

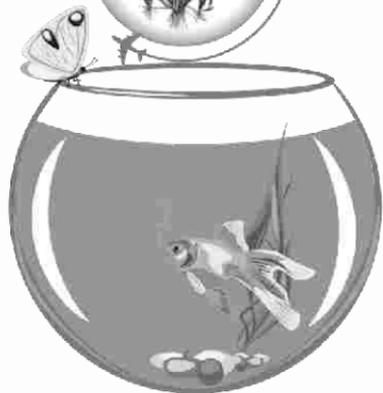
Smart
SERIES

Science

Key Book



Class Two



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**UNIT
1****Our Food**

A. Answer the following questions.

i). Where do we get energy?

Ans. We get energy from food. Food provides us energy.

ii). Write three functions of food?

Ans. Food performs different functions.

i). Food provides us energy.

ii). Food helps us to grow.

iii). Food makes us strong.

iii). Name some foods which provide us quick energy?

Ans. Some foods give us quick energy e.g. bread, rice, potatoes, honey, cakes and biscuits, etc.

iv). Name some foods which store in our body?

Ans. Some groups of food provide us energy which our body can store. This type of food are butters, cheese, vegetable, oils and nuts.

v). Name some food which help our body to fight against diseases?

Ans. Some foods help our body to fight against different diseases. For good health this group of food is most important. These foods are milk, meat, lemon and green vegetables, etc.

vi). How much water is required everyday?

Ans. Water is very essential for us. Without it we cannot live. We need 8-12 glasses of water everyday.

vii). Write at least five good eating habits?

Ans. Good eating habits are:

- i). Eat at regular intervals.
- ii). Chew the food well before swallowing.
- iii). Do not eat in a hurry.
- iv). Avoid eating when you are too tired.
- v). Wash your hands before eating.

B. Fill in the blanks.

- i). Body parts work even when we are sleeping.
- ii). Food provides us energy.
- iii). Food helps us to fight against diseases.
- iv). Eat at regular intervals.
- v). Do not eat in a hurry.
- vi). Wash your hands before eating.

C. Write "T" for true and "F" for false.

- i). Food do not help us in our growth. **F**
- ii). Human body is like a machines. **T**
- iii). Butter provides us quick energy. **F**
- iv). Green vegetables helps our body to fight against diseases. **T**

D. Match the column "A" with column "B" to complete the statements:

"A"

"B"

Food provide

give us quick energy.

Food repairs the

before swallowing.

Bread, rice and potato

us energy.

Chew the food well

everyday.

Eat green vegetables

body parts.



**UNIT
2****Animals' Body Parts**

A. Answer the following questions.

i). Name some common body parts of the animals.

Ans. There are many parts in animals' body which perform different functions. These body parts are head, neck, bodies (trunk) legs and tail.

ii). What does head bear?

Ans. The head is very important part of the body. The head bears eyes, ear, nose and mouth.

iii). Which part of the body does Join head to trunk?

Ans. The part that joins the head to trunk is called "Neck".

iv). What are limbs?

Ans. The limbs are suited for various movement of the body. Elephant cow, goat, buffalo, donkey, sheep walk due to their limbs.

v). What is the difference between hind-limbs and fore-limbs?

Ans. For limbs are usually called arms and hind limbs are called legs.

vi). What is the function of limbs?

Ans. Animals do all movement due to their limbs.

vii). Which types of the legs snake and earthworm have?

Ans. Snakes and earth worms have no legs. These animals glide from one place to another.

B. Complete each of the following statement by choosing suitable words from those given in brackets.

- i). The part that Joins the head to the trunk is called neck .
(trunk, neck, limbs)
- ii). The front legs of an animals are called fore limbs.
(fore –limbs, hind-limbs, limbs)
- iii). Earth worm have no legs.
(six ,four, no)
- iv). Fore –limbs of birds help them to walk .
(fly, swim, walk)
- v). Lizard which have short legs crawl on their bellies .
(legs, bellies, tail)

C. Observe the animals you see in your surroundings and group as follow: (Name three animals in each case).

i). Animals with four legs.

Cat

Dog

Cow

ii). Animals with six legs.

The Crab

The Milliped

Centipede

iii). Animals with more than six leg.

Ant

Bee

Fly

iv). Animals with two legs.

Hen

Duck

Peacock

**UNIT
3****Animals' Classification**

A. Answer the following questions.

i). What is backbone?

