18}$$

Other number **B = 27**

Chapter 4 Fractions

Exercise – 4.1

1. Write 'Like' and 'Unlike' for following set of fractions:

a) Like b) Unlike

c) Unlike d) Like

2. Multiply numerator and denominator by 2 in each of these to get an equivalent fraction:

a) $\frac{5}{8}$ $\frac{5\times2}{8\times2}$ = $\frac{10}{16}$

b) $\frac{3}{12}$ $\frac{3\times2}{12\times2}$ = $\frac{6}{24}$

c) $\frac{1}{2}$ $\frac{1\times2}{2\times2}$ = $\frac{2}{4}$

d) $\frac{2}{8}$ $\frac{2\times2}{8\times2}$ = $\frac{4}{16}$

e) $\frac{3}{5}$ $\frac{3\times2}{5\times2}$ = $\frac{6}{10}$

3. Divide by a common factor to get an equivalent fraction:

a) $\frac{42}{49}$ $\frac{42\div7}{49\div7}$ = $\frac{6}{7}$

b) $\frac{15}{30}$ $\frac{15\div5}{30\div5}$ = $\frac{3}{6}$ = $\frac{1}{2}$

c) $\frac{10}{40}$ $\frac{10\div10}{40\div10}$ = $\frac{1}{4}$

d) $\frac{5}{20}$ $\frac{5\div5}{20\div5}$ = $\frac{1}{4}$

e) $\frac{16}{24}$ $\frac{16\div8}{24\div8}$ = $\frac{2}{3}$

4. Are given fraction equivalent?

a) $\frac{3}{5}, \frac{27}{45}$ = 3×45 27×5 = 3×45 = 5×27

= 135 Yes

= 135

b) $\frac{10}{42}, \frac{5}{21}$ = 10×21 5×42 = 10×21 = 42×5

= 210 Yes

= 210

c) $\frac{3}{4}, \frac{4}{3}$ = $3 \times 4 = 3 \times 3$, $4 \times 3 = 4 \times 4$

= 9 No

= 16

d) $\frac{72}{100}, \frac{18}{25}$ = $72 \times 18 = 72 \times 25$, $100 \times 25 = 100 \times 18$

= 1800 Yes

= 1800

e) $\frac{13}{17}, \frac{8}{13}$ = $13 \times 8 = 13 \times 13$, $17 \times 13 = 17 \times 8$

= 169 No

= 136

f) $\frac{6}{14}, \frac{3}{7}$ = $6 \times 3 = 6 \times 7$, $14 \times 7 = 14 \times 3$

= 42 Yes

= 42

g) $\frac{4}{7}, \frac{8}{19}$ = $4 \times 8 = 4 \times 19$, $7 \times 19 = 7 \times 8$

= 76 No

= 56

h) $\frac{3}{13}, \frac{15}{65}$ = $3 \times 15 = 3 \times 65$, $13 \times 65 = 13 \times 15$

= 195 Yes

= 195

5. Write any two equivalent fractions for each of following:

a) $\frac{7}{9} = \frac{7 \times 2}{9 \times 2} = \frac{7 \times 3}{9 \times 3}$

$= \frac{14}{18} = \frac{21}{27}$

$\therefore \frac{14}{18}, \frac{21}{27}$

b) $\frac{1}{6} = \frac{1 \times 2}{6 \times 2} = \frac{1 \times 3}{6 \times 3}$

$= \frac{2}{12} = \frac{3}{18}$

$\therefore \frac{2}{12}, \frac{3}{18}$

c) $\frac{5}{9} = \frac{5 \times 2}{9 \times 2} = \frac{5 \times 3}{9 \times 3}$

$= \frac{10}{18} = \frac{15}{27}$

$\therefore \frac{10}{18}, \frac{15}{27}$

d) $\frac{2}{11} = \frac{2 \times 2}{11 \times 2} = \frac{2 \times 3}{11 \times 3}$

$= \frac{4}{22} = \frac{6}{33}$

$\therefore \frac{4}{22}, \frac{6}{33}$

e) $\frac{1}{13} = \frac{1 \times 2}{13 \times 2} = \frac{1 \times 3}{13 \times 3}$

$= \frac{2}{26} = \frac{3}{39}$

$\therefore \frac{2}{26}, \frac{3}{39}$

Exercise – 4.2

1. Encircle fraction in its lowest term:

a) $\frac{1}{4}$ b) $\frac{1}{4}$ c) $\frac{1}{3}$ d) $\frac{1}{5}$

e) $\frac{1}{7}$ f) $\frac{1}{2}$ g) $\frac{4}{9}$ h) $\frac{3}{9} = \frac{1}{3}$

2. Reduce following fractions to their lowest terms:

a) $\frac{25}{40} = \frac{25 \div 5}{40 \div 5} = \frac{5}{8}$

b) $\frac{12}{16} = \frac{12 \div 4}{16 \div 4} = \frac{3}{4}$

c) $\frac{7}{42} = \frac{7 \div 7}{42 \div 7} = \frac{1}{6}$

d) $\frac{9}{12} = \frac{9 \div 3}{12 \div 3} = \frac{3}{4}$

e) $\frac{3}{24} = \frac{3 \div 3}{24 \div 3} = \frac{1}{8}$

f) $\frac{16}{20} = \frac{16 \div 4}{20 \div 4} = \frac{4}{5}$

g) $\frac{14}{21} = \frac{14 \div 7}{21 \div 7} = \frac{2}{3}$

h) $\frac{7}{35} = \frac{7 \div 7}{35 \div 7} = \frac{1}{5}$

i) $\frac{9}{45} = \frac{9 \div 9}{45 \div 9} = \frac{1}{5}$

j) $\frac{16}{64} = \frac{16 \div 16}{64 \div 16} = \frac{1}{4}$

k) $\frac{40}{80} = \frac{40 \div 40}{80 \div 40} = \frac{1}{2}$

l) $\frac{80}{100} = \frac{80 \div 20}{100 \div 20} = \frac{4}{5}$

3. Change following into improper fractions:

a) $1\frac{2}{3} = \frac{5}{3}$ b) $3\frac{4}{5} = \frac{19}{5}$

c) $11\frac{11}{13} = \frac{154}{13}$ d) $5\frac{19}{29} = \frac{164}{29}$

e) $4\frac{17}{23} = \frac{109}{23}$ f) $9\frac{1}{17} = \frac{154}{17}$

g) $13\frac{13}{19} = \frac{260}{19}$ h) $7\frac{6}{11} = \frac{83}{11}$

4. Change following into mixed fractions:

a) $\frac{3}{2} = 1\frac{1}{2}$ b) $\frac{11}{5} = 2\frac{1}{5}$

c) $\frac{13}{6} = 2\frac{1}{6}$ d) $\frac{17}{5} = 3\frac{2}{5}$

e) $\frac{25}{4} = 6\frac{1}{4}$ f) $\frac{37}{11} = 3\frac{4}{11}$

g) $\frac{39}{14} = 2\frac{11}{14}$ h) $\frac{35}{13} = 2\frac{9}{13}$

Exercise – 4.3

1. Arrange following in ascending order:

a) $\frac{2}{8}, \frac{1}{2}, \frac{2}{3}, \frac{5}{6}$

b) $\frac{9}{15}, \frac{9}{12}, \frac{9}{10}, \frac{9}{9}, \frac{9}{8}$

c) $\frac{6}{15}, \frac{2}{3}, \frac{9}{12}, \frac{5}{6}$

d) $\frac{1}{3}, \frac{1}{4}, \frac{8}{10}, \frac{4}{6}$

e) $\frac{1}{6}, \frac{5}{8}, \frac{8}{12}, \frac{3}{4}$

f) $\frac{3}{12}, \frac{2}{6}, \frac{5}{12}, \frac{7}{8}$

2. Arrange the following in descending order:

a) $\frac{9}{15}, \frac{5}{15}, \frac{4}{15}, \frac{3}{15}, \frac{1}{15}$

b) $\frac{5}{6}, \frac{3}{4}, \frac{1}{2}, \frac{1}{6}$

c) $\frac{10}{12}, \frac{3}{6}, \frac{4}{9}, \frac{3}{8}$

d) $\frac{8}{11}, \frac{8}{12}, \frac{8}{14}, \frac{8}{15}, \frac{8}{20}$

e) $\frac{7}{10}, \frac{3}{5}, \frac{6}{20}, \frac{4}{15}$

f) $\frac{11}{12}, \frac{7}{9}, \frac{3}{4}, \frac{2}{3}, \frac{5}{8}$

3. Compare using >, < or = sign in the following:

a) $\frac{3}{5} > \frac{3}{7}$ b) $\frac{1}{8} > \frac{1}{7}$

c) $\frac{1}{12} > \frac{1}{14}$ d) $\frac{6}{12} < \frac{7}{11}$

e) $\frac{5}{13} < \frac{5}{7}$ f) $\frac{7}{15} < \frac{7}{13}$

g) $\frac{5}{7} > \frac{5}{9}$ h) $\frac{9}{19} < \frac{7}{11}$

4. Which is greater?

a) $\frac{7}{8}$ b) $\frac{11}{5}$ c) $1\frac{7}{10}$

d) $2\frac{9}{11}$ e) $\frac{11}{24}$ f) $3\frac{13}{17}$

5. Find smaller fraction:

a) $2\frac{1}{2}$ b) $1\frac{2}{7}$ c) $3\frac{3}{5}$

d) $5\frac{4}{9}$ e) $8\frac{8}{13}$ f) $2\frac{24}{25}$

Exercise – 4.4

1. Add following:

a) $\frac{1}{2} + \frac{1}{6} = \frac{3+1}{6} = \frac{4}{6}$

b) $\frac{3}{5} + \frac{1}{4} = \frac{12+5}{20} = \frac{17}{20}$

c) $\frac{1}{6} + \frac{3}{2} = \frac{1+9}{6} = \frac{10}{6}$

d) $\frac{2}{5} + \frac{4}{10} = \frac{4+1}{10} = \frac{5}{10}$

e) $\frac{1}{8} + \frac{7}{12} = \frac{3+14}{24} = \frac{17}{24}$

f) $\frac{4}{6} + 3\frac{2}{3} = \frac{4}{6} + \frac{11}{3} = \frac{4+22}{6} = \frac{26}{6}$

