

NOTES FOR TERM 1

CLASS 4TH SUBJECT: ENGLISH

LESSON 3: SOME APPLES, PLEASE.

There is an old saying; Where there is a way, there is a will. This story is about a woman who gets what she wants by being kind and helpful.

There was once an old woman who wanted to eat an apple pie. She had plenty of flour and butter and plenty of sugar and spice but she did not have any apples. She manages to exchange her basket of plums with a bag of feathers which belongs to a young woman.

After hearing a couple quarrelling over a small issue, she gives her bag of feathers to them and gets two loaves of bread in exchange. Later she gives the two loaves of bread to a poor family who gives her a little dog. Finally she gives the little dog to an old man who wants somebody for a company. In exchange she gets a basket of apples from him. She makes apple pie for supper and enjoys it.

Questions/Answers

1. What did the old woman have to eat in her house?

Ans; The old woman had flour, butter, plenty of sugar and spice and plums.

2. What did the old woman and the young woman talk about?

Ans; The young woman told the old woman about her hens and the old woman told the young woman about the apple pie and the basket of plums.

3. Why were the man and the woman in the farmhouse quarrelling?

Ans; The man and woman in the farmhouse were quarrelling on the material which the cushion of their grandfather's chair would be stuffed with.

4. What, according to the old woman, was 'a good bargain'?

Ans; The old woman exchanged the bag of feathers with two loaves of bread. That she thought as a good bargain.

5. What did the old woman get in exchange for the loaves of bread?

Ans; The old woman got a dog for two loaves of bread.

6. What did the apple tree in the old man's garden look like?

Ans; The apple tree in the old man's garden was a fine tree full of apples.

LESSON 4: SNAKEBITE

This story has been written by Keshaw Shankar Pillai. He comes across a snake in his compound. He catches a snake and calls his grandma. She gets shocked and calls grandpa for help. When he sees a black mark on his finger he immediately takes Keshaw to an old man who knew the cure for snakebites. Keshaw wants to tell his grandpa that he was bitten by a bee and not a snake. The old man recites verses and gives him some water to drink. He tells grandpa that he is out of danger now. It was indeed a poisonous snake that had bit him.

- Questions/Answers

1. What did the author do when he saw the snake?

Ans; When the author saw the snake it was crawling in the compound. The snake slithered into a coconut shell when it spotted the author. The author quickly went close to it, covered the mouth of the shell with a stone and then picked up the shell and ran to show it to his grandmother.

2. What did Grandpa do when he found out about the snake?

Ans; When Grandfather found out about the snake, he snatched the shell and threw it away. Then he warned the author never to play with snakes because they were dangerous.

3. What was the blue mark on the author's finger?

Ans; The author got a blue mark on his finger from a bee sting.

4. Where did Grandpa take the author?

Ans; Grandfather took the author to the house of an old man who was supposed to know the cure for snakebites.

5. What did the old, grey-haired man say at the end?

Ans; At the end, the old man told Grandfather that the author was out of danger, and it was lucky that Grandfather had brought the boy to him in time, because he had indeed been bitten by a poisonous snake.

POEM –

THE LION AND THE MOUSE.

Once a lion was prowling in the forest and by chance he gets caught in a net. He tries his best to free himself but all in vain. Then a tiny mouse comes and nibbles the cords with his teeth and frees the lion.

This poem conveys a message that we should not dislike the humblest things because we never know when we need their help.

- Once, a hungry lion WAS HUNTING in the woods, in search of FOOD. While doing so, he got CAUGHT in a net. He TRIED to free himself but could not do so. A tiny mouse CAME out of its hole and SAW the lion. It NIBBLED at the cords of the net. The cords gave away and the lion was SET FREE. This shows that we should not LAUGH at little creature. Even mighty and strong creatures may NEED the help of weak and small ones.
- Pick out the words from the poem that rhyme with these words.