Ans. It is hard bone at our back. It helps in locomotion. Without it we would be a heap of flesh.

ii). What are “Vertebrates”?

Ans. The animals with backbones are known as “Vertebrates”.

iii). What is the function of backbone?

Ans. Backbone help us in locomotion without it we cannot move.

iv). Write down five names of invertebrates?

Ans. i). Butterfly ii) Leach
iii). Bee iv) Starfish
v) Fly

v). Into how many groups can we divide animals on the basis of backbones.

Ans. Animals are divided into two main groups on the basis of backbones.

- i). Animals with backbones.
 - ii). Animals without backbones.
-

B. Separate the vertebrates and invertebrates:

Vertebrates Animals	Invertebrates Animals
Crow	Butterfly
Snake	Cockroach
Lizard	Scorpion
Fish	Starfish
Rabbit	Fly
Frog	Honey Bee
Lion	Mosquito
Elephant	Bee
Goat	Ant
Cat	Fly Bird
Bear	Snail
Dog	Spider

C. Put (✓) for vertebrates and (×) for invertebrates:



Panda



Eagle



Fish



Ladybug



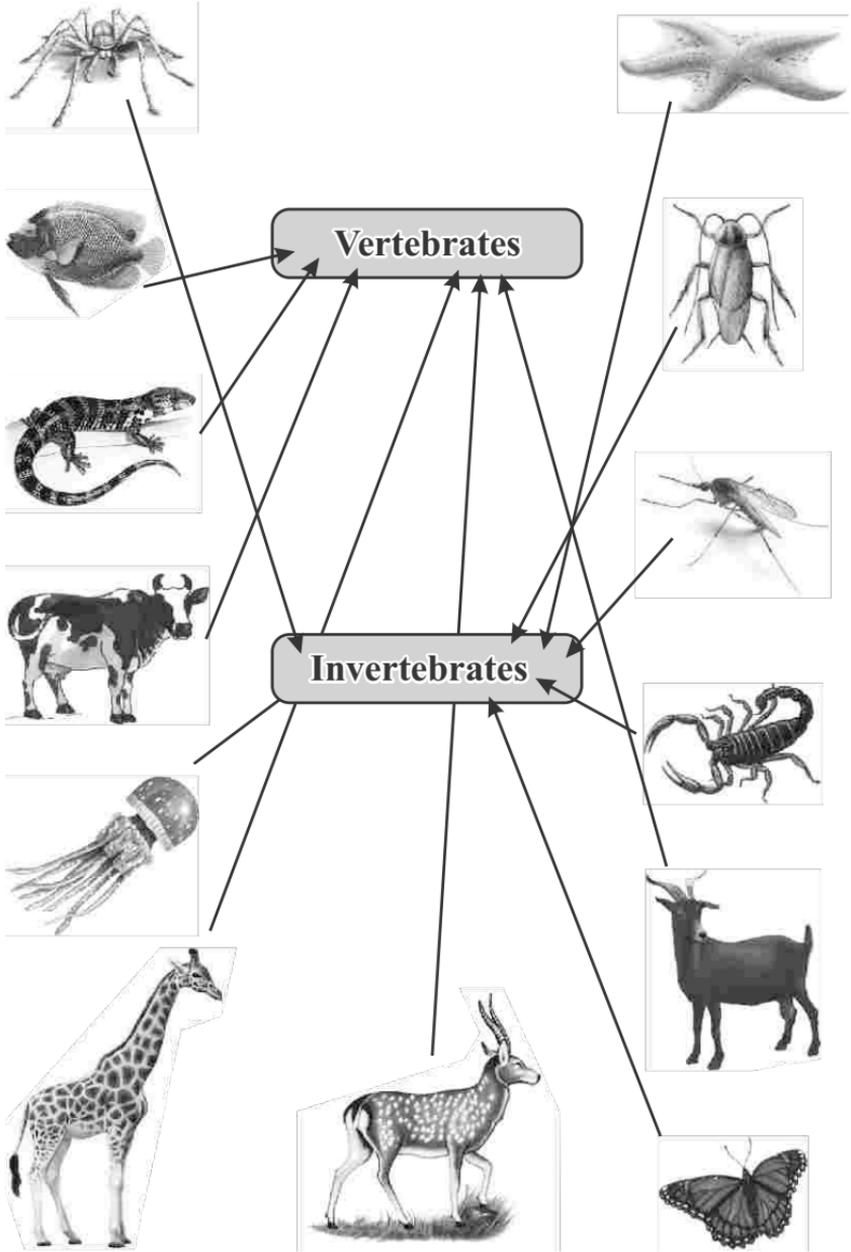
Sea lion



Vulture



D. Match the animals with their group:



E. Find the names of six animals that are hidden in the following:

Word search.