g) $\frac{2}{11} + \frac{1}{22} = \frac{4+1}{22} = \frac{5}{22}$

h) $3\frac{5}{4} + 1\frac{3}{4} = \frac{17}{4} + \frac{7}{4} = \frac{17+7}{4} = \frac{24}{4}$

i) $\frac{3}{8} + \frac{9}{12} = \frac{9+18}{24} = \frac{27}{24}$

j) $\frac{1}{12} + \frac{3}{4} = \frac{1+9}{12} = \frac{10}{12}$

k) $\frac{1}{15} + \frac{4}{10} = \frac{2+12}{30} = \frac{14}{30}$

l) $\frac{5}{6} + \frac{1}{2} = \frac{5+3}{6} = \frac{8}{6}$

m) $2\frac{1}{2} + 2\frac{1}{4} = \frac{5}{2} + \frac{9}{4} = \frac{10+9}{4} = \frac{19}{4}$

n) $2\frac{1}{4} + 3\frac{4}{5} = \frac{9}{4} + \frac{19}{5} = \frac{45+76}{20} = \frac{121}{20}$

o) Do it yourself. p) Do it yourself.

2. Himanshu spent $^1/_2$ of his pocket money on books and $^1/_4$ on a new pen. What fraction of his pocket money did he spend?

Money spent on books = $\frac{1}{2}$

Money spent on pen = $\frac{1}{4}$

Total money spent = $\frac{1}{2} + \frac{1}{4}$

= $\frac{2+1}{4} = \mathbf{\frac{3}{4}}$

3. Reema walked 1/2 kilometre and jogged 5/6 of a kilometer. How far did she go in all?

Reema walked = $\frac{1}{2}$ km

Reema jogged = $\frac{5}{6}$ km

Total distance = $\frac{1}{2} + \frac{5}{6} = \frac{3+5}{6} = \mathbf{\frac{8}{6}}$ **km**

4. A boy took 3 jumps. 1st first jump was 3/7 m long, 2nd jump was 3/5 m long and 3rd jump was 7/10 m long. How far did boy jump in all?

1st Jump = $\frac{3}{7}$ m

2nd Jump = $\frac{3}{5}$ m

3rd Jump = $\frac{7}{10}$ m

Total distance = $\frac{3}{7} + \frac{3}{5} + \frac{7}{10} = \frac{30+42+49}{70}$

= $\mathbf{\frac{121}{70}}$ **m**

5. The painter used $2\frac{4}{5}$ *l* of white paint and $3\frac{7}{10}$ *l* f blue paint. How much paint did he use in all?

White paint used = $2\frac{4}{5}$ *l*

Blue paint used = $3\frac{7}{10}$ *l*

Total paint used = $2\frac{4}{5} + 3\frac{7}{10}$ *l*

= $\frac{14}{5} + \frac{37}{10} = \frac{28+37}{10}$

= $\mathbf{\frac{65}{10}}$ ***l***

Exercise – 4.5

1. Subtract following:

a) $\frac{4}{6} - \frac{1}{2} = \frac{4-3}{6} = \frac{1}{6}$

b) $\frac{1}{2} - \frac{1}{5} = \frac{5-2}{10} = \frac{3}{10}$

c) $\frac{4}{6} - \frac{3}{5} = \frac{20-18}{30} = \frac{2}{30}$

d) $\frac{9}{10} - \frac{5}{10} = \frac{9-5}{10} = \frac{4}{10}$

e) $\frac{5}{6} - \frac{5}{12} = \frac{10-5}{12} = \frac{5}{12}$

f) $9 - \frac{3}{4} = \frac{36-3}{4} = \frac{33}{4}$

g) $\frac{9}{6} - \frac{1}{3} = \frac{9-2}{6} = \frac{7}{6}$

h) $9 - \frac{1}{4} = \frac{36-1}{4} = \frac{35}{4}$

i) $3\frac{2}{3} - 1\frac{1}{4} = \frac{11}{3} - \frac{5}{4} = \frac{44-15}{12}$

= $\frac{29}{12}$

j) $\frac{11}{12} - \frac{1}{4} = \frac{11-3}{12} = \frac{8}{12}$

k) $9 - 1\frac{1}{2} = 9 - \frac{3}{2} = \frac{18-3}{2} = \frac{15}{2}$

l) $\frac{4}{8} - \frac{1}{3} = \frac{12-8}{24} = \frac{4}{24}$

m) $\frac{9}{10} - \frac{1}{2} = \frac{9-5}{10} = \frac{4}{10}$

n) $5 - \frac{1}{2} = \frac{10-1}{2} = \frac{9}{2}$

o) Do it yourself. p) Do it yourself.

2. A recipe needs 2/4 cup of milk and ¼ cup of cream. How much more milk than cream is required?

Milk needed = $\frac{2}{4}$ cup

Cream needed = $\frac{1}{4}$ cup

More milk needed = $\frac{2}{4} - \frac{1}{4} = \frac{2-1}{4}$

= **$\frac{1}{4}$ cup**

3. Radha bought 3 litres of milk in the morning. There was 2 ½ litres of milk in the evening. How much milk was used?

Qty. of milk in morning = 3 *l*

Milk left in evening = $2\frac{1}{2}$ *l*

Milk used = $3 - 2\frac{1}{2} = 3 - \frac{5}{2}$

= $\frac{6-5}{2}$ *l* = **$\frac{1}{2}$** ***litre***

Exercise – 4.6

Multiply following:

1. $9 \times \frac{3}{4} = \frac{27}{4}$

2. $\frac{5}{7} \times 1 = \frac{5}{7}$

3. $\frac{2}{7} \times 0 = 0$

4. $\frac{1}{4} \times \frac{3}{4} = \frac{3}{16}$

5. $9 \times \frac{4}{5} = \frac{36}{5}$

6. $12 \times \frac{9}{20} = \frac{108}{20} = \frac{27}{5}$

7. $9 \times \frac{8}{27} = \frac{72}{27} = \frac{8}{3}$

8. $5 \times \frac{3}{9} = \frac{15}{9} = \frac{5}{3}$

9. $\frac{4}{5} \times \frac{7}{12} = \frac{28}{60} = \frac{7}{15}$

10. $6 \times \frac{3}{12} = \frac{18}{12} = \frac{3}{2}$

11. $30 \times \frac{1}{30} = \frac{30}{30} = 1$

12. $5 \times \frac{7}{13} = \frac{35}{13}$

13. $7 \times \frac{0}{3} = 0$

14. $3 \times \frac{1}{9} = \frac{3}{9} = \frac{1}{3}$

15. $1 \times \frac{8}{4} = \frac{8}{4} = 2$

16. $\frac{8}{16} \times 1 = \frac{8}{16} = \frac{1}{2}$

17. $\frac{2}{5} \times \frac{2}{9} = \frac{4}{45}$

18. $\frac{5}{11} \times \frac{1}{5} = \frac{5}{55} = \frac{1}{11}$

19. $9\frac{2}{3} \times \frac{12}{29} = \frac{29}{3} \times \frac{12}{29} = \frac{12}{3} = 4$

20. $5\frac{1}{12} \times 0 = 0$

21. $3\frac{2}{5} \times \frac{1}{11} = \frac{17}{5} \times \frac{1}{11} = \frac{17}{55}$

22. $5\frac{5}{6} \times 15 = \frac{35}{6} \times 15 = \frac{35}{2} \times 5$

$= \frac{175}{2}$

23. $6\frac{1}{4} \times \frac{1}{4} = \frac{25}{4} \times \frac{1}{4} = \frac{25}{16}$

24. $7\frac{1}{5} \times 25 = \frac{36}{5} \times 25 = 36 \times 5 = 180$

25. $5\frac{1}{7} \times 35 = \frac{36}{7} \times 35 = 36 \times 5 = 180$

26. $6\frac{4}{5} \times 1\frac{1}{12} = \frac{34}{5} \times \frac{13}{12} = \frac{17}{5} \times \frac{13}{6} = \frac{221}{30}$

Exercise – 4.7

1. Divide following:

a) $\frac{5}{9} \div \frac{1}{2} = \frac{5 \times 2}{9 \times 1} = \frac{10}{9}$

b) $\frac{3}{4} \div \frac{4}{5} = \frac{3 \times 5}{4 \times 4} = \frac{15}{16}$

c) $\frac{3}{16} \div \frac{4}{5} = \frac{3 \times 5}{16 \times 4} = \frac{15}{64}$

d) $\frac{1}{3} \div \frac{3}{8} = \frac{1 \times 8}{3 \times 3} = \frac{8}{9}$

e) $0 \div \frac{1}{7} = 0$

f) $\frac{3}{4} \div \frac{3}{4} = \frac{3 \times 4}{4 \times 3}$

$= \frac{12}{12} = 1$

g) $9\frac{1}{6} \div 3 = \frac{55}{6} \div 3$

$= \frac{55}{6 \times 3} = \frac{55}{18}$

h) $11\frac{1}{2} \div 5 = \frac{23}{2} \div 5$

$= \frac{23}{2 \times 5} = \frac{23}{10}$

i) $9\frac{1}{9} \div 41 = \frac{82}{9} \div 41$

$= \frac{82}{9 \times 41} = \frac{2}{9}$

j) $\frac{2}{5} \div \frac{1}{5} = \frac{2 \times 5}{5 \times 1}$

$= \frac{10}{5} = 2$

k) $\frac{1}{2} \div 1 = \frac{1}{2 \times 1} = \frac{1}{2}$

l) $\frac{4}{5} \div 10 = \frac{4}{5 \times 10}$

$= \frac{4}{50} = \frac{2}{25}$

m) $\frac{1}{4} \div 9 = \frac{1}{4 \times 9} = \frac{1}{36}$

n) $2\frac{1}{9} \div \frac{1}{9} = \frac{19}{9} \div \frac{1}{9} = \frac{19 \times 9}{9 \times 1}$

$= \frac{171}{9} = 19$

o) Do it yourself. p) Do it yourself.