1. Prey – angry
2. House – mouse
3. Net – set
4. Lives – gives

C. Write the opposite of these words.

1. Free – caught
2. Unpleasant – pleasant
3. Tiny – huge
4. Despise – like
5. Strongest – weakest
6. Poor – rich

D. Write down the homophones of these words.

1. Wood – would
2. Knead – need
3. Hole – whole
4. There – their
5. One – won
6. Knot – not

LESSON 5: A HOME FOR THEIR BABIES 1.

This delightful story tells us about the joys of caring. Peggy is a little girl whose mom comes to wake her up and wish her Happy Spring. Peggy wakes up and sees two identical blue eyed, pale grey birds. Her mother tells her that they are called Mourning doves. She thinks that they have got this name because of their soft, cooing song. The doves were making a nest on the windowsill. Peggy thought the birds were slow workers. She watched them and noted their progress. On the seventh morning she discovers two white eggs in the nest.

1. What did Peggy remember when she rushed towards the stairs?

Ans; When Peggy rushed towards the stairs she remembered she had to open the window and hurried back into her room.

2. What did Peggy see on thw windowsill?

Ans; Peggy saw a pair of nesting mourning doves making a nest on her windowsill.

3. Why, according to mother, did the birds get the name 'Mourning Doves'?

Ans; According to Peggy's mother, the birds got their name because of their soft, cooing song.

4. When did Peggy make a discovery?

Ans; On the seventh morning Peggy discovered two eggs in the doves' nest.

LESSON 6: A HOME FOR THEIR BABIES

Peggy makes a discovery on the seventh morning. She discovers that the female dove had laid two white eggs. The male dove guards the eggs while the female dove flies away. This surprises Peggy. The female dove never visits the nest and the male dove never leaves it. She thought that their behaviour was not like that of human families. During the evening of day twelve, Peggy observes that the male dove was nervous because he sees a cat on a nearby tree. The female dove appears and swoops down and tries to take the cat's attention off the nest. On the fourteenth day the first egg hatches. The male covers the other egg and the baby, called a squab. Peggy notes the dove's activities in her notebook. Peggy realises that both parents take care of their young ones.

• **Questions/Answers**

1. What was Peggy's third surprise?

Ans; Peggy's third surprise was that why the female dove had flown away and left the male dove to sit on the eggs.

2. What did the male dove do that puzzled Peggy?

Ans; Peggy was puzzled because the doves' behaviour seemed very different from that of humans as the male dove never left the nest while the female dove never visited.

3. Why was the dove so nervous?

Ans; Peggy discovered that the reason the male dove was so nervous was because it was being stalked by the neighbour's cat.

4. What happened when the first egg hatched?

Ans; When the first egg hatched Peggy saw it happen. First, the egg cracked while the adult dove only watched and did not help. Tiny chips of shell fell away finally, the baby dove, all wet and weak, peeked free.

5. What did Peggy note in her journal after the first egg hatched?

Ans; Peggy noted in her journal that the hatched baby dove's eyes were closed, 'just like a puppy's'.

6. When did Peggy realize she was mistaken?

Ans; When Peggy saw the female dove return to the nest on the fifth day after hatching of the eggs, she thought that the female dove was late and all the work had been done by the male dove. But then Peggy realized her mistake that it was not the effort of the male dove alone but it took both parents to keep the babies to keep the babies fed, and to keep them from falling off the window ledge.

7. "All babies seem to do that" What does this sentence mean?

Ans; The sentence 'All babies seem to do that' means that all babies feed and grow fast.

Social studies

Lesson no. 5 (The Southern Plateau)

The Southern Plateau is located to the south of the Northern Plain. It is triangular in shape. The Southern Plateau is surrounded by hill ranges. Most of the rivers depend on rainfall for water. River Narmada divides the entire plateau region into two parts: The Central Highlands in the north and the Deccan Plateau in the south.

