

DELHI PUBLIC SCHOOL-GANDHINAGAR

SESSION 2021-2022

MY BUDDY

CLASS IV

ENVIRONMENTAL SCIENCE



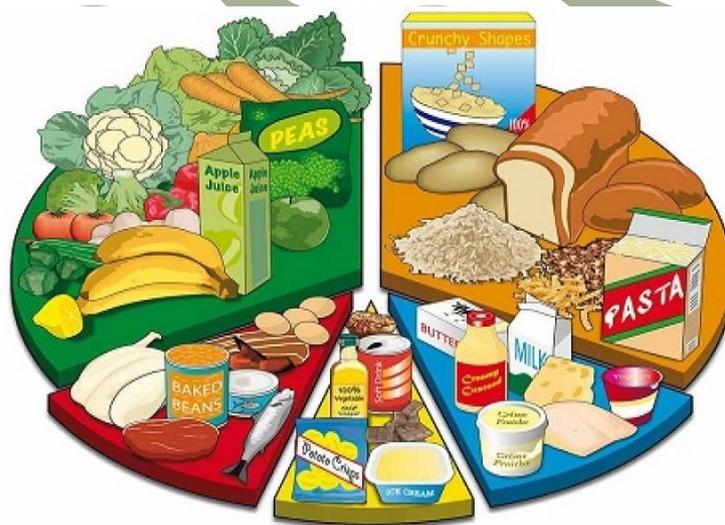
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Chapter-1 FOOD

- **What is in your platter today?**



Sr.No	Energy-giving food	Body-Building food	Protective food

- **ACTIVITY- 1:- Food Bazaar**

- **ACTIVITY- 2:-**

❖ Plan a balanced diet for a whole day according to the table given below.

	Food items	Nutrients you get
Breakfast		
Lunch		
Dinner		

S.E ACTIVITY (AIL): Prepare a dish of your choice which has all the nutrients.

Q 1- How do we preserve following food items :

Strawberry - _____ Pulses /Grains- _____

Potato - _____ Mixed Fruit- _____

Mango - _____ Meat/fish- _____

Milk - _____ Lemon/Chili- _____

Q 2- Give reasons :

i) Labourers should eat more carbohydrate rich food.

Ans- _____

ii) We should eat a variety of food.

Ans - _____

iii) Pooja hates to drink milk everyday. How will it affect her bones and teeth?

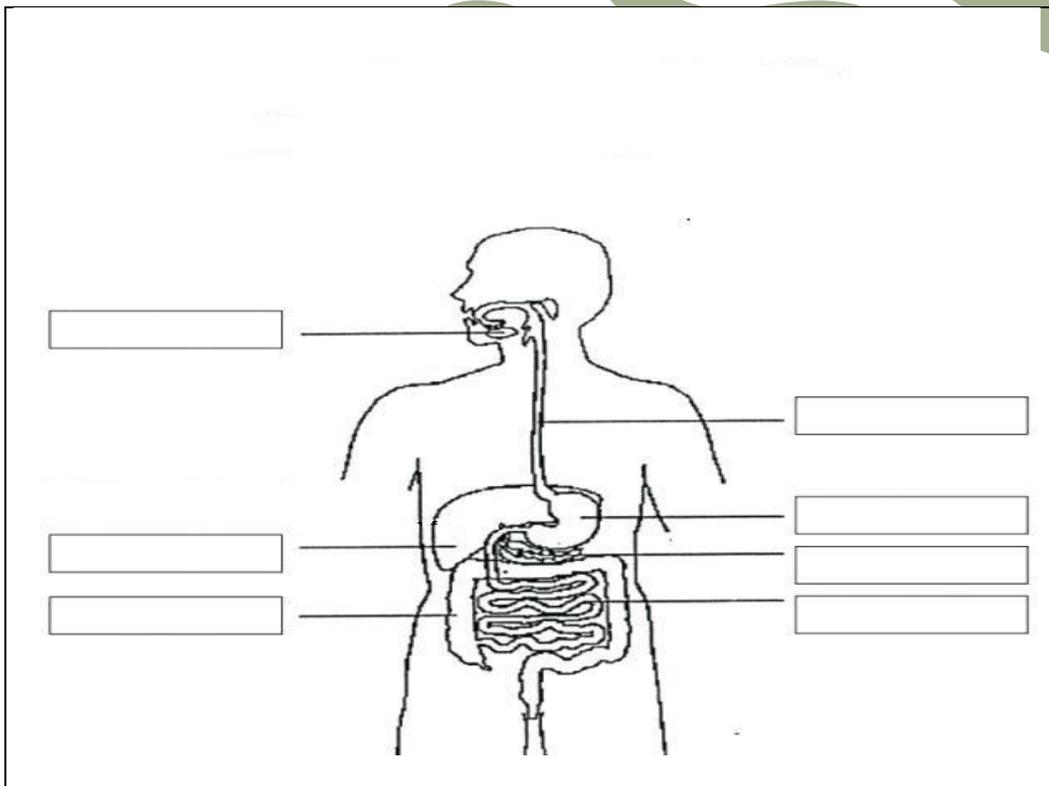
Ans- _____

Q 3 Give the functions of the following nutrients-

- i) Carbohydrate-
 - ii) Protein-
 - iii) Fats-
 - iv) Vitamins-
 - v) Minerals-
 - vi) Roughage-
 - vii) Water-
-

Chapter 2 - Digestion

Q 1- Label the diagram of the digestive system.



Q 2- Complete the table below with the function of the main parts of the digestive system. Colour the above diagram with the mentioned colour theme.

PARTS	FUNCTION IN DIGESTION
Mouth (Colour Pink)	
Tongue (Colour red)	
Oesophagus (Colour Orange)	
Stomach (Colour green)	
Small intestine (Colour blue)	
Large intestine (Colour yellow)	
Anus (Colour purple)	

