

Chapter - 1

Q-1 Do you find that all living things need the same kind of food?

→ Different types of living beings have different types of food habit. Therefore they eat different types of food.

Q-2 Name five plants and their parts we eat.

→	PLANT	PARTS WE EAT
①	Mango plant	Fruit
②	Spinach and cabbage	Leaves
③	Pumpkin Plant	Flowers, Fruits, seeds
④	Potato, Ginger	underground modified stem
⑤	Radish and carrot	underground modified roots

Ques-3 Match the Following :

- 1) Milk, curd, paneer, ghee → are all animal products
- 2) Spinach, cauliflower, carrot → are all vegetables
- 3) Lions and Tigers → eat other animals
- 4) Herbivores → eat plants and plant products

-4 Fill in the blanks :

Tiger is a carnivore because it eats only meat.

Deer eats only plant products and so, is called herbivore.

Parrot eats only plant products.

The milk that we drink, which comes from cows, buffaloes and goats is an animal product.

Extra Questions

Que-1 → What are herbivores?

Ans → Animals which eat plants and plant products are called as herbivores.
...eg. cow, deer, goat and elephant etc.

Que-2 → What are carnivores?

Ans → The animals which eat the flesh of other animals are called as carnivores
eg. Dog, Cat, Crow, Rat etc.

Que-3 → What are omnivores?

Ans → The animals that eat plants and plant products as well as flesh of other animals are called as omnivores. eg. Dog, Cat, Crow, Rat etc. (Human, Bear)

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Que-4 From where do we get food?

Ans → Food items like cereals, pulses, fruits, oil, vegetables etc. are called obtained from plants.

→ There are food items like milk, meat, fish, eggs, prawns etc. are obtained from animals.

Que-5 Explain the differences between Herbivores, Carnivores and omnivores.

HERBIVORES	CARNIVORES	OMNIVORES
① Animals that eat at only plants and plant products are called herbivores. eg. Cow, deer, goat, elephant etc.	① Animals that eat the flesh of other animals are called carnivores. eg. Lion, Tiger, Leopard etc.	① Animals that eat plants and plant products as well as the flesh of other animals are called omnivores. eg. Dog, Cat, Monkey, Bear etc.

Que-6 Which parts of plants are sources of food?

Ans → ① We eat the fruits of some plants.
eg. Mango and apple.

② Flowers can be taken as food. → Que
eg. Cauliflower, Pumpkin. → Ans

③ Some leaves can be taken as vegetables ^{Que}
eg. Spinach, cabbage. Ans

④ (Some roots can be taken as vegetables) ^{Que}
eg. Radish, Carrot. Ans

⑤ Some stems are eaten as vegetables ^{Que}
eg. Ginger, Onion and Potato. Ans

⑥ (Seeds of some plants are used as cereals) ^{Que}
eg. (rice, wheat.) Ans

⑦ (Oil can be extracted from the oil seeds) ^{Que}
eg. → Mustard seeds, ~~pea~~ Sunflower seeds. Ans

Ques-7 How Honey is produced / Prepared?

Ans → Honey bees collect sweet juices ~~are~~
~~are~~ called nectar from the flowers.
This ~~is~~ nectar is converted into
honey in the stomach of honeybees.
They store the prepared honey in the
cells of the beehive.

Q-8 How can ^{we} ~~be~~ prepare sprouted moong
or ~~chana~~ chana

Ans → We take dry seeds of some moong or
chana in the container filled with
water. Next day drain the water
completely and leave the seed in the
vessel. The seeds are kept in the wet
cloth and keep it aside for another
day. On the third day we see that
white structures are coming out
from the seeds which are early
roots. (Radicle). These seeds with
early roots are sprouted.

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Que-9 → What are ingredients?

Ans → The materials required to prepare a dish are called as ingredients.
eg. Milk, Rice and Sugar are needed to prepare Kheer, Urad Dal, rice, salt and water are needed to prepare idli.

Que-10 → What is the meaning of the term 'edible'?

Ans → Materials which are eatable are called as edible.

eg① The fruits, flower and seeds of the pumpkin plant are ~~is~~ edible.

eg② The fruit, stem and flower of the banana plant are edible.