The Southern Plateau covers the states of Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, Maharashtra, Karnataka, Andhra Pradesh, Telangana and Tamil Nadu. The Chota-Nagpur Plateau is rich in minerals, especially coal.

Answer these questions:-

Q. 1 Name the hill ranges that surround the Southern Plateau.

Ans:- The Southern Plateau is surrounded by the Aravalli Hills in the north –west and the Raj-Mahal Hills in the north –east.

Q. 2 List five minerals found in the Chota Nagpur Plateau.

Ans:- The minerals found in the Chota –Nagpur Plateau are coal , iron ,manganese ,bauxite and mica.

Q. 3 What are the main crops grown in Maharashtra ?

Ans:- The main crops grown in Maharashtra are cotton, sugar-cane, ground – nut and millets.

Q. 4 What are the popular tourist attractions of Hyderabad?

Ans:- The Charminar , the Salar Jung Museum and a huge statue of Gautam Buddha in the Hussian Sagar Lake .

Lesson no. 6 (The coastal plains and the islands)

The Deccan Plateau is surrounded by narrow coastal plains towards the west and the east. The Deccan Plateau is surrounded by the Western Coastal Plain and the Eastern Coastal Plain. The two coastal plains meet at Kanniyakumari. There are two big island groups in India. The Andaman and Nicobar Islands lie in the Bay of Bengal . The Lakshadweep Islands are in the Arabian Sea. The Andaman island and the Nicobar islands are separated by the Ten Degree Channel. The Lakshadweep islands have been formed from coral deposits. Gujarat, Maharashtra, Goa, Karnataka and Kerala share the west coastline of India. Tamil Nadu, Puducherry, Andhra Pradesh, Odisha and West Bengal share the east coastline of India.

Answer these questions:-

Q. 1 Name the parts into which the Western Coastal Plain and the Eastern Coastal Plain are divided.

Ans:- The Western Coastal Plain is divided into three parts. The Gujarat Coast towards the north, the Konkan Coast in the middle, the Malabar Coast towards the south. The Eastern Coastal Plain is divided into two parts; the northern part, known as the Northern Circars and the southern part, called the Coromandel Coast.

Q . 2 What separates the Andaman Islands and the Nicobar Islands? What are the main crops of the region?

Ans:- The Andaman Island and the Nicobar Islands are separated by the Ten Degree Channel. The main crops of the region are rice, maize, coconut and rubber.

Q . 3 Where is Mumbai High? Why is it important?

Ans:- Mumbai High is in Maharashtra. Large deposits of petroleum have been found in the sea bed near Mumbai. This region is called Mumbai high.

Q4. Write a short note on Puducherry.

Ans:- Puducherry lies towards the south of Chennai. It is a Union Territory .It was once under French rule. It is famous for the Aurobindo Ashram and the Matri Mandir.

Lesson – 7 (The soils of India)

Soil is a very important natural resource. Soil is formed when natural forces such as wind and rain break large rocks into smaller pieces. These pieces are further broken into sand and silt. They are carried to different places by running water and wind. The most important quality of soil is its fertility. Alluvial, black, red, laterite, mountain and desert are the different soil type. Manure and fertilizers are added to the soil to increase its fertility. Soil erosion is harmful for the soil. We must prevent it.

Answer these questions:-

Q.1How is soil formed? How long does it take to form soil?

Ans:- Soil is formed when natural forces such as wind and rain break large rocks into smaller pieces .These pieces are further broken down into sand and silt. They are carried to different places by running water and wind. All this is a slow process. It takes thousands of years for a layer of soil to form.

Q. 2 What is alluvial soil? Why do crops grow well in it?

Ans:- The rivers coming from the Himalaya mountains and the Deccan Plateau bring large quantities of mud and silt with them. These are deposited on the river banks. This forms alluvial soil. Crops such as rice, wheat, maize, sugarcane, jute, pulses, oilseeds and vegetables grow well in it.

Q . 3 Why is black soil suitable for cultivating cotton and sugarcane? Name two other crops which grow in this soil .