2. Pooja has 5/6 kilogram of sweets. She wants to distribute them equally among 5 of her friends. How much of sweets will each of her friend get?

Qty. of sweets = $\frac{5}{6}$ kg

No. of friends = 5

Each friend will get = $\frac{5}{6} \div 5 = \frac{5}{6 \times 5}$

$= \frac{5}{30} = \mathbf{\frac{1}{6}\ kg}$

3. How many pieces of length of $3\frac{4}{5}$ metre can be cut from a roll of cloth of length 37 metres?

Total length = 37 m

1 piece length = $3\frac{4}{5}$ m = $\frac{19}{5}$ m

No. of pieces = $37 \div \frac{19}{5} = \frac{37 \times 5}{19}$

$= \frac{185}{19} = 9.74$

= **10** pieces (approx.)

4. Mona has a ribbon 24 m long. She cuts it into several pieces. If every piece is 4/5 m long, how many pieces were cut from the ribbon?

Ribbon length = 24 m

1 piece length = $\frac{4}{5}$ m

No. of pieces = $24 \div \frac{4}{5} = \frac{24 \times 5}{4} = 30$

= **30 pcs.**

5. Cost of 5 books is Rs. $2\frac{4}{8}$. Find the cost of one book:

Cost of 5 books = Rs. $2\frac{4}{8}$ = $\frac{36}{8}$ = $\mathbf{\frac{9}{2}}$

No. of books = 5

Cost of 1 book = Rs. $\frac{9}{2} \div 5 = \frac{9}{5 \times 2} = \frac{9}{10}$

$\therefore$Cost of 1 book = **Rs. $\frac{9}{10}$**

6. When I have travelled $4\frac{1}{5}$ km, I have completed 3/7 of my journey. What is total length?

Let total length be = a km

As per question: = $\frac{21}{5}$ km = $\frac{3}{7}$ of **a**

or $\frac{21}{5}$ = $\frac{3}{7}$ x **a**

or $\frac{21}{5}$ = $\frac{3\mathbf{a}}{7}$

or $3a \times 5 = 21 \times 7$

or $a = \frac{21 \times 7}{3 \times 5}$

Total length = **a** = $\mathbf{\frac{49}{5}}$ **km**

Chapter 5 Decimals

Exercise – 5.1

1. What part is shaded? Give your answer in decimals:

a) $1+\frac{3}{100}=1+0.03=1.03$ b) $\frac{50}{100}=\frac{1}{2}=0.5$

c) & d) Do it yourself.

2. Write the following decimals in figures:

a) 0.426 b) 10431.101 c) 9266.08

d) 3000.003 e) 478.942

3. For the number 2728.307, fill the place value chart:

Th	H	T	O	Tenths	Hundredths	Thousandths
2	**7**	**2**	**8**	**3**	**0**	**7**

4. Give the next two numbers:

a) 5.5, 5.6 b) 2.71, 2.72

c) 8.623, 8.624 d) 7.008, 7.009

e) 0.005, 0.006

5. Write following decimals in words:

a) Zero point eight.

b) Zero point zero eight four.

c) Zero point zero zero eight.

d) Two point eight.

e) Twenty three point zero nine.

f) Two hundred sixty three point zero one nine.

g) Three hundred eight nine point six one three.

h) Five thousand two hundred sixteen point four zero three.

i) Two thousand two hundred nineteen point four zero nine.

6. Write following in expanded form:

a) 259.005 : $200 + 50 + 9 + \frac{5}{1000}$

b) 1335.67 : $1000 + 300 + 30 + 5 + \frac{6}{10} + \frac{7}{100}$

c) 625.250 : $600 + 20 + 5 + \frac{2}{10} + \frac{5}{100} + \frac{0}{1000}$

d) $83.403 = 80 + 3 + \frac{4}{10} + \frac{0}{00} + \frac{3}{1000}$

e) 192.295 : $100 + 90 + 2 + \frac{2}{10} + \frac{9}{100} + \frac{5}{1000}$

7. Write the following in short form:

a) 673.12 b) 895.756

c) 23.047 d) 1111.101

Exercise – 5.2

1. Do it yourself.

2. Arrange the following in ascending order:

a) 40.56, 43.621, 132.60, 470.91, 909.869, 999

b) 30.009, 70.9, 80.06, 132.9, 190.190, 340.6

c) 0.01, 2.6, 3.091, 4, 4.8, 6.30, 9.8

d) 3.864, 4.329, 6.806, 9.409, 9.643, 16.40

3. Arrange the following in descending order:

a) 11.61, 9.89, 9.3, 9.2, 8.0, 4.2

b) 19.020, 14.60, 12, 10.43, 9.8, 7.64, 3.29

c) 6.64, 6.4, 4.93, 3.29, 3.002, 2.101

d) 18.5, 18.4, 18, 12.609, 12.39, 12

4. In a quiz competition, team A secured 49.5 points and team B secured 50 points. Which

teach won the quiz?

Team A secured = 49.5 points

Team B secured = 50 points

□ 50 > 49.5

□ Team B won the quiz.

5. Mona can swim 100m in 42.1 seconds. Akshay can swim the same distance in 42.05 seconds. Who is faster?

Total distance = 100 m

Mona takes = 42.1 sec.

Akshay takes = 42.05 sec.

□ 42.1 > 42.05

□ Mona is faster.

Exercise – 5.3

1. Add the following:

a) 5.29 + 5.18 = 10.47

b) 5.20 + 0.046 = 5.246

c) 8.12 + 6.68 = 14.80

d) 24.16 + 43.09 = 67.25

e) 2.06 + 4.28 = 6.34

f) 29.46 + 17.005 = 46.465

g) 18.06 + 21.07 = 39.13

h) 24.39 + 0.008 = 24.398

i) 7.42 + 9.82 = 17.24

2. Subtract the following:

a) 5.421 − 3.631 = 1.790

b) 8.912 − 0.063 = 8.849

c) 5.78 − 2.12 = 3.66

d) 29.93 − 7.43 = 22.50

e) 23.81 − 12.009 = 11.801

f) 917.2914 − 816.0700 = 101.2214

g) 23.39 − 19.45 = 3.94

h) 428.32 − 391.67 = 36.65

i) 928.62 − 645.50 = 283.12

3. Solve the following:

a) Rs. 6.85 + 17.95 + 4.62 = Rs. 29.42

b) Rs. 290.50 − 46.80 = Rs. 243.70

c) 93.06 m + 51.29 m + 83.40 m = 227.75 m

d) 325.63 m − 249.94 m = 75.69 m

e) 91.32 kg + 93.20 kg + 74.16 kg = 258.68 kg

f) 94.29 mg − 27.60 mg = 66.69 mg

4. Solve these word problems:

a) The thickness of one book is 3.8 cm. The thickness of another is 2.03 cm. What is the thickness of the two books together when placed one on top of the other?

Thickness of 1st book : 3.80 cm

Thickness of 2nd book : + 2.03 cm

Total thickness : 3.80 + 2.03 = 5.83 cm

b) A rose plant measured 8.6 cm on Friday. It grew another 0.15 cm on Saturday. What was its height on Saturday?