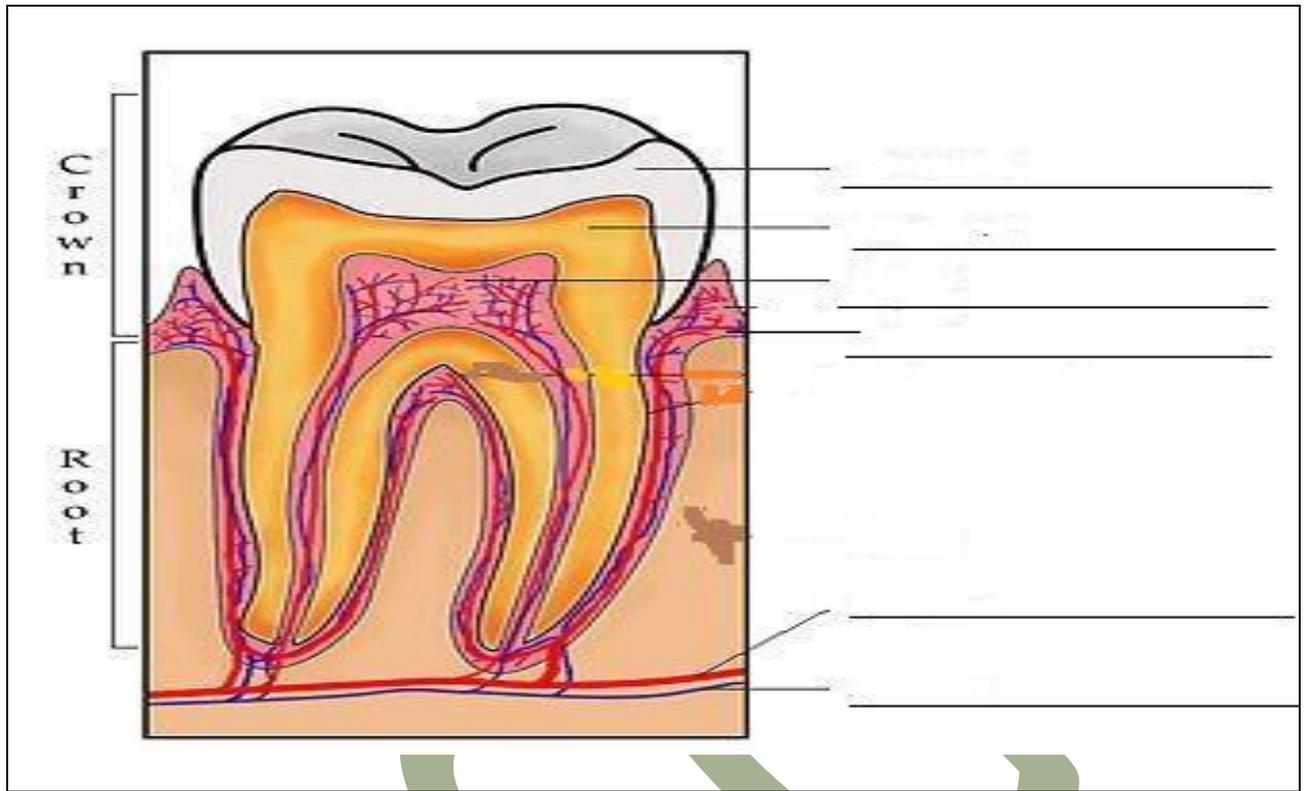
Q 2- Choose and tick the correct eating habit .

- i) Eat your food any time / Eat your food at a fixed time.
- ii) Never be in a hurry to finish food / Finish your food in hurry.
- iii) Rinse your mouth thoroughly after eating / Wipe your mouth after eating.
- iv) Play after eating. / Rest a while after eating.
- v) Eat fresh fruits and vegetables / Eat ice-creams , chips.

S.E ACTIVITY (AIL): To show the function of the digestive system with the help of paper towel, bread, water, vinegar.

Chapter 3- Teeth and Microbes

Q 1- Label the parts of the tooth.



Q 3- Match the columns-

COLUMN A

COLUMN B

	Name of the microbe		Diseases they cause
I	Bacteria		Measles, polio
ii	Protozoa		Malaria, dengue
iii	Virus		Ringworm, dandruff
iv	Fungi		Typhoid, food poisoning

Ans:- i) _____ ii) _____ iii) _____ iv) _____

SEA 1- Make a chart on different types of microbes and disease caused by them.

MOCK TEST PAPER FOR PERIODIC TEST-1

Q-I **Answer the following questions in one word or one sentence:** **10×1=10**

1. Name the nutrient which helps you to grow.
2. Which mineral keeps your bones and teeth strong?
3. At which place churning of the food takes place?
4. Which are the smallest microbes?
5. Name any two preservatives.
6. The bacteria which live in our intestine are harmful or harmless?
7. Is starch soluble or insoluble?
8. Name the digestive juice found in the mouth?
9. How much part of your body is water?
10. Give names of two food items which are rich in iron .

Q-II **Answer the following questions in short:** **5×2=10**

1. Why do we need food?
2. Give any two functions of protective food?
3. Name any four methods of preserving food?
4. Write any two good eating habits?
5. What is the function of the large intestine in the process of digestion.

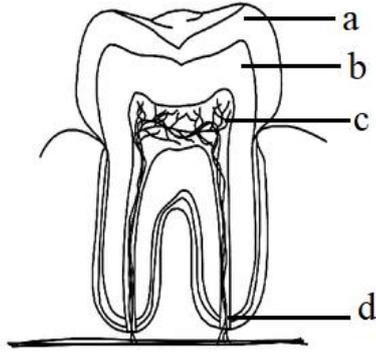
Q-III **Answer the following questions in detail:** **2×3=06**

1. Why is water important for our body ?
2. Write any three good eating habits?

Q-IV **Do as directed:** **1×4=04**

1. Look at the picture given below and answer the following questions:

(i) What does the following diagram represent ?



(ii) Label a, b, c & d.

(iii) Write the function of any one part.

Chapter 4- Matter

● **SUBJECT ENRICHMENT ACTIVITY:-**

● **Aim/ Objective-** To check the solubility of given substances in water.

● **Materials Required-** _____, _____, _____
_____, _____, _____.