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

Words

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Crow | <input checked="" type="checkbox"/> Donkey | <input checked="" type="checkbox"/> Lizard |
| <input checked="" type="checkbox"/> Turtle | <input checked="" type="checkbox"/> Rabbit | <input checked="" type="checkbox"/> Bat |

**UNIT
4****Plant Investigation**

A. Answer the following question.

i). Name different parts of a plant.

Ans: There are many parts of a plant e.g. roots, stems, leaves, flowers, buds and fruits, etc.

ii). Why is the leaf called the “Food Factory” of the plant?

Ans: Leaves are very important parts of the plants. Leaves prepare food for the plants with the help of sunlight. They are known as the food factory of the plants.

iii). What is the function of roots?

Ans: Roots absorb water and mineral salt from the soil for the plant.

iv). What is trunk?

Ans: Big trees have hard stems which is called “Trunk”.

v). Why do butterflies and honey bees visit the flower?

Ans: Butterflies or honey bees visit flowers to get nectar.

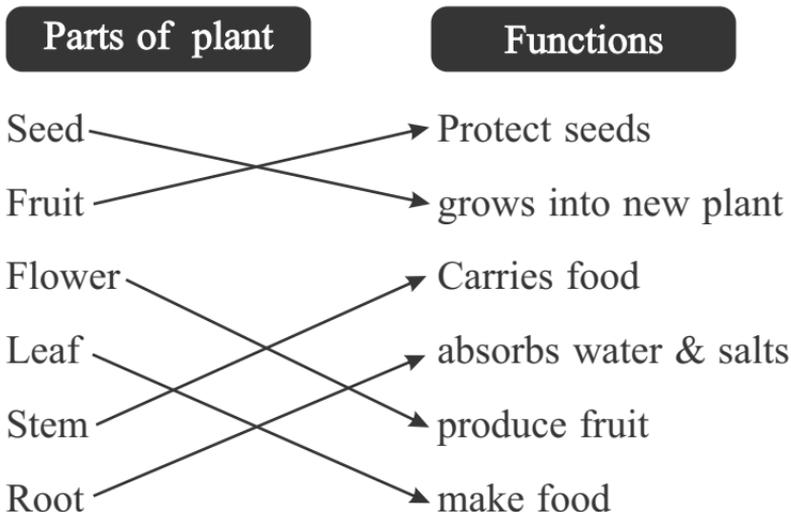
vi). Name some fruits which have more than one seeds?

Ans: Seed are present in many fruits. Some fruits have many seeds e.g. Orange, Watermelon etc.

B. Write your answers in the boxes to complete the given sentences.

- i). **Root** is an underground part of the plant.
- ii). Leaves prepare **food** for plant.
- iii). **Mango** is a one seeded fruit.
- iv). Seeds are present inside **fruits** .
- v). Seeds have **baby plant** inside them.
- vi). Leaves are usually **green** in colour.

D. "List A" have the names of the parts of a plant and "List B" have their functions. Join the part to its function by drawing lines:



**UNIT
5****Electricity**

A. Answer the following questions.

i). What can electricity produce?

Ans. Electricity can produce heat, light, sound and coolness. It can make many machines to work.

ii). Write the two sources of electricity.

Ans. i). Electricity come from power stations.

ii). It may come from batteries.

iii). How do electricity produce into the batteries?

Ans. Batteries also can produce the electricity. In batteries chemicals are present which help to make electricity.

iv). How do electricity produce in power stations?

Ans. Main electricity is produced at the power-stations using coal, oil, water or gas.

v). Why should we save electricity?

Ans. Electricity is very valuable. We should not waste it, rather we should save electricity.

vi). Why should we remember safety rules while using electricity?

Ans. We should use electricity with great care because it may be dangerous for us.

vii). Write three safety rules of using electricity.

- Ans.** i) Do not touch switches and other electrical fitting with wet hand.
 ii) Never connect wires to a socket without a plug.
 iii) Get the wiring in tested the house from time to time and make sure that wires are in good condition.