Height on Friday : 8.60 cm

Height on Saturday : + 0.15 cm

Total height : 8.75 cm

Exercise – 5.4

1. Fill in the blanks:

a) 1.305 × **100** = 130.5

b) 0.01 × **10** = 0.1

c) 1.04 × **100** = 104

d) 3.21 × **10** = 32.1

e) 2.002 × **1000** = 2002

f) 15.26 × **1000** = 15260

g) 2.7 × **100** = 270

h) 0.109 × **100** = 10.9

2. Multiply the following:

a) 3.45 × 4 = 13.80

b) 8.39 × 9 = 75.51

c) 27.42 × 8 = 219.36

d) 2.236 × 8 = 17.888

e) 1.4 × 3.5 = 4.9

f) 9.9 × 0.8 = 7.92

g) 1.25 × 1.80 = 2.25

h) 2.90 × 0.08 = 0.232

i) 44.092 × 5 = 220.460

j) 3.48 × 2 = 6.96

k) 564 × 0.0 = 0

l) 0.6 × 0.7 = 0.42

3. Solve the following:

a) 0.2 × 0.3 = 0.06

b) 0.5 × 0.1 = 0.05

c) 0.04 × 0.04 = 0.0016

d) 0.06 × 0.6 = 0.036

e) 0.004 × 13 = 0.052

f) 0.4 × 0.5 = 0.20

Exercise – 5.5

1. Divide the following:

a) $9\overline{)27.54}$ = 3.06

-27

$0\ 54$

-54

0

b) $3\overline{)168.6}$ = 56.2

-15

18

-18

06

-6

0

c) $9\overline{)3.825}$ = 0.425

-36

22

-18

45

-45

0

d) $5\overline{)1.835}$ = 0.367

-15

33

-30

35

-35

0

e) $6\overline{)272.22}$ = 45.37

-24

32

-30

22

f) $5\overline{)3.295}$ = 0.659

-30

29

-25

45

-45

0

Ans: 3.06

Ans: 0.659

g) $2.4\overline{)4.8}$ = 2

-4.8

0

h) $3\overline{)17.736}$ = 5.912

-15

27

-27

03

-3

06

-6

0

i) $5\overline{)0.675}$ = 0.135

-5

17

-15

25

-25

0

2. Divide until remainder is zero:

a) $4\overline{)74}$ = 18.5

-4

34

-32

20

-20

0

f) $6\overline{)90.3}$ = 15.05

-6

30

-30

030

-30

0

b)
$$\begin{array}{r} 2.15 \\ 8\overline{)\,17.2} \\ -16 \\ \hline 12 \\ -\ 8 \\ \hline 40 \\ -\ 20 \\ \hline 0 \end{array}$$

c)
$$\begin{array}{r} 9.045 \\ 2\overline{)\,18.09} \\ -18 \\ \hline 009 \\ -\ 8 \\ \hline 10 \\ -\ 10 \\ \hline 0 \end{array}$$

d)
$$\begin{array}{r} 0.534 \\ 5\overline{)\,2.67} \\ -25 \\ \hline 17 \\ -\ 15 \\ \hline 20 \\ -\ 20 \\ \hline 0 \end{array}$$

e)
$$\begin{array}{r} 4.575 \\ 2\overline{)\,9.15} \\ -8 \\ \hline 11 \\ -10 \\ \hline 015 \\ -14 \\ \hline 10 \\ -10 \\ \hline \times \end{array}$$

3. Solve the following:

a)
$$\begin{array}{r} 0.12 \\ 25\overline{)\,30} \\ -\ 25 \\ \hline 50 \\ -\ 50 \\ \hline 0 \end{array}$$

b)
$$\begin{array}{r} 1.375 \\ 8\overline{)\,11} \\ -\ 8 \\ \hline 30 \\ -\ 24 \\ \hline 60 \\ -\ 56 \\ \hline 40 \\ -\ 40 \\ \hline 0 \end{array}$$

g)
$$\begin{array}{r} 1.5 \\ 6\overline{)\,9} \\ -6 \\ \hline 30 \\ -30 \\ \hline 0 \end{array}$$

h)
$$\begin{array}{r} 0.65 \\ 8\overline{)\,5.2} \\ -48 \\ \hline 40 \\ -\ 40 \\ \hline 0 \end{array}$$

i)
$$\begin{array}{r} 0.775 \\ 4\overline{)\,3.1} \\ -28 \\ \hline 30 \\ -\ 28 \\ \hline 20 \\ -\ 20 \\ \hline 0 \end{array}$$

f)
$$\begin{array}{r} 2.5 \\ 2\overline{)\,5} \\ -4 \\ \hline 10 \\ -\ 10 \\ \hline 0 \end{array}$$

g)
$$\begin{array}{r} 0.75 \\ 4\overline{)\,30} \\ -28 \\ \hline 20 \\ -\ 20 \\ \hline 0 \end{array}$$

c)
$$\begin{array}{r} 87.25 \\ 4\overline{)\,349} \\ -\ 32 \\ \hline 29 \\ -\ 28 \\ \hline 10 \\ -\ 8 \\ \hline 20 \\ -\ 20 \\ \hline 0 \end{array}$$

h)
$$\begin{array}{r} 0.25 \\ 4\overline{)\,10} \\ -\ 8 \\ \hline 20 \\ -\ 20 \\ \hline 0 \end{array}$$

d)
$$\begin{array}{r} 24.2 \\ 25\overline{)\,605} \\ -\ 50 \\ \hline 105 \\ -\ 100 \\ \hline 50 \\ -50 \\ \hline \times \end{array}$$

e)
$$\begin{array}{r} 0.5 \\ 2\overline{)\,10} \\ -\ 10 \\ \hline 0 \end{array}$$

i)
$$\begin{array}{r} 1.75 \\ 20\overline{)\,35} \\ -\ 20 \\ \hline 150 \\ -\ 140 \\ \hline 100 \\ -\ 100 \\ \hline 0 \end{array}$$

4. 1 kg of ghee contains 0.283 kg of fat. How much ghee will contain 1.8395 kg of fat?

0.283 kg of fat contains ghee = 1 kg

1 kg of fat contains ghee $= \frac{1}{0.283}$ kg

1.8395 kg of fat contains ghee $= \frac{1 \times 1.8395}{0.283}$

$= 6.5$ kg.

5. The area of a classroom is 70 sq. m. A student needs 2.5 sq. m area to sit comfortably. How many students can sit comfortably in this room?

Total area of classroom = 70 sq. m.

Area needed by 1 student = 2.5 sq.m.

No. of students = $70 \div 2.5$

$= 700 \div 25$

$\therefore$ No. of students = 28

$$\begin{array}{r} 28 \\ 25\overline{)\,700} \\ -\ 50 \\ \hline 200 \\ -\ 200 \\ \hline 0 \end{array}$$

6. In a quiz competition, team A scored 64.5 points

and team B scored 65 points. Which team won the quiz?

Team A scored = 64.5 points

Team B scored = 65 points

∴ 65 > 64.5

∴ Team B won the quiz.

7. A bean plant measured 8.6 cm on Friday. It grew another 1.25 cm on Saturday. What was its height on Saturday?

Height on Friday : 8.60 cm

Height on Saturday : + 1.25 cm

Total height : 9.85 cm

8. 3 kg of peanuts cost Rs. 96.50. How much will 1 kg cost?

Cost of 3 kg peanuts = Rs. 96.50

Cost of 1 kg peanuts = 96.50 ÷ 3

```
       3 2.166
=   3) 9 6. 50
     - 9
       0 6
     –  6
        0 5
          3
          2 0
        - 1 8
            2 0
          - 1 8
              2
```

∴ Cost of 1 kg peanuts

= 32.166

= Rs. 32.17

9. Mohit can swim 100 m lap in 92.1 seconds. Rohit can swim same distance in 92.04 seconds. Who is faster?

Total distance = 100 m

Mohit took = 92.1 seconds

Rohit took= 92.04 seconds

∴ 92.01 < 92.04 seconds.

∴ Mohit is faster.

Chapter 6 Lines, Planes and Angles

Exercise – 6.1

1. Name the following lines:

a) Line X b) Line AB

c) Line PQ

2. Draw the following:

a) A ———————— B

b) P ———————— Q

c) X ———————— Y

d) Do it yourself.

e) B

3. Look at the figures and name different rays:

a) Ray PM, Ray PN

b) Ray AB, Ray BA

c) Ray DE, Ray DF, Ray DG

4. Do it yourself.

Exercise – 6.2

1. Name the following angles and their parts:

Figure	Name of Angle	Vertex	Arms of Angle
(a)	∠DEF	E	DE, EF
(b)	∠ABC	B	AB, BC,
(c)	∠XYZ	Y	XY, YZ
(d)	∠XYZ	Y	XY, YZ

2. In figure given alongside, name 4 acute angles, 2 obtuse angles and 3 right angles:

Acute Angles : ∠EOC, ∠DOC, ∠COB, ∠BOA

Obtuse Angles : ∠BOF, ∠DOA

Right Angles : ∠COE, ∠COA, ∠DOB

Exercise – 6.3

1. a) 90 degree (right angle)

b) to d) Do it yourself by using protractor.

2. Fill in the blanks with acute, obtuse, right, straight or reflex angles.

a) Obtuse b) Acute

c) Right

3. a) 90 degree

b) to d) Do it yourself by using protractor.

4. Classify these angles according to the measurements:

a) Acute b) Right c) Acute

d) Straight e) Acute f) Acute

g) Obtuse h) Obtuse i) Acute

5. Look at watch and measure approximate angles of their needles:

a) 90 degree b) 180 degree

c) 120 degree d) Do it yourself by using protractor.