Ans:- Black soil is suitable for cotton and sugarcane because it can retain a large amount of moisture. This soil is rich in minerals. Wheat, millets, tobacco and oilseeds grow in this soil.

Q .4 List three ways to prevent soil erosion.

Ans:- The following steps must be taken to prevent soil erosion.

- Do not cut trees. Plant more trees especially along hill slopes.
- Do not keep the fields barren as roots of plants hold soil and prevent it from being washed away.
- Stop overgrazing of land.
- Use organic or natural fertilizers such as cow dung and compost.

Lesson 8 (Our forest wealth)

A forest is a large area of land covered with trees and shrubs. A variety of trees grow naturally in a forest. Forest is very useful to us. They give us many things such as pure air, wood, herbs, fruits, gum and medicinal plants. They also provide shelter to birds and animals. Forest prevents floods and soil erosion. They attract rainfall and make the place cool.

Forests are classified into five types – evergreen, deciduous, thorn, tidal and mountain. About one –fifth of the total area of India is under forests. India has many national parks wild life sanctuaries.

Answer these questions:-

Q .1 How are forests important to us?

Ans:- Forests give us many things such as pure air, wood, herbs, fruits, gum and medicinal plants. They also provide shelter to birds and animals. Forests prevent floods and soil erosion. They attract rainfall and make the place cool.

Q. 2 Where do we find evergreen and deciduous forests in India? What is the main difference between the two?

Ans:- Evergreen forests are found on the rainy slopes of the western Ghats, the hills of north –east India and in the Andaman and Nicobar Islands. Deciduous forests are found along the foothills of the Himalaya mountains and in the wetter parts of the Southern Plateau.

The main difference between the two is that evergreen forests do not shed their leaves. They remain green throughout the year but deciduous forest shed their leaves once a year during the dry season.

Q .2 Where do we find thorn, tidal and mountain forest in India?

Ans:- Thorn forests are found in the desert areas of Rajasthan. Tidal forests are found in the deltas of rivers and in areas which are flooded by sea water. These forests grow in both salt and fresh water. Mountain forests are found in the higher region of Himalaya mountains and in parts of the Nilgiri Hills.

Q. 3. What was the Chipko Movement?

Ans:- In the 1970s, a group of female peasants in the Reni village of Uttarakhand prevented tree cutters from cutting down trees. The villagers hugged the trees to protect them. This was the beginning of the Chipko Movement. Chipko means to hug or embrace.

Q. 4 Why has the government set up national parks and wild life sanctuaries?

Ans:- In the past ,wild animals were hunted for sport. This led to the extinction of many animals. To protect wild animals and to save the natural vegetation ,national parks and wild life sanctuaries have set up.

Science Term 1

LESSON NO. 3

ANIMALS HOW LIFE GOES ON

Living things do not live forever. They die after completing their life span. For life to go on living things must produce more of their own kind. The process by which living things produce more of their own kind is called reproduction.

Animals need to reproduce so that life on the earth goes on. Animals reproduce by giving birth to young ones or by laying eggs. Birds, fish, frogs, turtles, snakes, reptiles lay eggs.

Animals that give birth to young ones and suckle them are called mammals. Mammals take care of their babies for a long time. Usually the mother cares for the young. She feeds the babies, cleans them and keeps them warm. She protects them from enemies.

All insects hatch from eggs. Some insects like grasshoppers and cockroaches have three stages in their life cycle. The baby insect which comes out of the egg is called a nymph. Other insects like houseflies and butterflies have four stages in their life cycle. The young ones that hatch from the egg of these insects are called Larva. The larva of a housefly is called Maggot. The larva of a butterfly is called a caterpillar.

Answer these questions:

Q1. Who are the most developed among all animals?

Ans. Mammals are the most developed among all animals.

Q2. How do birds reproduce?

Ans. Birds reproduce by laying eggs.

Q3. What are nymphs?