Que-11 What is nectar?

Ans → Sweet juices produced by the flowers is called nectar. Honeybees use nectar to produce honey.

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Ques-12 What are sprouted seeds?

Ans → When seed grains of a plant ^{are} kept in moist condition over night they develop ~~which~~ structures called early roots (radicle). These seeds are sprouted seeds they are very rich in proteins.

Note: Learn the following thoroughly.

(1) Underground root → Beet root, carrot, radish and sweet potato.

(2) Underground stem → potato, ~~onion~~ ^{and} onion, ginger, Turmeric and garlic.

(3) Leaves → Spinach, cabbage, coriander, Lettuce and Lal Sag.

(4) Flowers → Cauliflower, Banana, Neem, and Pumpkin.

(5) Fruits → Lady's ^{Finger} ~~Fing~~, Tomato, Pumpkin, Brinjal, Mango, apple and grape.

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Ch - 2 Components of food

Text Book Questions

Que-1 Name the major nutrients in our food.

Ans → Carbohydrates, Proteins, and fats, vitamin and mineral are the major nutrients in our food.

Q2 Name the following

→ (a) The Nutrients which mainly give energy to our body.

→ Carbohydrates and fats

The nutrients that are needed for the growth and maintenance of our body. Minerals and Proteins

A vitamin required for maintaining good eyesight. Vitamin - A

mineral that is required for keeping our bones healthy. - Calcium

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Que-3 Name two food each rich in:

- (a) Fats - Oil, butter and cheese
- (b) Starch - Rice and potato
- (c) Dietary fibre - Cabbage and Spinach

Que 4 Tick (✓) the statements that are ~~are~~ correct.

- (a) By eating rice alone, we can fulfill nutritional requirement of our body.
(X) F
- b) Deficiency diseases can be prevented by eating a balanced diet. (✓) T
- c) Balanced diet for the body should contain a variety of food items. (✓) T
- d) Meat alone is sufficient to provide all nutrients to the body (X) F

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Que-5 Fill in the blanks:

- (a) Rickets is caused by deficiency of Vitamin D.
- (b) Deficiency of Vitamin B1 causes a disease known as Beri-Beri.
- (c) Deficiency of Vitamin C causes a disease known as Scurvy.
- (d) Night blindness is caused due to deficiency of Vitamin A in our food.

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Extra Questions

Q.1 ~~What~~ do the different food items contain?

Ans → The different food items contain the following nutrients -

- (1) Carbohydrates
- (2) Proteins
- (3) Fats
- (4) Vitamins
- (5) Minerals

Food Items also contain roughage and water.

2 How will you test ~~the~~ the presence of starch in our food?

→ (Activity form)

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To test the presence of starch in our food.

Materials Required : Cooked Rice, Test tube, iodine solution

Step - (1) Take a small amount of cooked rice in a test tube.

(2) Add two to three drops of Iodine solution.

Observation - In the test tube the colour of the cooked rice has changed to blue-black.

Conclusion - The above experiment proves that food item like cooked rice contains starch.

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Q.3 How will you test the presence of protein in the given food material. (Activity form)

A.3 Aim - To test the presence of proteins in the food material

Materials required → Boiled egg white, copper sulphate-solution, Caustic Soda solution, water and test tube.

Method → • Take some amount ^{of} boiled egg white and crush it into a paste

• ~~Transfer~~ Transfer this paste into a test tube and add ~~to~~ ten drops of water. ~~*3 Add 2-3 drops of copper sulphate solution and shake~~

• Shake the test tube well and add ~~2-3~~ ₁₀ drops of caustic soda solution.

• Shake the test well and observe

★ Add 2-3 drops of copper sulphate solution and shake it.

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Observation - The mixture present in the test tube turns into violet colour.

Conclusion - The violet colour indicates the presence of proteins in the food material (egg white).

Ques-4 How ~~do~~ will you test the presence of fats in the food material? (Activity form)

Aim - To test the presence of fats in the food material.

Materials required - A sheet of brown paper and some groundnuts.

Method - ① We take a few groundnuts and wrap them in a brown paper.

② Crush the groundnuts ~~for~~ and take care that the paper ~~does~~ does not get torn.