● **Method-** i) _____
ii) _____
iii) _____
iv) _____
v) _____

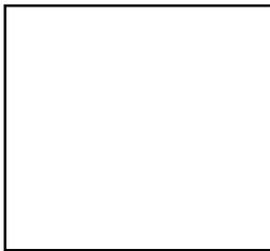
● **Observation-**

Sr.No	Name of the substance	Soluble	Insoluble

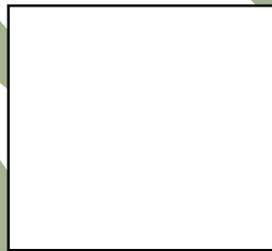
- **Conclusion-** _____

_____.

Q 2- Demonstrate the molecular arrangement by using bindis in -



ICE



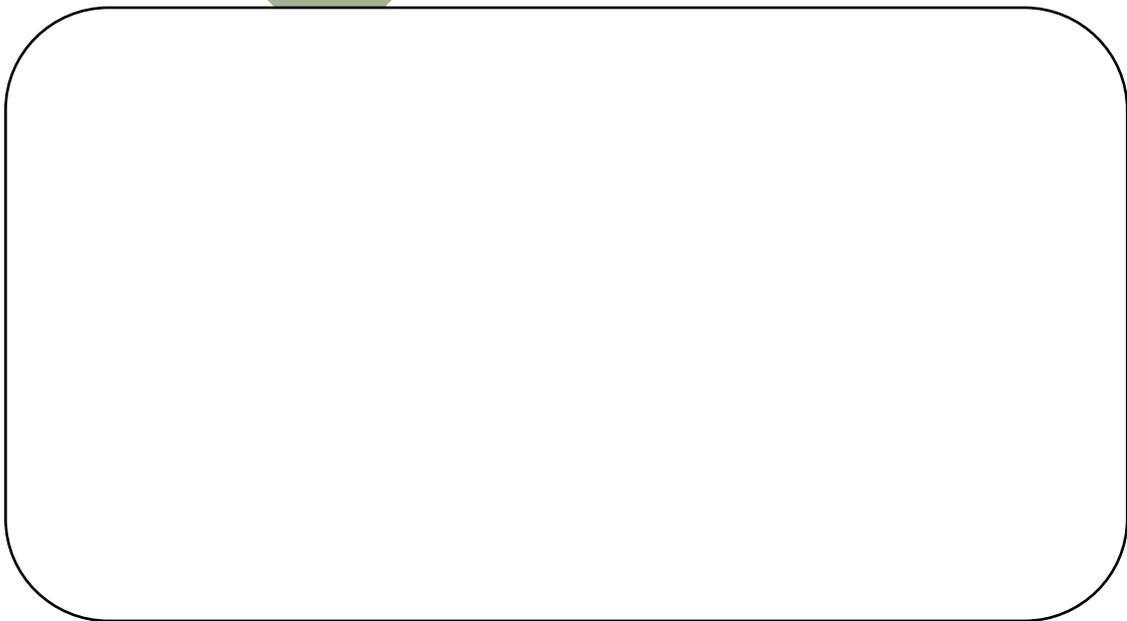
WATER



WATER-VAPOUR

Chapter 6 - How Plants Make Food

Q 1- Show the process of photosynthesis by using a dry leaf with a twig and markers.



● **Answer the following questions:-**

i) Name the substance due to which the leaves appear green in colour.

Ans- _____.

ii) Name the process by which plants make their food.

Ans- _____.

iii) Name the materials needed for the plants to make their food.

Ans- _____.

iv) Name the gas that leaves take in to make food.

Ans- _____.

v) What are the small openings through which air enters called?

Ans- _____.

Q-3 Give reasons-

i) Plants do not make food at night.

Ans.- _____

ii) Non green plants like mushrooms cannot make their own food.

Ans. _____

iii) If all animals and human beings on the Earth die, plants will not survive.

Ans. _____

iv) If all the plants of this planet will cut off animals will also die.(give 2 reasons)

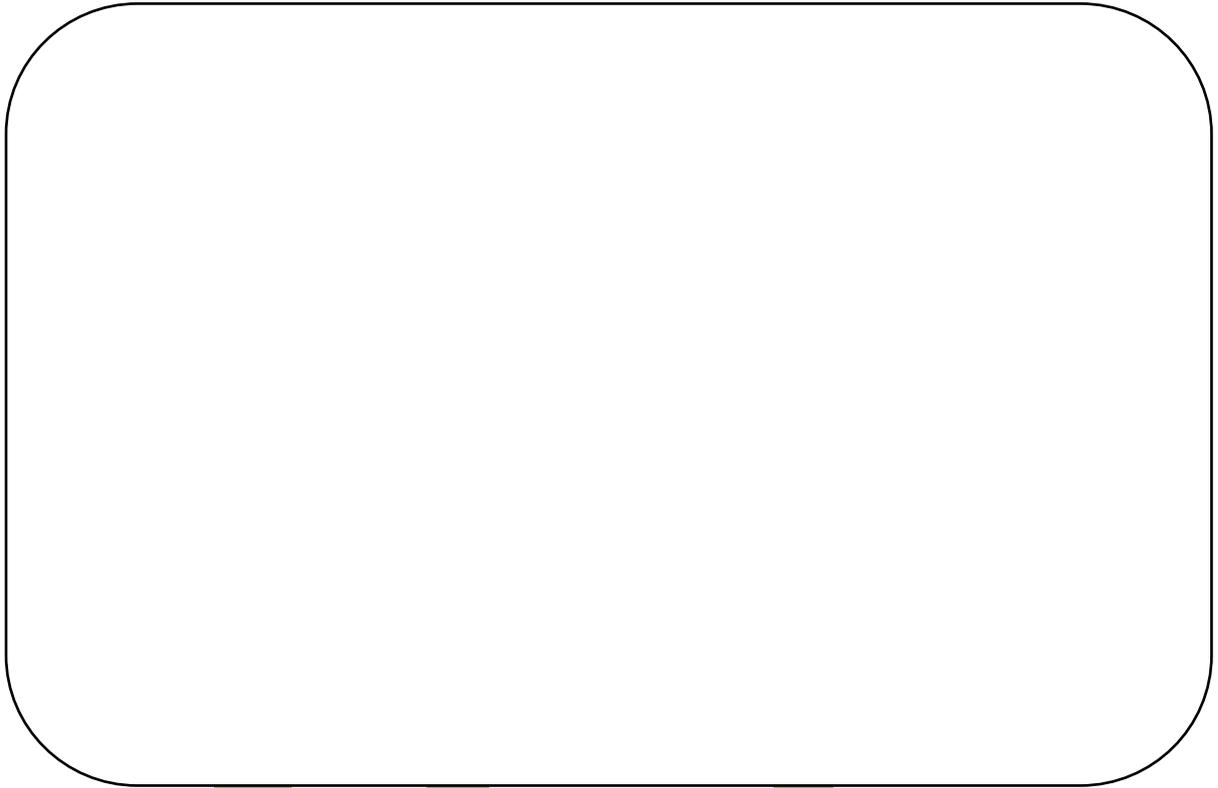
Ans. _____

Chapter 7- Adaptations in Plants

Earth Day



Q 1- Grow a plant in your neighbourhood and take a picture of it. Paste it in the given place. Write the name and adaptive feature of it.



- Common Name :- _____
- Botanical Name :- _____
- Adaptive Features :- _____

Q-2 Identify the place where the following plants are found by reading their adaptive features-

S.no.	Adaptive features	Places where they are found	Examples (2)
1.	Small leaves, or modified into spines, green fleshy stems		
2.	Plants grow in swampy areas, have breathing roots		
3.	Tall, straight trees, needle like leaves, no flowers ,cones containing seeds		

4.	Lots of spreading branches, evergreen or deciduous trees		
----	--	--	--

Q-3 Look at the following pictures and write the type of plant

S.no.	Picture	Type of plant	Examples (2)
1.			
2.			
3.			
4.			
5.			

Q-4 Give reasons-

i) The leaves of water lily and lotus have stomata on the upper side.

Ans.- _____

ii) Underwater plants have long thin leaves.

Ans. _____

iii) Plants on mountains shed their leaves in winter.