6. Find complementary angles of following:

a) 45° b) 35° c) 30°
d) 20° e) 50° f) 65°

7. Find supplementary angles of following:

a) 70° b) 105°
c) 50° d) 40°
e) 65° f) 95°

8. Are following angles complementary? State in Yes or No:

a) Yes b) Yes c) Yes
d) No e) Yes f) No
g) Yes h) Yes

Science : Term-1

Chapter-1 Functions of our body parts

A. Fill in the blanks :

1. Skeleton 2. Skull
3. Backbone 4. Bones
5. Cardicle

B. Give one word answer :

1. Bone 2. Joint
3. Vertebra 4. Cardioc Muscle
5. Femur

C. Name the types of joint present in these parts :

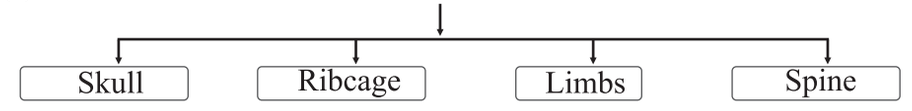
1. Pivot 2. Gliding
3. Ball and socket 4. Hinge
5. Ball and Socket 6. Hinge
7. Hinge 8. Hinge

D. Answer the following questions :

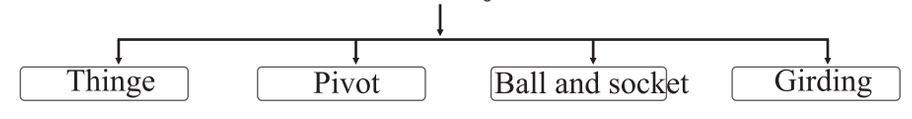
1. The functions of skeleton system is to give shape and structure to body.
2. The skull, the ribcage, the backbone and the limbs (arms and legs) are the different part of the human Skeleton system.
3. Fore limbs - Hinge joint,
   Hind limbs - ball and socket joints
4. Nerves, spinal card and brain are the main parts of the nervous system.
   (i) The brain- It works like s super Computer. It is the central. Cental of the body.
   It is divide into 3 parts. (a) Cerebrum (b) Cerebellum (c) Medulla
   (ii) Spinal card - It connects the brain with all body parts.
   (iii) Nerves - Nerves are made up of nerve cells. They are thin wires connecting everything in our body to brain. They are of three kinds.
   (i) Sensory nerves
   (ii) Motor Nerves
   (iii) Mixed nerves
5. Different kinds of muscles in human body are as follows:-
   (i) Skeletal muscles
   (ii) Smooth muscles
   (iii) Cordix muscles

Check Your PROGRESS!

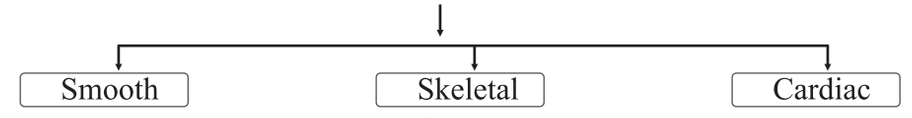
(a) **Parts of human skeleton**



(b) **Kinds of joints**



(c) **Types of muscles**



EASY to Do

A. Match the columns :

Column A	Column B
Calcium	bones
Bone marrow	jelly in bones
Nerves	carry messages
Upper jaw	immovable joint
Medulla	controls heartbeat

B. Tick (✓) the correct option :

1. (b) Skeleton
2. (a) Cartilage
3. (b) Voluntary

C. Name the joint that helps in these actions :

1. Hinge joint
2. Hinge joint
3. Hinge joint
4. Gliding joint
5. Ball and socket joint
6. gliding joint
7. Hinge joint
8. Ball and socket joint

Chapter -2 Safety Life

A. Fill in the blanks :

1. electric
2. fuel
3. antiseptic
4. animal
5. splint
6. electric

B. Give one word answer :

1. Accident
2. first aid
3. fracture
4. fire extingusher
5. splint
6. rabbies

C. Give two examples of each :

1. Petrol	Kerosene
2. Splints	Slings
3. Dogs	Cats
4. Fire	Chemical

D. Answer the following questions :

1. Petrol, kerosene, electricity, crackers and chemicals are sources of fire. The different ways to prevent it are:

   (i) Throw lots of sand or mud on the fire.

   (ii) Never throw water as petrol or kerosene is lighter than the water and will float on the surface of water and keep burning.

   (iii) If our clothes catch fire, then we should stop, drop and roll on floor until the fire is out.

   (iv) If there is fire in the building, vacate the building immediately. Use stairs instead of lift.

2. Some safety rules to be followed on road are:

   (i) Always be careful while walking along to road.

   (ii) Always walk along the footpath to the left side of the road. If there is no footpath walk along the safer side of the road.

   (iii) Use zebra crossing, subway or pedestrain overpass to cross the road.

   (iv) Do not get into a out of a moving bus or train.

3. (a) Minor burns (i) Put the burnt area immediately under cold running water for sometime. Apply antiseptic cream.

   (ii) Cover the burnt area with a piece of clean cloth for protect if from germs and dust particular insect bite:

   (b) Insect bite: (i) Wash the wound with soap and water for sometime to remove the germs.

   (ii) Bandage it with sterils gauge after applying antiseptic lotion or cream.

   (iii) Remove the sting first of insect. Put ice cube on the affected area and apply antiseptic area or lotion.

   (c) Cuts or wounds

   (i) Wash the hands properly before giving first aid dirty hands can infect the wound.

   (ii) Wash the wounds with clean running water. Apply antiseptic lotion.

   (iii) Get an anti- tetanus injection also within few hours.

4. The importance of first aid me we have already came to know that accidents happen unexpectedly. But we are wise enough to over come the situation. We can save a person's life first aid is the first help given to an injured person before the arrival of the doctor or any another help.

5. We should remember while giving first aid-

   (i) We should stay calm.

   (ii) The type and cause of injury to be

confirmed

(iii) Arrange the material needed to give first aid.

(iv) Wash your hand before giving first aid.

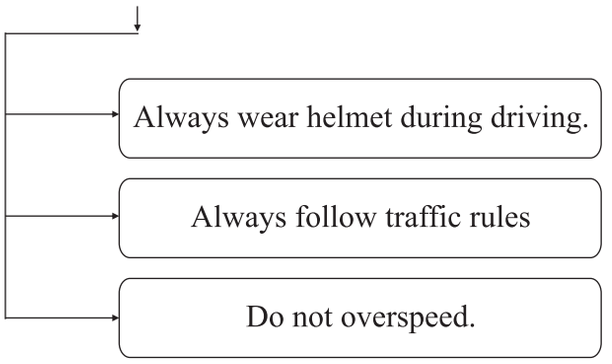
(v) Inform the doctor meanwhile

(vi) Try to sympathise the injured are.

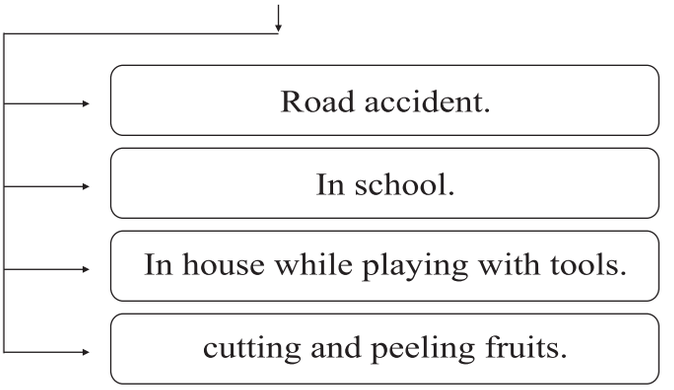
(vii) Do not try to do more them you know.

Check Your PROGRESS!

(a) Safety points to be followed to avert accidents :



(b) Situations when first aid can be given:



EASY to Do

A. Match the columns :

Column 'A'	Column 'B'
Carelessness	Accidents
Crack in bone	Fracture
Poisonous	Snake bite
Synthetic clothes	Catch fire
Electric fire	Sand

B. Tick (✓) the correct option :

1. (b) alertness
2. (b) safety rules
3. (b) baking soda
4. (b) gas leak
5. (a) swells

C. Rearrange the parts of the sentence to get a proper definition by writing the sequence in number :

1. first aid
2. is the care
3. given immediately
4. to an injured person
5. to preserve life
6. and prevent more damage
7. before the arrival of a doctor

Correct: First aid is the care given immediately to an injured person to preserve life and prevent more damage before the arrival of doctor.

Chapter-3 Plant Reproduction

A. Fill in the blanks :

1. Outer covering of /protects
2. Food store
3. Their body parts
4. Animals and explosion
5. Insecticides and Pesticides

B. Give one word answers :

1. Germination
2. Germination
3. Cross Pollination
4. Agriculture

C. Give two examples of each :

1.	Aquatic	Coastal
2.	Cotton	Hiptage
3.	Pea plants	Pods throw
4.	Sweet Potato	Carrot
5.	Potato	Hibiscus
6.	Mushroom	Ferns

D. Answer the following questions :

1. The name three things that a seeds requires for germination.
   (a) water (b) air (c) warmth
2. Plants need to scatter their seeds so that they do not grow to close to one another.
3. The special features of the seeds dandelion. Cotton, hiptage and orchid are some

examples of seeds dispersed by wind.

4. The birds eat the fruits and throw away the seeds at the other place. So animals have a great role in the dispersal of seeds.
5. Name the different stages agriculture:
   (i) Ploughing the field
   (ii) Manuring (iii) Sawing
   (iv) Irrigation (v) Spraying pesticides
   (vi) Harvesting (vii) Storage
6. The different was of dispersal of–
   (i) Seeds – Natural things, like are and water have the biggest contribution in seed dispersal.
   Animal – Animals have a great role in the dispersal of seeds the birds eat the fruit and throw away the seeds at the other places.
   Explosion – Explosion of seed pods throw them to quite a distance.
7. Harvesting when the crop is Ripe or ready. It is cut and gathered a farmer do to protect his crop.

Check Your PROGRESS!