③ Hold ^{the} paper against light

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Observation - We are able to see the light ~~to~~ faintly through the oily patch of the brown paper.

Conclusion - The above experiment proves that groundnuts contain fats..

Ques-5 What do the various nutrients do for our body?

1) Carbohydrates - It is called as 'energy giving food' because it mainly provides energy for our body.
eg → Rice and Potato.

2) Fats → It is called as energy giving food. In fact it gives more energy as compared to the ~~carb~~ same amount of carbohydrates. Fats give us stored ~~food~~ form of energy.
eg. ghee and oil

Proteins → Foods containing proteins are called 'Body-building foods' because it helps in the growth, maintenance,

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and proper development of the body. It also helps in repairing tissues and replacing the cells in our body.

4.) Vitamins → Vitamins are called as 'protective foods' because they help in keeping our eyes, and bones and gums healthy, some of the vitamins are Vitamin A, B, C, D, E and K. ~~Vitamin~~ There is also a group of vitamins called vitamin B Complex. Our body needs all types of vitamins for the proper growth of the body and to maintain good health.

5.) Minerals → It is also called as 'protective food' because it helps our body to fight against diseases. It also helps in the growth of the body and to maintain good health. It is needed by our body in a small amount.

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Que-6 What is roughage?

Ans → Some food ingredients in our diet do not provide any ~~nutrient~~ but help in the body cleaning by removing undigested waste from our body. Such food materials are called as Roughage. eg. Cabbage and Spinach are rich sources of roughage.

Que-7 What are nutrients?

Ans → The major component of the food that are needed by our body are called as nutrients. eg. They are carbohydrates, Proteins, Fats, vitamins and minerals.

Que-8 What is Balanced Diet?

Ans → A diet that contains carbohydrates, proteins, fats, vitamins, minerals, ~~roughage~~ and water in required amount to provide all the nutrients.

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to our body is called the Balanced Diet. eg. A combination of chapati, rice, dal, curd, vegetables and fruits.

Que-9 What are Deficiency Diseases?

Ans → Diseases which occurs due to the lack of nutrients in our diet for a long period of time ^{are} ~~is~~ called as deficiency diseases.
eg. → Lack of vitamin D in our diet leads to Rickets. Lack of Iodine in our diet leads to Goiter.

Que-10 Name atleast two sources of the following:

- Nutrients ~~is~~ needed by our body.
- Carbohydrates - paddy & wheat, potato
- Proteins - Milk, egg, meat, fish and pulses.
- Fats - Coconut, Butter and oil.
- Vitamin A - Carrot, Pumpkin and Fish oil
- Vitamin B - Unpolished Rice, wheat and liver
- Vitamin C - Amla, Lemon, Orange, Tomato and Chilli.
- Vitamin D - Milk, Butter, Ghee and fish
- Iron - Spinach, Apple and Banana.

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9. Calcium - Milk, Egg and Green Vegetables
10. Phosphorous - Milk, Banana and wheat
11. Iodine - Iodised salt, sea fish, prawn, crab and Spinach.

Que-11 Name the Deficiency disease that is caused due to deficiency of Carbohydrates and Proteins and write the symptoms.

Ans → The disease caused due to deficiency of carbohydrates and proteins is called Marasmus.

Symptoms -

1. The growth will stop completely
2. Such a person may become very lean and thin.
3. The person may be weak that he/she ~~or~~ may not be able to move.

Que-12 What is the deficiency disease caused due to lack of proteins in our diet.

Ans → The disease is called as Kwashiorkor

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Symptoms -

- ① Stunted growth
- ② Swelling of face and belly
- ③ Discolouration of hair and skin

Q-13 - Name the deficiency diseases caused due to lack of vitamins and minerals. - Pg 16 Table 2.3

(NCERT TEXT BOOK)

VITAMIN/ MINERAL	DEFICIENCY DISEASE/DISORDER	SYMPTOMS
1. Vitamin A	Loss of vision/ Night Blindness	Poor vision, loss of vision in darkness (night), Sometime complete loss of vision.
Vitamin B1	Beri Beri	Weak muscles and very little energy to work
Vitamin C	Scurvy	Bleeding gums, wounds take longer time to heal