Ans. _____

QUESTION BANK L-1 TO L-7

L-1 Food

Q.I. One word or one sentence answers:-

1. Define nutrients.
2. Give two sources of carbohydrates.
3. What is the other name of roughage?

Q.II Short Questions:-

1. Why should we preserve food?
2. What are the uses of water in our body?
3. Why do we need food?

Q.III Long Questions:-

1. Write a short note on fats.
2. What is roughage? How is it important?
3. Name the four groups with two examples into which food items are divided.
4. How do we preserve food?

L-2 Digestion

Q.I. One word or one sentence answers:-

1. Which digestive juice is found in the mouth?
2. In which part of the digestive system water is being absorbed?
3. Define digestion.

Q.II Short Questions:-

1. Name the organs of the digestive system.
2. Describe the process of digestion in the stomach.

Q.III Long Questions:-

1. Describe the process of digestion in the mouth.
2. Write good eating habits.
3. Why should we rest a while after eating?

L-3 Teeth and Microbes

Q.I. One word or one sentence answers:-

1. How many kinds of teeth do we have?
2. To whom should we go to get our teeth checked?
3. Which nutrients our food should contain to have healthy teeth?

Q.II Short Questions:-

1. Name the sets of teeth human beings have during their lifetime.
2. Explain enamel, dentine and pulp.
3. Write any three uses of bacteria.

Q.III Long Questions:-

1. Name the different kinds of teeth humans have. Write their number, function and shape in a tabular manner.

L-4 Matter

Q.I. One word or one sentence answers

1. What is matter?
2. In how many states matter exists?

Q.II Short Questions:-

1. Write differences between soluble and insoluble substances.
2. With the help of a diagram show the molecular arrangement in solid, liquid and gas.
3. What is a saturated solution?

Q.III Long Questions:-

1. State differences between liquids and gasses.
2. Explain how matter can change from one state to another?

L-6 How plants make food

Q.I. One word or one sentence answers:-

1. Name the green substance which leaves have.
2. Define photosynthesis.

3. Through which part does carbon dioxide enter the leaf?

Q.II Short Questions:-

1. Why is sunlight important for a plant to make its food?
2. Where do plants store their extra food?
3. How do plants use the food they prepare?

Q.III Long Questions:-

1. Explain the process of photosynthesis with the help of a diagram.
2. Why should we maintain the balance between the plants and animals in nature?

L-7 Adaptations in plants

Q.I One word or one sentence answers:-

1. What do we call the plants which do not shed their leaves throughout the year?
2. Where are Conifers found?
3. In which places mangroves grow?

Q.II Short Questions:-

1. Write the adaptations found in desert plants.
2. What are fungi? From where do they get their food?
3. Give two examples of- (a) Insectivorous plants (b) Fungi (c) Desert plants (d) Conifers

Q.III Long Questions:-

1. Write a short note on aquatic plants.
2. What are breathing roots?

Mock Paper of Half Yearly Examination

Instructions :-

- (i) *All the questions are compulsory.*
- (ii) *Answer the questions as per the instructions.*

Q-I Answer the following questions in one word or one sentence : 8×1=8

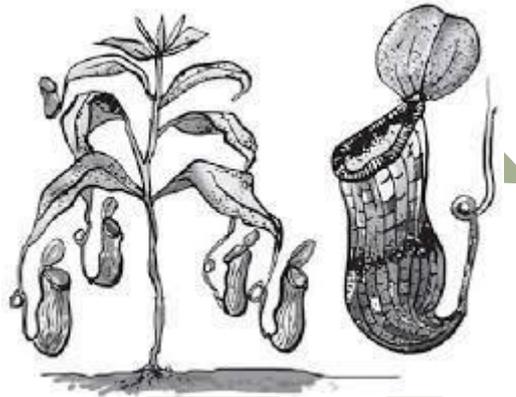
1. How many nutrients does a food contain? (give number)
2. Sugar and Starch are the examples of _____.
3. What do we call the indigestible plant substance?
4. Name the digestive juice present in the mouth.
5. How many milk or temporary teeth do we have in our mouth?
6. What do we call the amount of space matter takes up?

7. Name the openings through which air enters inside the leaf.
8. In which season does cacti remain dormant?

Q-II Answer the following questions in short :

6×2=12

1. Look at the picture shown below and answer the following:-



- i) Identify and write the name of the plant shown.
 - ii) Give another example of the same type.
2. What are deciduous trees?
 3. A new plant which is white in colour. Do you think it can make its own food? Why or Why not?
 4. How can you make a saturated solution in water?
 5. What is a cavity? When does it hurt?
 - 6.i) Name the set of teeth which replaces your milk teeth.
 - ii) Mention the number of teeth an adult person has.

Q-III Answer the following in detail :

7×3=21

1. Explain body-building food. Write their functions and sources.(any two)
2. Look at the given picture and answer the following :-
 - i) Identify the plant shown.



- ii) Write the types of roots they have?
- iii) Name the places they are found.
3. What is the role of Calcium and Iron in our diet. What are their sources?
4. How do plants use the food they prepare?
5. Explain the following parts of a tooth:-
- (i) Enamel (ii) Dentine (iii) Pulp
6. Write the three states of matter with one example of each.
7. Differentiate between soluble and insoluble substances. Give two examples.

Q-IV

Do as directed:-

6×4=24

1. Write the adaptations found in desert plants.
2. Why should we maintain the balance between plants and animals in nature.
3. Write two points of differences between solids and liquids.
4. Write 2 uses of Bacteria and Fungi each.
5. Name the different kinds of teeth humans have. Write their number and functions.
6. Write any 4 good eating habits.

Q-V

Write a short note on the following :-

3×5=15

1. How do plants make food? Explain the process.
2. Explain how matter can change from one state to another with the help of a diagram.
3. Write the role played by the stomach and small intestine in the process of digestion.

TERM- 2

Chapter 8 - Adaptations in Animals

- Think and Write how the following animals camouflage.