1.	Air	Water	Warmth
2.	Wind	Water	Animals
3.	Animals	Mice	Birds
4.	Body	Used	Plants

A. Match the columns :

Column 'A'	Column 'B'
Coconut	Coast
Onion	Bulbs
Tea	Hills
Embryo	Seeds
Pollination	Flower

B. Tick (✓)the correct option :

1. (b) Plants 2. (a) Germination
3. (a) Seed coat 4. (b) Eye
5. (a) Wheat

C. Do it yourself.

Chapter-4 States of Matter

A. Fill in the blanks :

1. Atom 2. Solid
3. Fast 4. Matter
5. Space, mass

B. Give one word answer :

1. Matter 2. Contracting
3. Evaporation 4. Freezing
5. Melting 6. Condensation
7. Solution 8. Insoluble
9. Physical change 10. Chemical change

C. Define the following with examples:

1. Evaporation: The changing of liquid into its gaseous form is called evaporation. Example- During evaporation or heating of water, the particles start moving faster.
2. Condensation: The changing of a gas into a liquid is condensation. In condensation, Ex. the free moving particles of stream cool down on touching a cold surface to form water again.
3. Melting: The changing of a solid into a liquid is called melting. Ex- When ice start melting, the movement of water particles increases and they become free. They become water from the ice.
4. Freezing - The changing of a liquid into solid form is called freezing. Ex-While cooling of water, the particles of water come close to each other and pack into a solid form.

D. Answer the following questions :

1. Different between solid, Liquid, Gases

Solids	Liquid	Gases
1. Molecules are closely packed in a pattern	1. Molecules are loosely packed and make no particular pattern	1. Molecules are very loosely packed making no pattern.
2. Have fixed shape weight and volume	2. No fixed shape and volume.	2. No fixed shape and volume.
3. Space between molecules is almost negligible	3. Have larger space between the molecules	3. Have larger space between the molecules.
4. Can not be pressed easily.	4. Can be pressed.	4. Can be pressed easily.

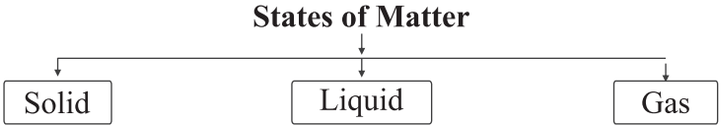
2. Evaporation, condensation, and melting.
3. Difference between physical and chemical changes.

Physical	Chemical
1. Physical change is a change in which no new substance is formed	1. A chemical change is a change in which a new substance is formed.
2. It is temporary and can be reversed.	2. It is permanent and can not be reversed.
3. The properties and composition of the substance remain the same	3. The properties and composition of the original substance change.

4. The changing of a liquid into solid form is called freezing. While cooling of water, the particles of water comes close to each other and pack into a solid form. A substance can expand, on heating and can contract on cooling.

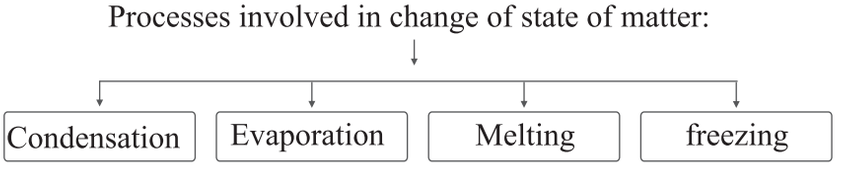
Check Your PROGRESS!

(a)



EASY to Do

(b)



A. Tick (✓) the correct option :

1. (b) solids
2. (b) atom
3. (a) gas
4. (a) physical
5. (a) heating

B. Match the columns :

Column 'A'	Column 'B'
Solid	Wood
Liquid	Lemonade
Gas	Oxygen
Solution	Juice
Physical change	Temporary change
Chemical change	Paper of ash

Chapter-5 Animals all Around

A. Fill in the blanks :

1. Tadpoles and crabs
2. Chameleon
3. shell
4. Lungs
5. Starfish

B. Give one word answer :

1. Habitat
2. Shell
3. Hibernation
4. Migration
5. Vertebrate
6. Adaptations

C. Give two examples of each :

1. Tiger	Lion
2. Whale	Crocodile
3. Fish	Tortoise
4. Earthworm	Insects
5. Bear	Pig
6. Snakes	Crocodiles
7. Penguins	Dolphins
8. Bear	Lizard
9. Siberian Cranes	Monarch butterfly
10. Chameleon	Leopard

D. Answer the following questions :

1. The surrounding where on organism lives naturally is called its habitat. The habitat provides favourable climatic conditions, availability of food and water.

2. Different type of features of animals help them to live and survive in their habitat, these features help the animals to breathe, eat, move and protect themselves. They are:
(i) Different body coverings.
(ii) Different organs for breathing
(iii) Different feeding habits
(iv) Different ways of defence

3. Body covering: The body covering of an animal helps it to survive in a particular habitat. Example scale, feathers, shell, fur, wool and hair.

4. All animals need to protect themselves from their enemies and harsh weather conditions. There are some ways that help them to defence. Some animals likes go to sleep for a long period of time in Winter. They hide themselves in burrows or underground caves. Before going for the sleep, they collect the food.

5. Difference between Insects and mammals.
Insect: Insect have six legs to move crawl, walk and hop. Their wings have no bones, feathers or strong muscles .
Mammals: Mammals breathe through lungs. The lungs have blood vessels which help in absorbing oxygen from the inhaled air. Exchange of gases take place.

6. The difference between herbivores and carnivores–

Herbivores

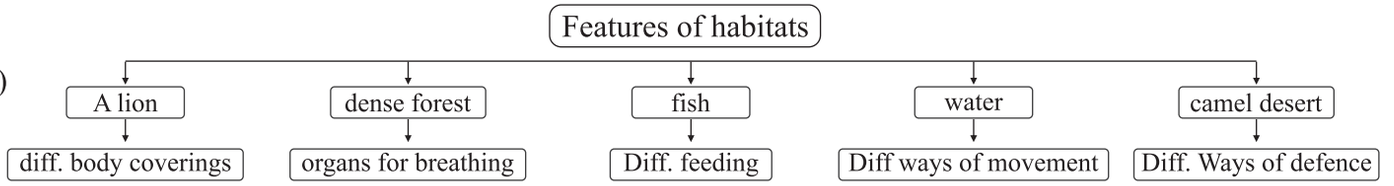
1. These animals are plant eaters.
2. They have sharp front teeth to bite and cut the food

Carnivores

1. They are the flesh eater.
2. They have sharps canines to tear the flesh.

Check Your Progress!

(a)



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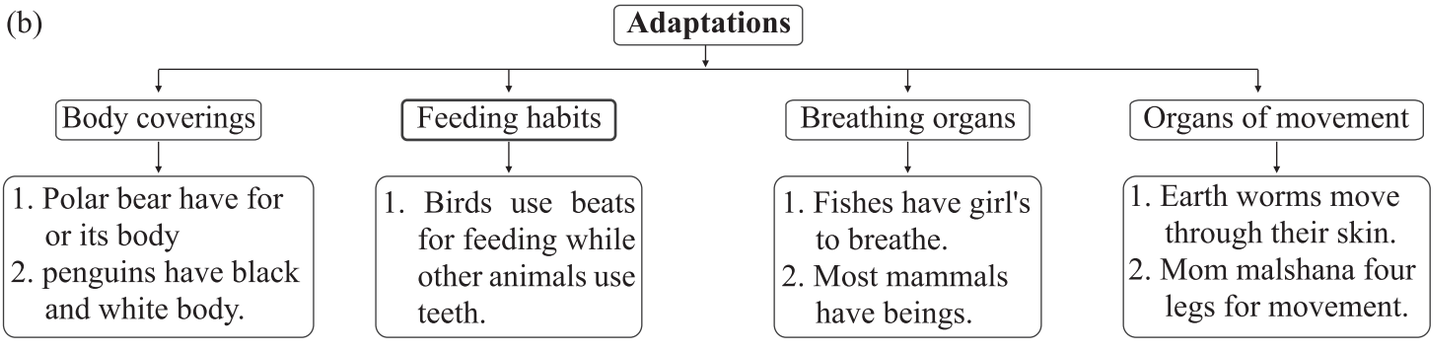


EASY to Do

A. Match the columns :

Column 'A'	**Column 'B'**
Wool and hair	Bear
Six legs	Insects
Scales	Snakes
Gills	Fishes
Sharp canines	Carnivores

B. Tick (✓) the correct option :

1. (b) Little
2. (a) Fins
3. (a) Crocodile
4. (b) Penguins
5. (a) Spiracles

Head Scratch

Do it yourself

Activity Time

Do it yourself

Chapter-6 Health and Hygiene

A. Fill in the blanks :

1. Carbohydrates
2. Calcium
3. Energy
4. Virus
5. Overweight

B. Give one word answer :

1. Proteins
2. Roughae
3. Protective Nutrients
4. Diseases
5. Bacteria
6. Vaccins

C. Give examples of each :

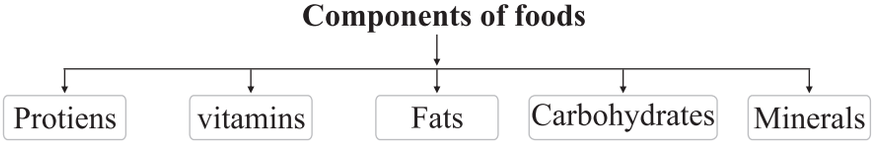
1.	Milk	Meat
2.	Lemon	Strawberry
3.	Malaria	Polio
4.	Night blind ness	Scurvy
5.	Pulses	Meat