B. Write your answers in the boxes to complete the given statements.

- i). Do not touch plug with wet hand.
 ii). Main electricity is made at the power station.
 iii). In batteries chemicals are present which make electricity.
 iv). Electricity is very valuable.
 v). Do not use machine that has broken wire.

C. Write "T" for true and "F" for false.

- i). There are two sources of electricity. **T**
 ii). Electricity is not the necessity of life. **F**
 iii). Do not touch switches with wet hand. **T**
 iv). Torch also uses electricity. **T**
 v). Electricity can not produce light. **F**

Computer: Main Supply	Camera: Battery
Toy-doll: Battery	Radio: Battery
C.D. Player: Main Supply	Torch: Battery
Television: Main Supply	Watch: Battery

E. Match the column "A" with column "B":

"A"

"B"

- | | | |
|-----------------------|---|-----------------------------|
| Do not touch switches | → | into socket without a plug. |
| Never connect wires | → | to plug things in. |
| Do not put anything | → | that has broken wires. |
| Always get an adult | → | with wet hands. |
| Do not use machine | → | into socket. |

F. When you switch on the things below, do you get movement, heat, sound or light. Write (m, h, s or l) in each circle:



(M)



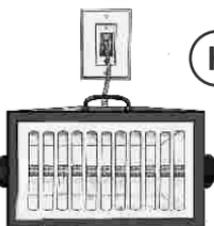
(M)



(S)



(S)



(H)



(L)

(S)



**UNIT
6****Force**

A. Answer the following questions.

i). What is position?

Ans. The position of an object is relative to another objective. For example, the location of a house (an object) is relative to another house.

ii). What do you know about pull or push?

Ans. Push and pull are the forces that can change the position of any object.

iii). How can you change the position of an object?

Ans. Whenever we want to change the position of we have to pull or push it.

iv). What is direction of force?

Ans. The direction in which the object is pushed or pulled is called the direction of force.

v). Can you see a force?

Ans. We cannot see force but we can see what it does.

vi). How can you find that there is a force?

Ans. An object is moving, it is due to force.

vii). How force can change the shape of an object?

Ans. Force can change the shape of any object e.g. when we press a tennis ball, it will deform.

viii). How force can increase the speed of an object?

Ans. Force has ability to increase the speed of any moving object. We know that a sail boat moves in water due to only by the force of wind. When the wind is fast the boat moves faster than before. When the wind is slow boat moves slowly.

B. Write your answer in the boxes to complete the given statements.

- i). Pull and push are forces.
- ii). Force can change the speed of a moving object.
- iii). Force is needed to push or pull.
- iv). While lifting a water bucket from a well, you pull the rope.
- v). The direction in which the object is pushed or pulled is called the direction of force.

C. Write "T" for true and "F" for false.

i). Pull or push are not forces.