Leopard



Monarch Butterfly



Polar Bear



Thorn Bug



- **Make a list of Predators and Prey found in nature.**

Predators :- _____

Prey :- _____

- **Think and answer**



1. Who will spend more energy to find food – a herbivore or a carnivore? And why?

_____.

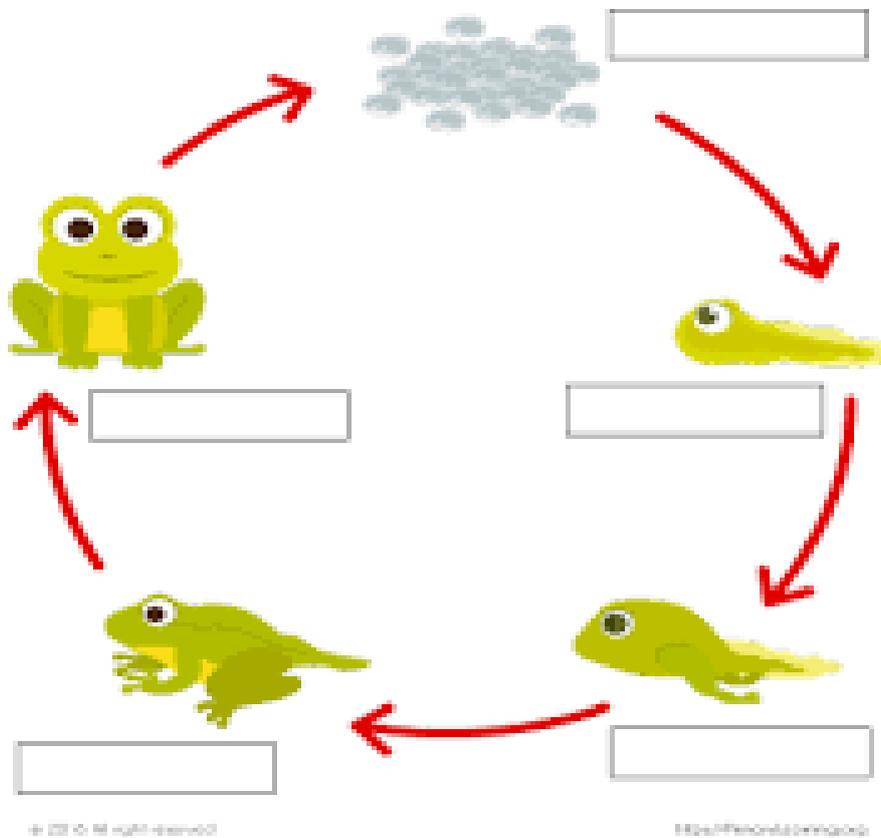
S.E ACTIVITY (AIL): Change the animals to adapt in different habitats.

Chapter 9 - Reproduction in Animals

- **Identify and label the different stages in the life cycle of a frog using the words from the word box.**

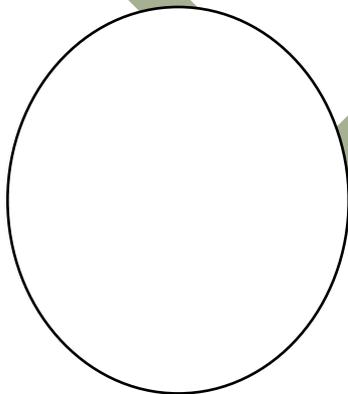
Adult frog Tadpole with legs Eggs Tadpole Young frog

Frog Life Cycle



- Differentiate the following animals as mammals and egg-laying animals.

Snakes ant man horse crocodile dog



S.E ACTIVITY (AIL): Make a model of life cycle of butterfly or frog.

WORKSHEET

Q-1. What treatment or First aid you give someone in the following situations:-

i) Small cut:- _____

ii) Minor Burns:- _____

iii) Insect bite:- _____

iv) Nose bleed:- _____

v) Fainting:- _____

Q-2. Fill in the blanks:-

i) You should follow _____ to avoid accidents.

ii) You can find _____ and _____
in a first aid box.

iii) Burns should not be washed with _____ water.

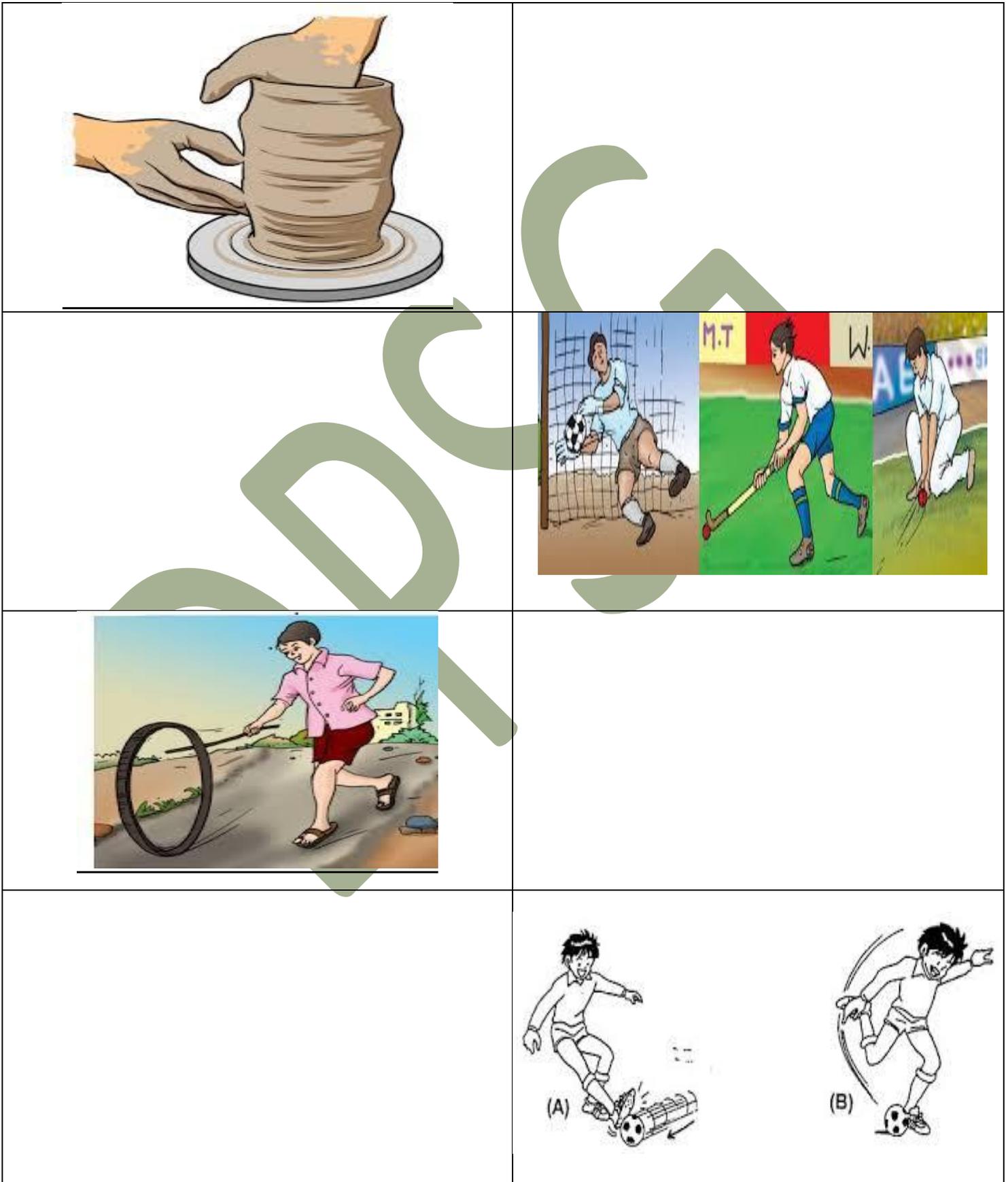
iv) You should cross the road at a _____ only.

v) _____ lotion/cream should be used to kill germs.