D. Answer the following questions :

1. The five main components of food with their examples are as follows:
   (a) carbohydrates, for e.g = Sugar, starch
   (b) Fats, for e.g = oil, butter, ghee
   (c) Proteins, for e.g. = Milk, paneer, daal
   (d) Vitamins, for e.g = Tomato, Broccoli
   (e) Minerals, for e.g = Grapes, wheat.
2. Water is important in many chemical reactions in the body. It helps in maintaining body temperature. Water helps the body to get rid of wastes as urine and sweat.
3. **Communicable Disease**
   Diseases that can spread from one person to another are known as communicable disease
   For example- Malaria, Pneumonia, Typhoid, Cholera etc.
   Non-communicable diseases
   Diseases that do not spread from one person to another are known as non-communicable diseases.
   For example - Scurring Beri-Beri, Rickets, Night Blindness etc.
4. Four ways by which germs can spread are:
   (i) Air and Direct contact
   (ii) Food and water
   (iii) Mammals
   (iv) Infected equipments
5. Some preventive measures to control communicable diseases are:
   (i) clean water and food should be taken to prevent diseases.
   (ii) Spraying of kerosene oil or petrol or insecticides in drainages, ditches or stagnant water to stop breeding of insects.
   (iii) Vaccination is the use of special subtances called vaccines to prevent specific diseases and build up its own immunity.
   (iv) Sunlight kills a lot of microbes. It is a natural disinfections.

Check Your Progress!

(a)



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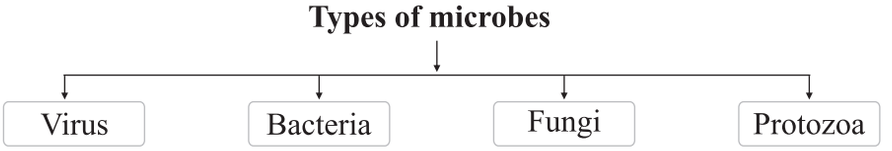

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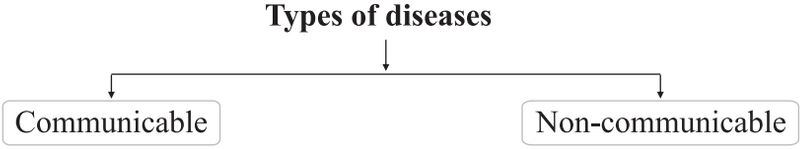

EASY to Do

A. Match the columns :

Column A	Column B
Soft bones	Calcium
Ringworms	Fungus
Common cold	Virus
Sunlight	Disinfectant
Balanced diet	Fit and healthy

B. Tick (✓) the correct option :

1. (b) fruits
2. (b) proteins
3. (b) mosquito
4. (a) obesity

C. Sort these foodstuffs in correct column :

Eggs, corn, honey, noodles, milk, mango, bread, dal, rice, oil, burger, chicken, cold drink, cheese, vegetables, butter, banana

Carbohydrates	Proteins	Fats	Junk food
bread	egg	butter	burger
mango	vegetables	cheese	noodles
rice	chicken	oil	
corn	dal	cold drink	
banana	honey	oil	

Social Studies : Term-1

Chapter-1 Globe–The Model of The Earth

A. Tick (✓) the right option:

1. a. Air and water
2. c. Ferdinand Magellan
3. c. 150 million km
4. b. Globe
5. b. Russia

B. Fill in the blanks:

1. Imaginary 2. Antarctic
3. Equator 4. North pole, south pole
5. Greenwich

C. Write 'True' or 'False':

1. F 2. T 3. T 4. T

D. Short answer questions:

1. The pacific ocean is the largest ocean.
2. The Arctic ocean is the smallest ocean.
3. A needle is fixed through its centre is a titled way.

E. Long answer questions:

1. Earth's surface is very big. We can not visit every part of it, therefore, it is very tough to know about its surface. for the solution of this problem A small replica of the earth has been made this replica is called globe.
2. The International date time passes from west to east, a day is added. It means it is sunday on the American side. It would be Monday on the asiatic side. The 180th Meridian is called as the International date line. Similarly if it crosses from east to west, a day is dropped. It is important to do correction in dates at the crossing of the International date line.
3. Three Differences of Latitudes and longitudes

Latitudes

1. East-West, Parallel to to equator.
2. They are parallel lines.
3. Range of 0 to 90^0 North and South.

Longitudes

1. North south converging at the poles and widest at the equator.
2. They are not parallel lines.
3. Range of 0 to 180^0 East and West.

4. The earth is round like orange in shape. It is slightly flattened at the top and at the bottom.
5. A prime meridian is a meridian in a geographical coordinate system at which longitude is defined to be 0. Together a prime meridian and its antimeridian form a great circle. The prime meridian is a line that devides the earth and is defined as being zero degrees.

HOTS Questions

It is importance to do correction in dates as the crossing of the international date line.

Activity

A. The earth appears blue because the three fourths of the earth surface is covered with water.

B. Do it yourself.

Chapter -2 Maps – and Locations

A. Tick (✓) the correct option:

1. a. 3
2. c. Flat surface
3. a. Signs and symbols
4. c. Atlas
5. a. Different

B. Fill in the blanks:

1. The North
2. Physical Characteristics
3. Light blue
4. Globe
5. Globe

C. Write 'True' or 'False':

1. T 2. T 3. T 4. T 5. T

D. Short answer questions:

1. A book of maps is called Atlas.
2. Symbols, scale and direction are the components of map.
3. The top of the map is the North.
4. Green displays forests and plains.
5. Yellow and brown colour displays highlands and plateaus.

E. Long answer questions:

1. The language of map makes the use of certain standard. Symbols and signs to represent rivers, lakes, cities, mountains valleys etc. The symbols and signs are called the language of a map.
2. Their are four main directions,–East, west, North and South. The top of the map points towards the North and its bottom indicates the South. To the right side, it is East and to its left is West.
3. Because a map has very limited space. Once these symbols and signs are clear, they can be read as a map. Therefore, maps give a lot of useful informations to us.
4. Maps are more useful than globes. We can prepare the maps of various sizes in accordance with our need. Map is easy to carry any where.
5. There is an index key in a map for the representation of colour scheme. This key represents the depth of water and heights of the land below or above sea level. The colour scheme remains the same for all maps.

HOTS Questions

Signs and

Activity

A. Do it yourself. B. Do it yourself.

C. Do it yourself.

Chapter -3 The Prairies

A. Tick (✓) the correct option:

1. a. Central
2. c. Grasses
3. c. Extremely hot
4. a. Wheat
5. a. Cattle-rearing

B. Match the following:

Column 'A'	Column 'B'
(a) South America	(i) Pampas
(b) Africa	(ii) Velds
(c) Australia	(iii) Downs
(d) Asia	(iv) Steppes
(e) North America	(v) Prairies

C. Write 'True' or 'False':

1. T 2. T 3. T 4. T 5. F

D. Short answer questions:

1. The word prairie means Grass land or meadow.
2. The mississipi river flow through the prairies.
3. The crops grown in prairies barley, flax, oats, Rye and grasses such as alfalfa.

4. Chicago is the main centre for meat processing.

E. Long answer questions:

1. Prairies have extreme type of climate. The winter are extremely cold and summers are extremely hot, the prairies receive heavy snowfall in winter. Rainfall is moderate in summer.
2. The people of the prairies lead a luxurious life. They enjoy every kind of modern facilities like cars, telephones and air condition. All these facilities have become possible only due to their hard work.
3. The western prairies have hilly areas. Cattle Rearing is the main occupation of the people here.
4. Farming is the main occupation of people of the prairies. People are very hard working. They have worked hard and change the long grassland into suitable farmlands.
5. In the past, the prairies were fully covered with tall grasses. But today the land has been cleared for farming. Now this is the largest wheat producing regions of the world. So, it is called the wheat basket of the world.

Activity

A. Do it yourself. **B.** Do it yourself.

C. Do it yourself.

Chapter-4 Greenland

A. Tick (✓) the correct option:

1. a. Polars
2. c. A jacket
3. c. Meat of animal
4. c. Ship building
5. c. Huskies

B. Fill in the blanks:

1. North-East
2. Only 16
3. Lichens and Mosses
4. Major
5. Poor Plant

C. Match the following:

	Column 'A'		Column 'B'
(a)	Umiak	(i)	Big boats
(b)	Huskies	(ii)	Strong dogs
(c)	Igloos	(iii)	Snow house
(d)	Mossess and lichens	(iv)	small plants

D. Short answer questions:

1. Yes, the Eskimos are excellent hunters.
2. These floating bits of ice-caps are called icebergs.
3. The sun does not rise above the horizon in the arctic region and there is no sunlight at all.
4. Kayaks and umiaks are the main means of transport on land in green land.
5. Yes, people now use motorised sledges skidoos for transport.

E. Long answer questions:

1. The climate of green land is very cold. Winter is very cold and long. The sun does not rise above the horizon in the arctic region and there is no sunlight at all. Winter remains dark for months.
2. The life of the people changed in modern times. The life of Eskimos has greatly changed. They now have very good facilities like school, shops, hospital clubs and libraries. Green-land is developing with a great speed.
3. They wear thick clothes made up of seal skin and fur to protest themselves from extreme cold. Both men and women wear hooded jacket called parkas.