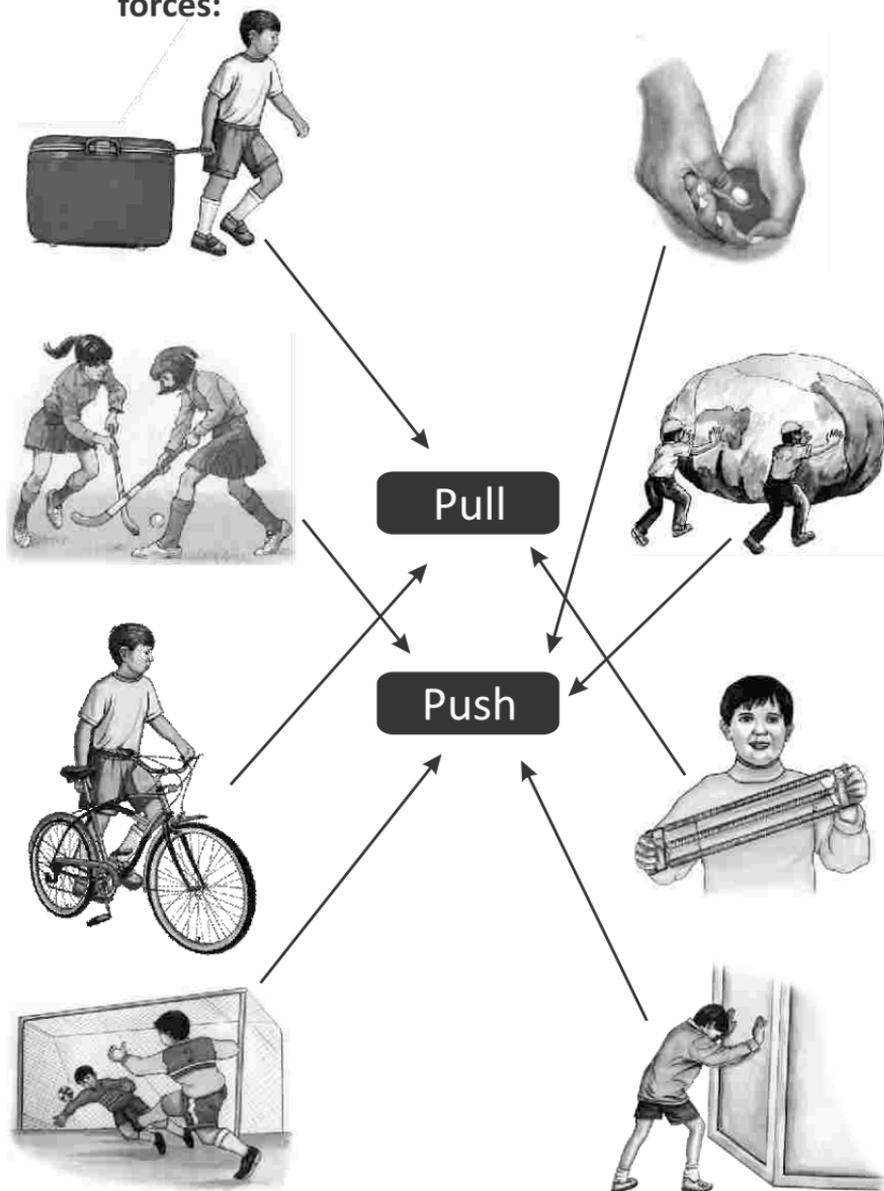
F

ii). The position of an object is relative to others object. **T**

iii). Pull or push cannot change the position of an
o b j e c t .

F

D. Match the following pictures with their related forces:



**UNIT
7****Sound**

A. Answer the following questions.

i). What are musical sounds? Give examples.

Ans. You know that some sounds leave very pleasant effects on ears. These sounds are called “Musical Sounds”. For example, sounds of cuckoo, sound of flute, sound of fan, sound of drum, sound of hen, etc.

ii). What is noise? Give examples.

Ans. You know that some sounds do not leave pleasant effects on ears. These sounds are called “Noise”. For example, sound of autos, screaming of people, roaring of lion, etc.

iii). How do the sounds produce?

Ans. There are many ways to produce sound. Some sounds are made when something moves. If we shake school bell it will ring and produce sound. When we beat drum it will produce sound. When the wind blows the leaves moves and make sounds.

iv). How do the people hear who are deaf?

Ans. Deaf people use hearing aid to hear.

v). Which sound to is louder?

Ans. Roar of lion is a louder sound.

vi). Write two purposes of making sounds.

Ans. For example:

- i) Animals and human beings use sounds to communicate.
- ii) The fire alarm sound gives us the message to danger.

B. Write your answers in the boxes to complete the given statements:

- i). Flute is a musical sound.
(Noise, Musical, Natural)
- ii). Flies or honey bees hiss .
(Buzz, Hiss, Cry)
- iii). All animals have two ears.
(Two, Three, Four)
- iv). Fire alarm can warn us of danger.
(Amuse, Warn, Communicate)
- v). We can make loud sound when we shout .
(Shout, Whisper, Cry)

C. Write "T" for true and "F" for false.

- i). We can hear sound with our nose. **F**
- ii). Sounds made far away are louder. **F**
- iii). Some sounds occur naturally. **T**
- iv). Dumb people cannot hear sound. **F**
- v). Sound produces for different purposes. **T**

D. Match the sounds with their related sources.

Roar Ding Hiss Cry

Buzz Honk, Beep, Beep

E. Words Puzzle:

			N								
			O			S	O	U	N	D	S
	S		I			C					
W	H	I	S	P	E	R					
	O		E			E					
	U					A					
	T					M					

Words Bank:

- Sounds Noise Shout Whisper
 Scream

**UNIT
8****Matter and its Properties**

A. Answer the following questions.

i). Define Matter?