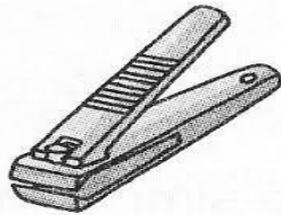
ACTIVITY:- Making of First Aid Box. (With the help of an old shoe box)

Chapter 11 – Force, Work and Energy

Q-1. Identify the effects of the force.



Q-1. Identify the type of different simple machines used in the following complex machines.





SUBJECT ENRICHMENT ACTIVITY 3:-Make a model of Simple Machines (all six)

Q-III. Answer the following in detail.

2x3=6

1. How do the following animals breathe:-

- i) Camel ii) Fish iii) Frog

2. What is force? State its two effects.

Q-IV. Do as directed.

1. Describe the structure of an egg with the help of a diagram.

Chapter 12 –The Earth and the Solar System

Q-1 Who am I ?

1. Which planet rotates the fastest and is the largest in the solar system.-_____.
2. Name one country in the Northern Hemisphere-_____.
3. Name one country in the Southern Hemisphere-_____.
4. At what angle does the Earth's axis run from North Pole to South Pole-_____.
5. Which satellite reflects sunlight from its surface? _____.

● Draw/Mark the following on the Earth:-

- i) Equator ii) Axis iii) Northern Hemisphere
iv) Southern Hemisphere v) North Pole vi) South Pole



S.E ACTIVITY (AIL): 1. Make a model of the Solar System using an old CD, paper and colourful bindis.

2. Make a Sundial to observe rotation of Earth.

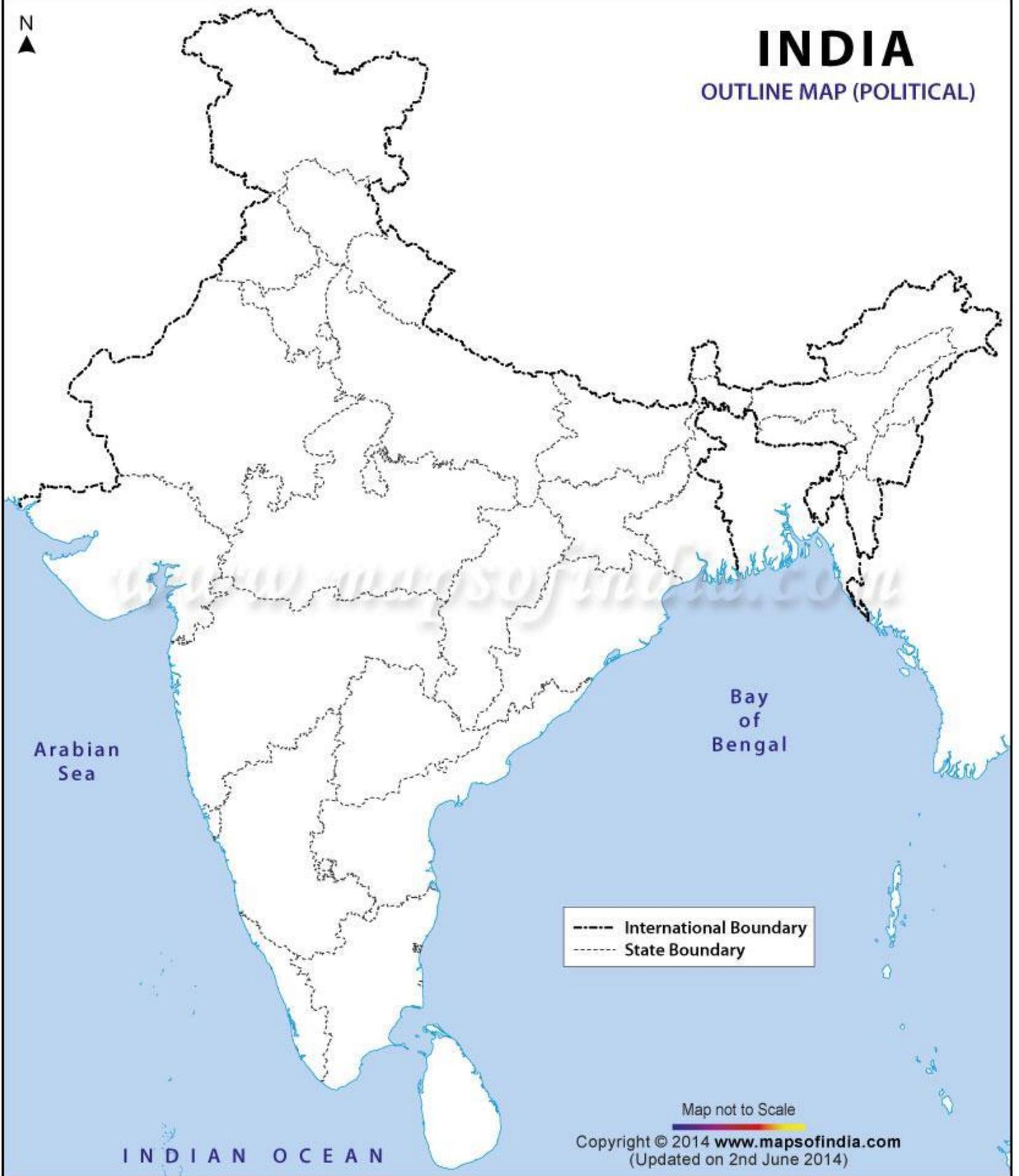
ACTIVITY-2:- Mark all the 28 States in a Political Map of India.

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▲

INDIA

OUTLINE MAP (POLITICAL)



Chapter 13 –Air, Water and Weather

Q-1. Find out from where you get water at your house.

- i) Narmada Canal
- ii) Sabarmati River (AMC)
- iii) Borewell

Also, select the type of water filter you should use.

Q-2. If there are no waterworks in a town, is it safe to drink the water available in that town? Why, or why not?

Q-3. Fill this chart for different seasons:-

Name of the season	Changes seen	Food eaten	Clothes worn
Summer			

Winter			
Autumn			
Spring			
Monsoon			

S.E ACTIVITY (AIL) :-

1. Presentation on Air, Water, and Land Pollution. (Group Activity)
2. Make a weather report for a week in your scrapbook mentioning maximum minimum temperature and weather condition of each day.
3. Experiment on effect of sun on land and water.

Chapter 14 –Our Environment

Q-1 Write any five ways in which you have cared for your environment.

1. _____.
2. _____.
3. _____.
4. _____.
5. _____.