Activity

A. Do it yourself. **B.** Do it yourself.

Chapter-5 Saudi Arabia

A. Tick (✓) the correct option:

1. c. Riyadh
2. c. Saudis
3. c. Hot and dry
4. c. Four-fifths
5. a. Second

B. Fill in the blanks:

1. Long cotton grown called thawb.
2. Medina
3. Network
4. Petroleum
5. Oasis

C. Match the following:

	Column 'A'		Column 'B'
(a)	Bedouins	(i)	Nomads
(b)	Islam	(ii)	Main religion of S.A.
(c)	Jeddah	(iii)	Largest seaport
(d)	Medina	(iv)	Holy place of Muslims

(e) Riyadh (v) Currency of Saudi Arabia

D. Short answer questions:

1. A desert is a place where there is very little rain, very, few plants grow and few animals live.
2. Saudi Arabia has a very hot climate across the year.
3. The second condition of Saudi Arabia in petroleum deposists.
4. Asir is the part that receives enough rainfall in Saudi Arabia.

E. Long answer questions:

1. Saudi Arabia officially known as the kingdom of Saudi Arabia (KSA) Cultural life has Rapidly developed primarily in the Hejaz, the leads in the past.
2. People now enjoy the modern facilities like buildings, air conditioned, houses, schools, parks, trains, portations and hospitals, shops everywhere. All these modern amenities have become possible.
3. There is a wonderful network of Railways, Roadways and airways in Saudi Arabia. Riyadh, Dhanaran and Jeddah are linked to the big cities of the world through airways. The important sea ports of Saudi Arabia are Jeddah.
4. People now enjoy the modern facilities like buildings, air conditioned, houses, schools, parks, trains, portations, hospitals, shops and everywhere. All these modern amenities have become possible. These become due to petroleum. Because petroleum is in huge there.
5. At some places underground water reaches close to the surface and makes pools of water called oasis.

Activity

A. Do it yourself. **B.** Do it yourself.

Chapter -6 Weather and Climate

A. Fill in the blanks :

1. b. Weather 2. b. Slanting
3. a. Hotter 4. a. Goa
5. c. Altitude

B. Match the following:

Column 'A'	Column 'B'
a. Temperate Zone	(i) Temperature Climate
b. Polar Region	(ii) Cold Polar Climate
c. South Frigid Zone	(iii) Cold Climate
d. Torrid Zone	(iv) Hot Climate

C. Write 'True' or 'False':

1. T 2. T 3. T 4. T 5. F

D. Short answer questions:

1. Chennai is hotter than Ooty because Chennai lies far from the sea.
2. The name of climatic regions are:–
   (i) Hot zones (ii) Cold zones
   (iii) Temperate zone
3. The tilt of the earth's axis causes the reasons to change.
4. Atmosphere is defined as the area of air and gas enveloping objects in space, like stars and planets, or the air any location.

E. Long answer questions:

1. The climate of a place depends on
   (i) The height from the sea.
   (ii) The direction of wind.
   (iii) Tilting of the earth.
2. There is moderate climate at the place near the sea, on the other hand place away from the sea experience cold in winter and hot in summer. While Delhi is located far away from the sea so, it experiences an extreme type of climate.
3. The climate of a place is also influenced by the direction of the wind. If a wind blows from a hot area, it makes the climate hot in its surrounding. If a wind blows from a cold area it makes the climate cold.
4. It is because water cools down and heats up more slowly than land. In summer, the sea breeze makes the places near the sea cools, and in winter, the land breeze makes these places warm.

Activity

A. Do it yourself. **B.** Do it yourself.

Chapter-7 Our Communication

A. Tick (ü) the correct option:

1. c. John Logie Baird
2. a. 1605
3. c. Radio
4. c. Guglielmo Marconi

B. Match the following:

Column 'A'		Column 'B'	
(a)	Handwritten accounts	(i)	Manuscripts
(b)	E-mail	(ii)	Computer
(c)	Magazine	(iii)	Mass communication
(d)	PTI	(iv)	News Agency
(e)	Radio	(v)	Marconi

C. Write 'True' or 'False':

1. F 2. T 3. T 4. T 5. F

D. Short answer questions:

1. An-email can be sent anywhere in the world Instantly. It is a system of sending and receiving message through computer with an internet connection.
2. A teleprinter messeages can be sent three times faster than an ordinary telegraph.
3. (i) Post office (ii) Telephone
4. Early men communicated through clay tables, palm leaves etc.

E. Long answer questions:

1. Telegraph – It is a machine for transmitting and receiving message over long distances. The telegraph was invented by Samuel Morse. A code called morse code is used to send messages. This code was also invented by Samuel Morse. Dots and dashes are used in this code.
2. The changes in printing press are following:
   (i) Now more books could easily be printed in very less time
   (ii) Before the invention of printing press, everything was written by hand. Today with the improvement of printing technology, thousands of books are printed and reprinted every year.
3. Important news agencies of our country are PTI (Pressirust of India and UNI (United News of India). The newspaper and magazines are published all around the world in various language. News papers provide us a wide variety of information from all over the world. They are the cheapest means of print media.
4. News papers and magazines are the cheapest and most convenient means of communication.
5. Cinema leaves a great mass impact.

Activity

A. Do it yourself. **B.** Do it yourself.

Chapter-8 Our Environment

A. Tick (✓) the correct option:

1. a. Open 2. c. Recycle
3. b. Two 4. c. Recycle
5. b. Compost pit

B. Match the following:

Column 'A'		Column 'B'	
(a)	Vegetable peels	(i)	Biodegradable
(b)	Plastic	(ii)	Non-biodegradable
(c)	Burning	(iii)	Air pollution
(d)	Manure	(iv)	Compost
(e)	Garbage	(v)	Wastes

C. Write 'True' or 'False':

1. F 2. T 3. F 4. T 5. T

D. Short answer questions:

1. Our environment is made up of both living and non living things.
2. 3 Rs stand for Reduce, Reuse and Recycle.
3. The useless things and dust are called wastes.
4. Biodegradable wastes and non-biodegradable wastes.

E. Long answer questions:

1. Our environment is made up of both living and non–living things. Living things depend on non living things for their growth and survival. Plants require things like air, water and sunlight to survive and grow.
2. Some ways in which we can protect the environment are – Throw waste materials always in garbage bins. Do not throw garbage or anything in to streets or into drains and rivers. Do not spit, urinate or defecate in the open. Avoid using plasting bags instead use

cloth or jute bags.

3. The three difference of biodegradable wastes and non biodegradable wastes are –

(i). Biodegradable: They do not pollutes the environment.

Non Biodegradable: The substances that cause harm to the environment.

(ii). Biodegradable: Paper, fruit, leaves, vegetables, and peels food are biodegradable wastes.

Non Biodegradable: Cans and plastic goods are the examples of non biodegradable wastes.

(iii) Biodegradable: These type of wastes are based on products which come from plants and animals.

Non Biodegradable: That can not be broken down into harmless substances are called non biodegradable wastes.

4. Some local agencies in big cities are the charge of disposal of waste products. They use different method do dispose wastes and keep the environment clean and safe. Some of them are as follow. Burning of wastes, open dumping, land fills and compost pits.

5. 3Rs method help us to protect our environment. Following some simple method can decrease the waste generation tremeendously, in turn reducing the various pollution. These methods are the process of natural resources and also save energy.

HOTS Question

Waste dump the demped garbage is covered with soil.

Activity:

A. Do it yourself **B.** Do it yourself

Chapter -9 Means of Transport

A. Tick (✓) the correct option:

1. b. India
2. c. In 1853
3. c. The Panama canal
4. a. Mumbai
5. a. Waterways

B. Fill in the blanks:

1. Wheal
2. Dansen
3. National Highways
4. Panama
5. Fastest

C. Match the following:

	Column 'A'		Column 'B'
(a)	Bengaluru International Airport	(i)	Bengaluru
(b)	Anna Durai International Airport	(ii)	Chennai
(c)	Rajiv Gandhi International Airport	(iii)	Hyderabad
(e)	Chhatrapati Shivaji International Airport	(iv)	Mumbai
(f)	Indira Gandhi International Airport	(v)	Delhi

D. Short answer questions:

1. Orville wright and wilbur wright.
2. Waterways is the slowest of transport.
3. In 1913, Panama canal become operational.
4. Chhatrapati Shivaji International Airport is the busiest airport.

E. Long answer questions:

1. Our country has two Government operated airlines: Air India, and Indian airlines. Air India provides services to different countries of the world.
2. Chhatrapati Shivaji International Airport in Mumbai is the busiest and the biggest airport in India.
3. The Suez canal was built in 1869. It joins the mediterranean sea with the red sea. It has decreased the distance between Mumbai and London by 9700 kilometers. The travelling period between Mumbai and London has been decreased to just two week the suez canal due to rather the six month, improvement has taken place to due construction.
4. The North Atlantic route is called the busiest route in the world, situated in the west Indian central American.
5. Waterways are the slowest but cheapest means of transport. Heavy and bulky goods are carried by ships over long distances.

Inland waterways: These include big lakes and the rivers, in India the Ganga and the Brahmaputra rivers are the exclusively havigable rivers.

Ocean Transport: The north atlantic route,

the mediterranean suez Asiatic route the cape of good hope route, and the panama canal west Indian central American route are the world's big ocean route.

HOTS Questions

We have very large Network of roads all over the globe many serious problem due to created to the increased road traffic. Two of them serious condition first pollution, air pollution, sound and increasing non of road accidents.

Activity

A. Do it yourself. **B.** Do it yourself.