Ans. Some insects like grasshoppers and cockroaches have three stages in their life cycle. The baby insect which comes out of the egg is called a nymph.

Q4. How do mammals take care of their young ones?

Ans. Mammals take care of their babies for a long period of time. Usually the mother cares for the young. She feeds the babies, cleans them and keeps them warm. She protects them from enemies.

Q5. How do animals reproduce?

Ans. Animals reproduce in two different ways. Some give birth to young ones where as some lay eggs.

LESSON NO. 4

ANIMALS: LIVING AND SURVIVING

Millions of years ago, huge animals called dinosaurs roamed on the earth. Now there are no dinosaurs. Do you know why? Scientists believe this happened due to the sudden change in the earth's climate. The dinosaurs could not adjust to the cold conditions. The process of changing to suit the environment is called adaptation. The natural home of an animal is called its habitat. Animals can be grouped according to their habitats, as terrestrial, aquatic, amphibian, areal and arboreal. Animals eat plants or other animals. They can

be classified according to the type of food they eat like herbivores – plant eating animals, carnivores – flesh eating animals, omnivores – plant and flesh eating animals.

It is very important for animals to protect themselves and live long enough to reproduce. The common ways by which animals protect themselves are fast movement, large size and merging with the surroundings. Merging with the surroundings is called camouflage.

Answer the following questions:

Q1. What is adaptation?

Ans. The process of changing to suit the surroundings is called adaptation.

Q2. What are arboreal animals?

Ans. Some animals spend most of the time on trees. They are called arboreal animals.

Q3. The frog is an amphibian. How is it adapted to live on land and in water?

Ans. Frogs have limbs that help them in swimming and a moist skin which helps them to breathe in water. However they have lungs which help them to breathe on land.

Q4. How do animals like fish, elephant and leaf insects protect themselves?

Ans. Fish move very fast to escape from their enemies. Elephants are too big to be eaten and leaf insects merge with their surrounding which keeps them safe.

Lesson 5 - Food and Digestion

All living things need food. Food contains substances called nutrients which provide nourishment to the body. Food contains nutrients like proteins, carbohydrates, fats, vitamins, minerals.

1. Carbohydrates give us energy to work.
2. Fats gives us more energy than starch or sugar.
3. Proteins help us to grow.
4. Vitamins help our body to fight diseases.
5. Minerals help us in the formation of bones, teeth and blood.
6. Roughage is the fibre present in our food.
7. Water is essential for our body to function properly.

Digestion of food - The process of breaking down of food into a simpler form is called digestion.

The process of digestion begins from the moment we put food into our mouth. From the mouth the food passes through the food pipe into the stomach. From the stomach the food is pushed into the long coiled tube called the small intestine. The undigested food passes into the large intestine. The semi solid waste is passed out through the anus.

Write short answers

Q1. Why do we need food?

Answer. We need food as it allows us to grow, stay alive, gives us energy to work and keeps us fit and healthy.

Q2. Name any three food items which contain starch.

Answer. Rice, wheat and potato contain starch.

Q3. Name any four sources of vitamins and minerals.

Answer. Fresh fruits, vegetables, milk and fish are some sources of vitamins and minerals.

Q4. What is a balance diet?

Answer. A balance diet is that which has the right amount of all nutrients, that is, carbohydrates, fats, proteins, vitamins and minerals.

Q5. Where does the digested food go from the stomach?

Answer. The digested food enters the small intestine from the stomach.

Answer these questions

Q1. What happens to the food in the mouth?

Answer. When we put food in the mouth, our teeth bite and chew the food to break into small pieces. The saliva in our mouth mixes with the food and changes the insoluble starch in the food to soluble sugar.

Q2. What is the function of the small intestine?

Answer. The small intestine completely digests the food till it becomes almost a liquid. The blood vessels present in the walls of the small of the intestine absorb the digested food and carry it to all the parts of the body.