Ans. All these things are made of different materials around us. Matter is a thing from which every thing is made. The word “Matter” is used for all the materials.

ii). How many states of matter are there?

Ans. There are three states of matter:

i). Solid ii). Liquid iii). Gas

iii). Write down the differences and similarities between solid and liquid?

Ans. Solids are hard and have definite shape while solids and liquids have weight but liquids have no definite shape but have definite volume.

iv). Write down the differences between liquids and gases?

Ans. Liquid have no definite shape but have definite volume and gases do not have definite shape and volume.

v). What are molecules?

Ans. They consist a group of two or more atoms. It is simplest unit of a chemical substances.

vi). How are molecules of solid packed?

Ans. Molecules are very closely packed and there are no spaces in solid.

B. Give Reasons?**i). Solids have definite shape and volume.**

Ans. Because their molecules are very closely packed and there are no spaces.

ii). Liquids have definite volume but do not have definite shapes.

Ans. There are more spaces between molecules of liquids than the solid. So, liquids have no definite shape but have definite volume.

iii). Gases have no definite shape and volume.

Ans. In gases molecules can move any where and it is very easy to compress them so, they do not have definite shape and volume.

C. Write your answers in the boxes to complete the given statements?

i). Have definite shape solids.

ii). The amount of space taken up by matter is called its "volume".

iii). There are three states of mater.

iv). Liquid can flow.

v). Gases do not have definite shapes and volume.

D. Match the column "A" with column "B":**"A"****"B"**

Have weight and occupy space.

Have definite shape and definite volume.

Have definite shape but do not have definite volume.

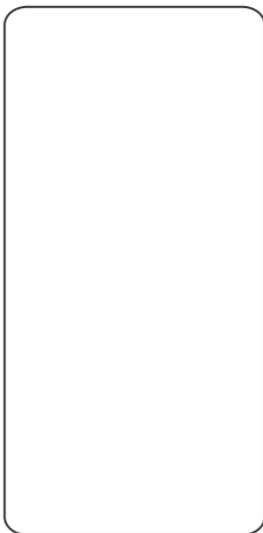
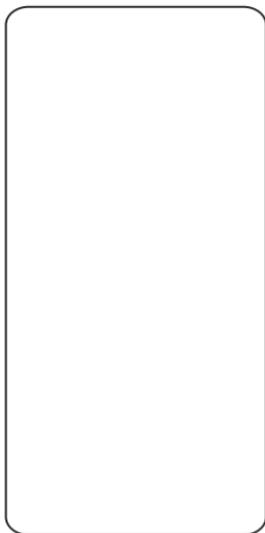
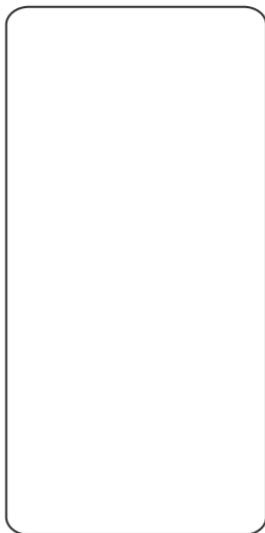
Have do not definite shape and volume.

Gas

Liquid

Matter

Solid

E. Draw the pictures of molecules of Solids, Liquids and gases:

**UNIT
9****Air**

A. Answer the following questions.

i). What is atmosphere?

Ans. The atmosphere is the mixture of different gases around the earth.

ii). What is air?

Ans. Air is a mixture of different gases. It is very necessary for our life. We cannot live without air.

iii). Which are the most common gases in the air?

Ans. The most common gases in air are nitrogen and oxygen. Oxygen is 21% and nitrogen is 78% and 1% are other gases.

iv). What do you know about wind?

Ans. Moving air called “Wind”.

v). Explain with simple activity that air is needed for burning?

Ans. Air is needed to burn things. Without oxygen burning is not possible. Over a burning candle with an empty glass it stops burning after some time. it require more air to keep burning. This shows that air is necessary for the process of burning.

vi). Write three uses of air?

Ans. (i) Air is used for cooling in summer season.
(ii) Air is needed to burning things.
(iii) Air is used for breathing.

B. Write your answers in the boxes to complete the given statements.

- i). Moving air is called wind.
- ii). A wind-vane can tell the direction of the wind.
- iii). Air is the mixture of different gases.
- iv). The air is all around us.
- v). Plants take carbon dioxide to make their food.