Q-2 Explain how this factory is causing –



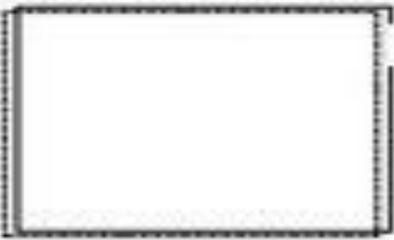
a) Air pollution

b) Water pollution

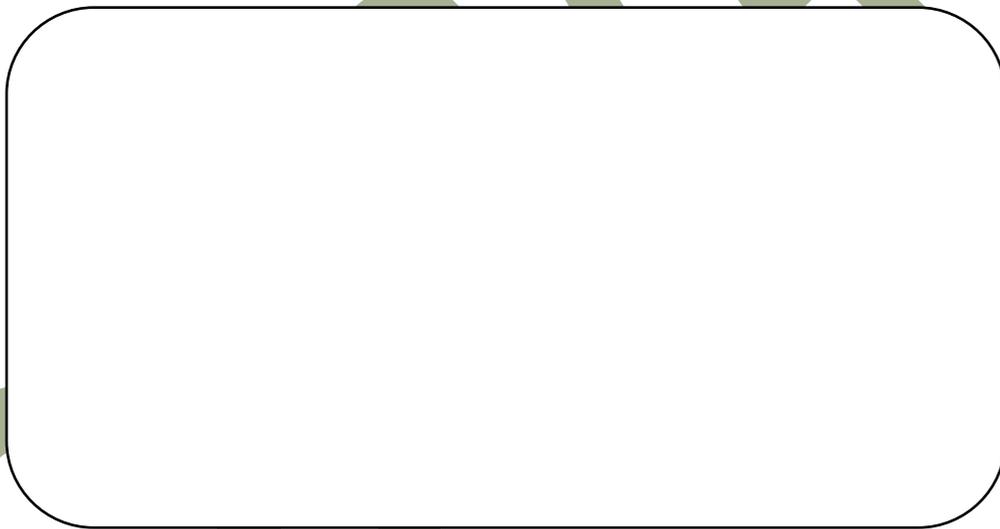
c) Land pollution

Q-3 Recognise the types of pollution shown and write any two causes of it.

Types of POLLUTION

- Write a catchy slogan on “STOP POLLUTION”



QUESTION BANK

CHAPTERS- 8,9,11,12,13,14

CHAPTER - 8 ADAPTATIONS IN ANIMALS

Q-I **Answer the following questions in one word or one sentence :**

1. What is a habitat?
2. Give two examples of animals that hibernate.
3. What is migration?
4. What are the animals that feed on the living animals or plants called?

Q-II **Answer the following questions in short :**

1. Define Camouflage. Give two examples.
2. What are Herbivores?
3. What type of teeth do herbivores have?
4. What do you mean by prey and predators?

Q-III **Answer the following in detail :**

1. How do the following animals protect themselves from their enemies:-
i) Zebra ii) Hedgehog iii) Tortoise
2. What kind of adaptive features do the following animals have?
i) Camel ii) Polar bear iii) Snakes

CHAPTER – 9 REPRODUCTION IN ANIMALS

Q-I **Answer the following questions in one word or one sentence :**

1. Name the process in which the mother bird sits on the eggs to keep them warm.
2. Define life cycle.
3. What are the larvae of butterfly and cockroach called?
4. Name any two animals that lay eggs.

Q-II **Answer the following questions in short :**

1. What is moulting? Give two examples.
2. What is metamorphosis?

Q-III **Answer the following in detail :**

1. Explain the life cycle of the following with diagram :-
i) Frog ii) Butterfly

CHAPTER – 11 FORCE,WORK AND ENERGY

Q-I **Answer the following questions in one word or one sentence :**

1. What is a push or a pull called?
2. Give two examples of Fuels.
3. Name the force that pulls every object down on the Earth.
4. Define energy.

Q-II Answer the following questions in short :

1. What do you mean by Friction? Give two examples from your daily life.
2. Explain Wedge with two examples.
3. Define an inclined plane.

Q-III Answer the following in detail :

1. Explain the following sources of energy
 - i) Sun
 - ii) Moving Air
 - iii) Moving Water
2. Describe the following forms of energy
 - i) Heat
 - ii) Electrical energy
 - iii) Light energy
3. Elaborate the different simple machines with examples
 - i) Pulley
 - ii) Screw
 - iii) Wheel and Axle

CHAPTER – 12 THE EARTH AND THE SOLAR SYSTEM

Q-I Answer the following questions in one word or one sentence :

1. What can be used to focus the Sun's rays?
2. Define a planet.
3. Write the number of moons of the following planets:-
 - i) Saturn
 - ii) Uranus
 - iii) Jupiter
 - iv) Neptune
4. What causes day and night?
5. Name the imaginary line that divides the Earth into two equal halves.
6. What is the magma that flows out from the Earth called?
7. How much time does the Earth take to complete its one revolution?

Q-II **Answer the following questions in short :**

1. Who am I?
 - i) The only planet that is having life on it.
 - ii) The planet around which we see many rings.
 - iii) The largest planet.
2. Explain the outer planets
3. Explain rotation of the Earth.

Q-III **Answer the following in detail :**

1. Explain the internal structure of the Earth.
2. Explain the revolution of the Earth.
3. Describe a volcano with the help of a diagram.

CHAPTER – 13 AIR, WATER AND WEATHER

Q-I **Answer the following questions in one word or one sentence :**

1. What is the weather?
2. What is added to kill the germs in water?
3. What do the condensed water-vapour form?
4. Define the process of evaporation.

Q-II **Answer the following questions in short :**

1. What makes the wind blow?
2. How does the Sun affect weather?
3. Define the process of :- **i)** evaporation
ii) condensation

Q-III **Answer the following in detail :**

1. Differentiate between Sea Breeze and Land Breeze.
2. Explain the process of Water Cycle with the help of a diagram.

3. Describe the following forms of water

- i) Hail ii) Frost iii) Fog

CHAPTER – 14 OUR ENVIRONMENT

Q-I **Answer the following questions in one word or one sentence :**

1. What is the environment?
2. What all does our environment give us?
3. Define acid rain.
4. Name any two diseases that are caused by drinking contaminated water.
5. How animal dung can be used?

Q-II **Answer the following questions in short :**

1. What is pollution
2. i) What do you mean by soil erosion.
ii) What are the causes of soil erosion?
3. Differentiate between biodegradable and non- biodegradable wastes.

Q-III **Answer the following in detail :**

1. Write the ways by which we have harmed our environment.
2. What are the effects of the following:-
 - i) Air Pollution
 - ii) Land Pollution
 - iii) Water Pollution
3. Write the ways by which we can save our environment.