Q3. What happens to the food when it enters the stomach till it reaches the large intestine?

Answer. The food is churned in the stomach. The digestive juices in the stomach break down the proteins present in the food into a simpler form. From the stomach the food is pushed into the long coiled tube called the small intestine. The inside walls of the small intestine produce a juice that mixes with the food. The liver and the pancreas also pour their juices into the small intestine. These juices help to completely digest the food. The digested food is almost like a liquid. The blood vessels present in the walls of the small intestine absorb the digested food and carry it to the all parts of the body. The undigested food passes into the large intestine.

Q4. What is preservation?

Answer. The process of treating food in a way that preserves its value for a long time is called preservation.

Q5. How do we preserve food?

Answer. We preserve food by treating it in special ways so that it does not get spoiled. We can keep it at low temperature for e.g. in a refrigerator or boil it. Adding sugar and salt while cooking also helps preserve the food. We can dehydrate it that is remove the water content for e.g. milk is changed to milk powder by dehydrating the milk. By adding preservatives we are able to can the food.

Lesson 6 - Teeth and Microbes

Teeth help us to speak clearly. They enable us to bite and chew food. So, our teeth are a very important part of our body. There are two sets of teeth, milk teeth or temporary teeth, permanent teeth. There are four kinds of teeth.

1. Incisors or cutting teeth
2. Canines or tearing teeth
3. Premolars or cracking teeth
4. Molars or grinding teeth

The Structure of a tooth

A tooth has three parts: the crown, the neck and the root. The outer covering of a tooth is very hard. It is called enamel. Below it lies the dentine, inside the dentine lies the pulp.

Care of teeth

If we take good care of our teeth, we can save them from decaying. Tooth decay results in bad breath, cavities, toothache, bleeding gums and indigestion. Calcium and vitamin C are important for healthy teeth and gums. Brush your teeth every morning and every evening before going to the bed. Do not have too many sweets or colas. Wash your mouth after every meal.

Microbes

Microbes are tiny living things that can be seen only through a microscope. Disease causing microbes are called germs. There are four main kinds of microbes. Bacteria are single-celled microbes. Viruses are smaller than bacteria and can be seen only through a powerful microscope. Protozoa are single celled microbes. Fungi are microbes which grow on decaying matter. Some fungi are useful example yeast helps to make bread soft. Some bacteria are also useful. They change milk into curd.

Write short answers

Q1. Name different kinds of teeth.

Answer. Incisors, Canines, premolars, molars.

Q2. Which are the three layers of a tooth?

Answer. Enamel, dentine, pulp.

Q3. Write four conditions that help microbes to grow.

Answer. Warmth, moisture, food, air

Q4. Name four kinds of microbes

Answer. Bacteria, viruses, protozoa, fungi

Q5. Write any four diseases caused by microbes

Answer. Typhoid, tuberculosis, chicken pox, dysentery

Answer these questions

Q1. How are teeth important to us.

Answer. Teeth are important to us as they give proper shape to our face, they help us to speak clearly, enable us to chew and bite clearly and make our smile beautiful.

Q2. What are the functions of molars and premolars?

Answer. Molars help us to grind food, premolars help us to crush food.

Q3. What types of food are good for our teeth?

Answer. Calcium and vitamin C are important for healthy teeth and gums. Foods like milk, eggs, cheese and cottage cheese are rich sources of calcium. Fruits like papaya, oranges and lemon are rich sources of vitamin C. Green leafy vegetables are also rich sources of vitamin C.

Q4. Write two tips which help to keep your teeth healthy.

Answer. Brush your teeth every morning and every night before going to bed. Do not have too many sweets or colas.

Q5. What are microbes? Name two diseases caused by protozoa.

Answer. Microbes are tiny living things which can only be seen through a microscope. Malaria and dysentery are two diseases caused by protozoa.

Q6. How are some microbes useful for us?