C. Write "T" for true and "F" for false:

- i). 27% oxygen is present in the air.

F

- ii). Dust storms are the very fast moving air. **T**

- iii). Air does not help in burning. **F**

- iv). We can live without air. **F**

- v). There is no air in the space. **T**

- vi). There is less air on the mountains and deep in

t h e

s e a .

"A"

"B"

Animal breathe in

carbon dioxide

Plant take for food making

no air

Space

energy

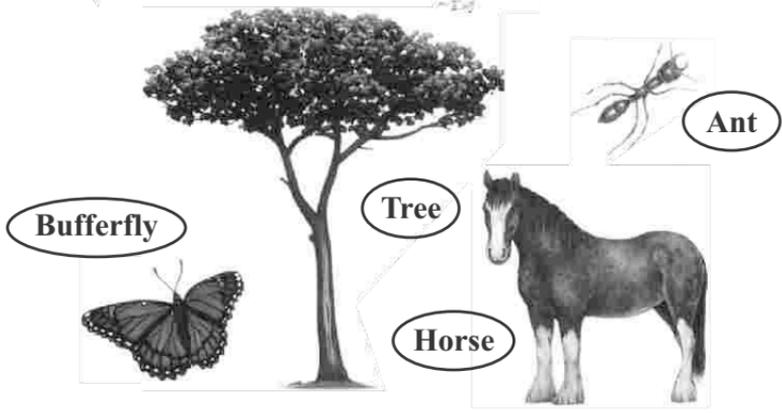
Food converts into

air tank

Astronauts need

oxygen

E. Circle these things that need air to keep alive:



**UNIT
10****Our Seasons**

A. Answer the following questions.

i). What can you feel in hot days?

Ans. We feel very heat in hot days.

ii). What can you feel in cold days?

Ans. We feel very cool in cold days.

iii). Which type of clothes do we like to wear in summer?

Ans. We like to wear thin and light-colour clothes in summer.

iv). Which type of clothes do we like to wear in winter?

Ans. We like to wear thick and dark colour clothes in winter.

v). In which days do we use umbrella?

Ans. We use umbrella in rainy and sunny days to save ourselves from extreme weather.

vi). What is gale?

Ans. When wind blows very fast, it is called a “gale”.

vii). What is breeze?

Ans. When wind blows slowly it is called a breeze.

viii). What do you know about storm?

Ans. When a strange gale comes with a rain or snow, it is called a “storm”.

ix). What damage can a storm cause?

Ans. A strong storm can cause a lot of damage.

B. Write "T" for true and "F" for false.

- i). We feel heat in summer. **T**
- ii). We feel cold in winter. **T**
- iii). We feel cold in summer. **F**
- iv). We wear dark coloured clothes in winter. **T**
- v). The days are long and night are short in winter. **F**

C. Fill in the blanks.

- i). Sky looks very dark due to darkness.
- ii). Children and youngster like rainy weather.
- iii). Hot wind blows in summer season.
- iv). In summer season days are hot and long and nights are short.
- v). In Winter season night are long.
-

**UNIT
11****Our Earth**

A. Answer the following questions.

i). How much area the earth is covered with water?

Ans. Water covers more than 70 percent of the earth.

ii). How much surface of the earth is covered with land?

Ans. Land covers only about 30 percent of Earth.

iii). Which rank has earth among planets according to its size?

Ans. Earth ranks fifth in size among the planets.

iv). What is crust?

Ans. The upper surface of the earth is called the crust of the earth.

v). What is the thickness of the mantle?

Ans. The mantle is about 2250 kilometer thick.

B. Write "T" for true and "F" for false.

i). The earth consists of three layers. **F**

ii). Earth ranks fifth in size among planets. **T**

iii). The mantle lies below the core. **F**

iv). The surface of the earth is called crust. **T**

v). Earth is perfectly round. **F**

C. Write your answers in the boxes to complete the given statements

- i). Earth is not perfectly round.
(perfectly, not perfectly)
- ii). Water covers more than 70 percent of earth.
(30,70)
- iii). The upper surface of the earth is called crust .
(core, crust)
- iv). The inner core consists solid iron, nickle.
(molten, solid)
- v). Mantle is about 2250 kilometers thick.
(2250, 1600)

D. Match the column "A" with column "B":

"A"

"B"