● MAP WORK

➤ Mark the following in the Political Map of India:-

- 1) Neighbouring Countries of India

Mock Paper of ANNUAL Examination

Instructions :-

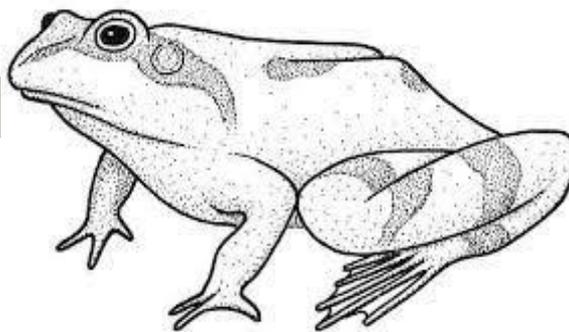
- (i) *All the questions are compulsory.*
- (ii) *Answer the questions as per the instructions.*

Q-I **Answer the following questions in one word or one sentence :** **8×1=8**

1. What do we call the animals who live on land?
2. How much water a large camel can drink in one go?
3. Name the group of animals who give birth to their babies and mothers feed them with their milk.
4. Name the process in which the mother bird sits on the egg to keep them warm.
5. What are the tools which make our work easy called?
6. Which energy plants use to make food?
7. Which is the nearest star to us?
8. What do we call the condition of the air around us at any given time?

Q-II **Answer the following questions in short :** **6×2=12**

1. Name the various forms of water in which it returns back to the Earth.
2. Look at the picture shown below and answer the following:-



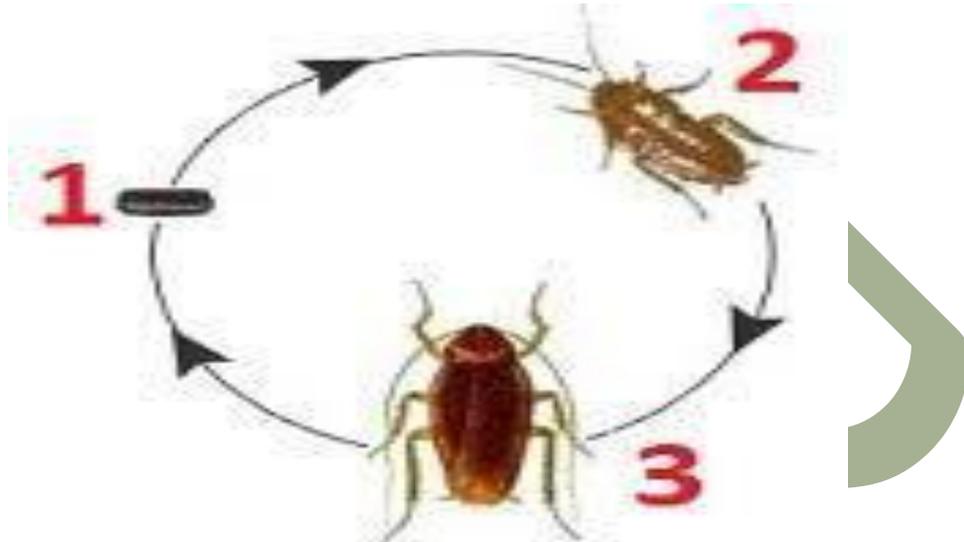
- i) Name the type of animal shown.
- ii) Give two other examples of the same type.
3. Define environment. What does it give us?
4. Why do birds migrate?

5. Write any two effects of Gravity.
6. Write difference between biodegradable and non-biodegradable wastes.

Q-III Answer the following in detail :

7×3=21

1. Differentiate between arboreal and aerial animals with two examples each.
2. Study the picture and answer the questions



- i) Name the stages (2) and (3).
- ii) During which stage does moulting take place?
3. Give any three ways to treat biodegradable wastes to help the environment.
4. Differentiate between crust, core and mantle.
5. How do we get drinking water at home?
6. Make a well labelled diagram to show water cycle.
7. Complete the following diagram:

ENERGY	SOURCE	FUNCTION
Heat		
Light		
Electrical		

Q-IV

Write a short note on the following :-

6×4=24

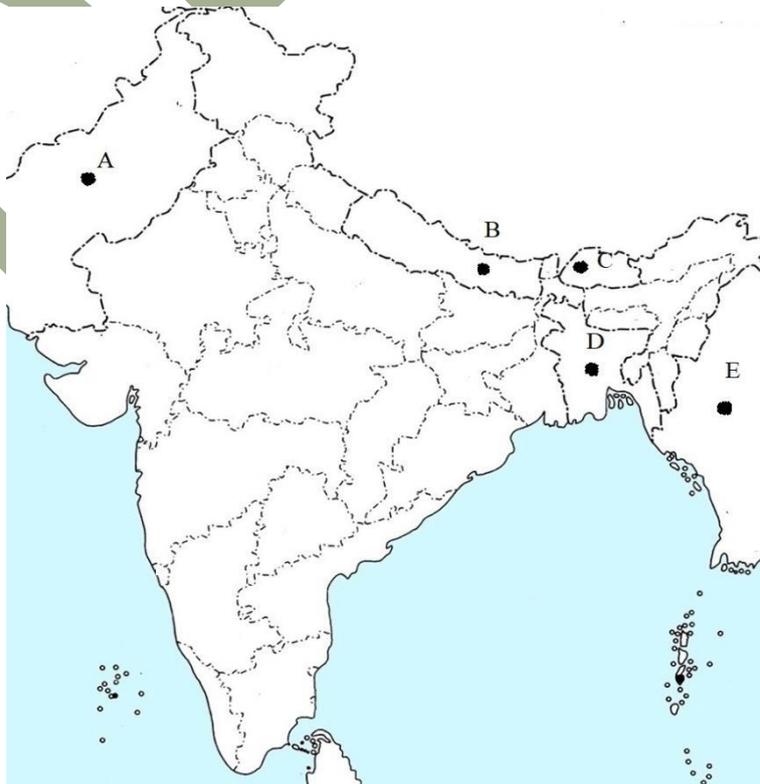
1. How do the following protect themselves from their enemies:
 - i) Deer
 - ii) Stick insect
 - iii) Flying fish
 - iv) Buffaloes
2. Describe the life cycle of a frog.
3. Explain the following simple machines-
 - i) Wheel and Axle
 - ii) Inclined Plane
 - iii) Pulley
 - iv) Wedge
4. What makes the wind blow? Explain with the help of a diagram.
5. Draw a diagram of a Earth and mark the following
 - i) Axis
 - ii) South Pole
 - iii) Equator
 - iv) Northern Hemisphere
6. Write any 4 ways to reduce water pollution.

Q-V

Do as directed:-

3×5=15

1. What causes seasons? Explain with the help of a diagram
2. Explain Sea breeze and Land breeze with diagrams.
3. Identify and name the following marked neighbouring countries of India.



- **Note- Each and every concept will be reinforced by video clippings**

DRSG