Answer. Some microbes are very useful to us. Some bacteria change milk into curd, produce vitamins in our body, help in the decaying of dead plants and animals and help in digestion of roughage in animals.

- 3) 11
11X1=11
11X2=22
11X3=33
11X4=44
11X5=55
11 , 22 , 33, 44 and 55.

- 4) 12
12x1=12
12x2=24
12x3=36
12x4=48
12x5=60
12,24,36,48 and 60.

- 5) 20
20x1=20
20x2=40
20x3=60
20x4=80
20x5=100
20, 40, 60,80 and 100.

C) Write True or False

- a) 27 is a multiple of 4 (False)
- b) 35 is a multiple of 5 (True)
- c) 86 is a multiple of 8 (False)
- d) 99 is multiple of 11 (True)

Even and Odd numbers

Even numbers → Numbers that are multiples of 2 e.g 2,4,6,8,10.

Odd numbers → Numbers which are not multiples of 2 are odd numbers e.g 1,3,5,7 or 9.

D) Identify even or odd numbers

78 – Even	276- Even	
42- Even	94-Even	
48-Even		81- Odd
39-Odd		101-Odd
105-Odd	596-Even	

E) Write 5 Odd Multiples of :-

5

$$5 \times 1 = 5$$

$$5 \times 3 = 15$$

$$5 \times 5 = 25$$

$$5 \times 7 = 35$$

$$5 \times 9 = 45$$

5, 15, 25, 35 and 45.

11

$$11 \times 1 = 11$$

$$11 \times 3 = 33$$

$$11 \times 5 = 55$$

$$11 \times 7 = 77$$

$$11 \times 9 = 99$$

11, 33, 55, 77 and 99.

Write 5 Even multiples of :

9

$$9 \times 2 = 18$$

$$9 \times 4 = 36$$

$$9 \times 6 = 54$$

$$9 \times 8 = 72$$

$$9 \times 10 = 90$$

Ex 6.2

B) Write first two Common multiples of

2, 3

$$2 \times 3 = 6$$

$$3 \times 2 = 6$$

$$2 \times 6 = 12$$

$$3 \times 4 = 12$$

6 and 12

4, 6

$$4 \times 3 = 12$$

$$6 \times 2 = 12$$

$$4 \times 7 = 28$$

$$6 \times 4 = 24$$

12 and 24

5, 10

$$5 \times 2 = 10$$

$$10 \times 1 = 10$$

$$5 \times 4 = 20$$

$$10 \times 2 = 20$$

10 and 20

Factors

- 1 is a factor of all numbers.
- 1 is the smallest factor of a number.
- A number is a factor of itself.

Ex 6.3

1. 15

$$1 \times 15 = 15$$

$$3 \times 5 = 15$$

1, 3, 5 and 15.

2. 16

$$1 \times 16 = 16$$

$$2 \times 8 = 16$$

$$4 \times 4 = 16$$

1, 2, 4, 8 and 16.

3. 35

1, 5, 7 and 35

4. 36

1, 2, 3, 4, 6, 9, 12, 18 and 36.

5. 23

1, 23

Ex 6.4

Common Factors

1. 6, 8

Factors of 6 are 1, 2, 3, 6.

Factors of 8 are 1, 2, 4, 8.

Common factors 1 and 2.

2. 30, 45

Factors of 30 are 1, 2, 3, 5, 6, 10, 15, 30.

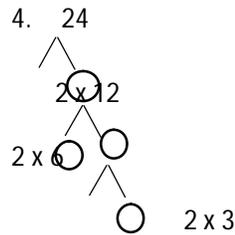
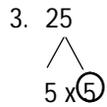
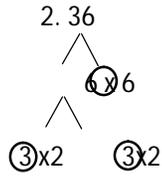
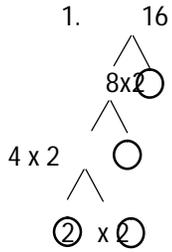
Factors of 45 are 1, 3, 5, 9, 15, 45.

1, 3, 5 and 15.

Is-7
HCF and LCM

A. Complete each factor tree

Ex 7.1



Find the prime factors

B)

- a. $96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$
- b. $27 = 3 \times 3 \times 3$
- c. $51 = 3 \times 17$
- d. $72 = 2 \times 2 \times 2 \times 3 \times 3$
- e. $62 = 2 \times 31$
- f. $56 = 2 \times 2 \times 2 \times 7$
- g. $49 = 7 \times 7$
- h. $56 = 2 \times 2 \times 2 \times 7$
- i. $63 = 3 \times 3 \times 7$
- j. $81 = 3 \times 3 \times 3 \times 3$
- k. $65 = 5 \times 13$

C. Find the prime factors

1. $72 = 2 \times 2 \times 2 \times 3 \times 3$
2. $96 = 2 \times 2 \times 2 \times 2 \times 2 \times 3$
3. $56 = 2 \times 2 \times 2 \times 7$
4. $78 = 2 \times 3 \times 13$
5. $90 = 2 \times 3 \times 3 \times 5$
6. $40 = 2 \times 2 \times 2 \times 5$
7. $66 = 2 \times 3 \times 11$
8. $64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$
9. $60 = 2 \times 2 \times 3 \times 5$

Fractions

Fractions are parts of a whole



$$= 1 / 2$$

Ex 8.1

1. $4/10$ > 4 out of 10 equal parts > Four tenths
2. $1/4$ > 1 out of 4 equal parts > One Quarter
3. $2/3$ > 2 out of 3 equal parts > Two thirds
4. $3/8$ > 3 out of 8 equal parts , three eights
5. $3/4$ > 3 out of 4 equal parts , three fourths

How many make a whole shape

- B. Halves or $1/2 = 2$
- One fourths or $1/4 = 4$
- One- thirds or $1/3 = 3$
- One – Eights or $1/8 = 8$
- One –fifths or $1/5 = 5$
- One- Sixths = 6

Ex 8.2

Fill in the to make equivalent fractions

a. $1/2 \times 5/5 = \boxed{5/10}$

b. $1/4 \times 3/3 = \boxed{3/12}$

c. $1/3 \times 4/4 = 4/12$

d. $1/6 \times 3/3 = 3/18$

e. $1/8 \times 2/2 = 2/16$

f. $3/4 \times 5/5 = 15/20$

g. $2/5 \times 5/5 = 10/25$

h. $1/9 \times 3/3 = 3/27$

D. Fill in the to make equivalent fractions

a. $14/21 \div 7/7 = 2/3$

b. $6/10 \div 2/2 = 3/5$

c. $12/16 \div 4/4 = 3/4$

Ex 8..3

Circle the fractions that are in the simplest form

A. $5/7$, $8/9$, $7/15$, $6/11$, $1/4$, $11/19$

B. Reduce to the lowest terms

1. $5/15 = 1/3$

2. $9/12 = 3/4$

3. $15/20 = 3/4$

4. $24/30 = 4/5$

5. $15/30 = 1/2$

LS – 9

Operations on fractions

Ex 9.1

Solve the following

1. $\frac{1}{9} + \frac{5}{9} = \frac{6}{9} = \frac{2}{3}$

2. $\frac{2}{7} + \frac{4}{7} = \frac{6}{7}$

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

4. $\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$

5. $\frac{2}{6} + \frac{3}{6} = \frac{5}{6}$

6. $\frac{4}{10} + \frac{5}{10} = \frac{9}{10}$

7. $\frac{2}{9} + \frac{1}{9} = \frac{3}{9} = \frac{1}{3}$

8. $\frac{4}{10} + \frac{2}{10} + \frac{3}{10} = \frac{9}{10}$

9. $2 + 1 + \frac{1}{2} = 3\frac{1}{2}$

10. $\frac{1}{3} + \frac{1}{3} + \frac{2}{3} = 1\frac{1}{3}$