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4. Vitamin D

Rickets

Bones become
soft and bent

5. Calcium

Bone and tooth
decaysWeak bones,
tooth decays

6. Iodine

Goiter

Glands in the
neck appear
swollen, mental
disability in
children

7. Iron

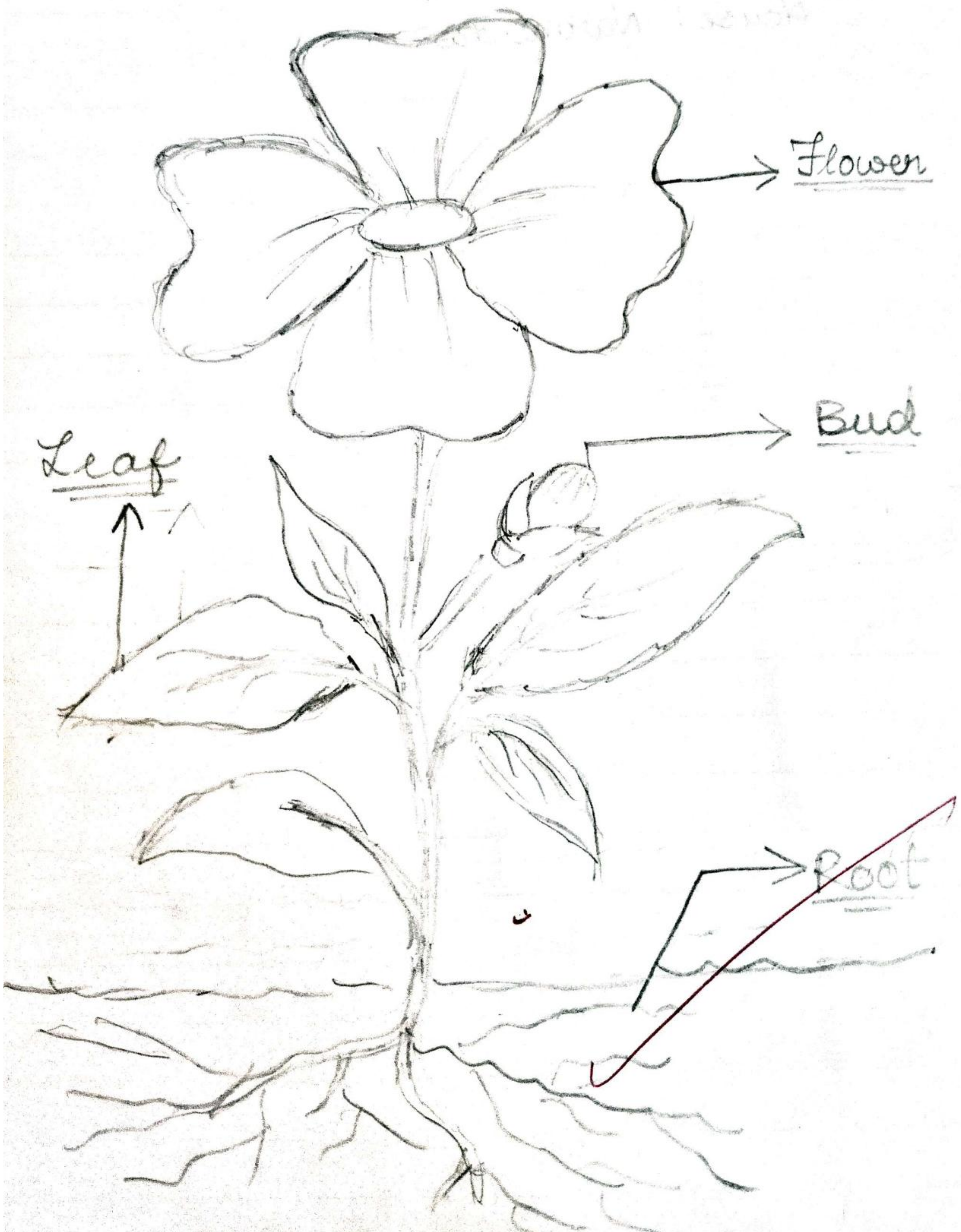
Anaemia

Weakness

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Diagram.

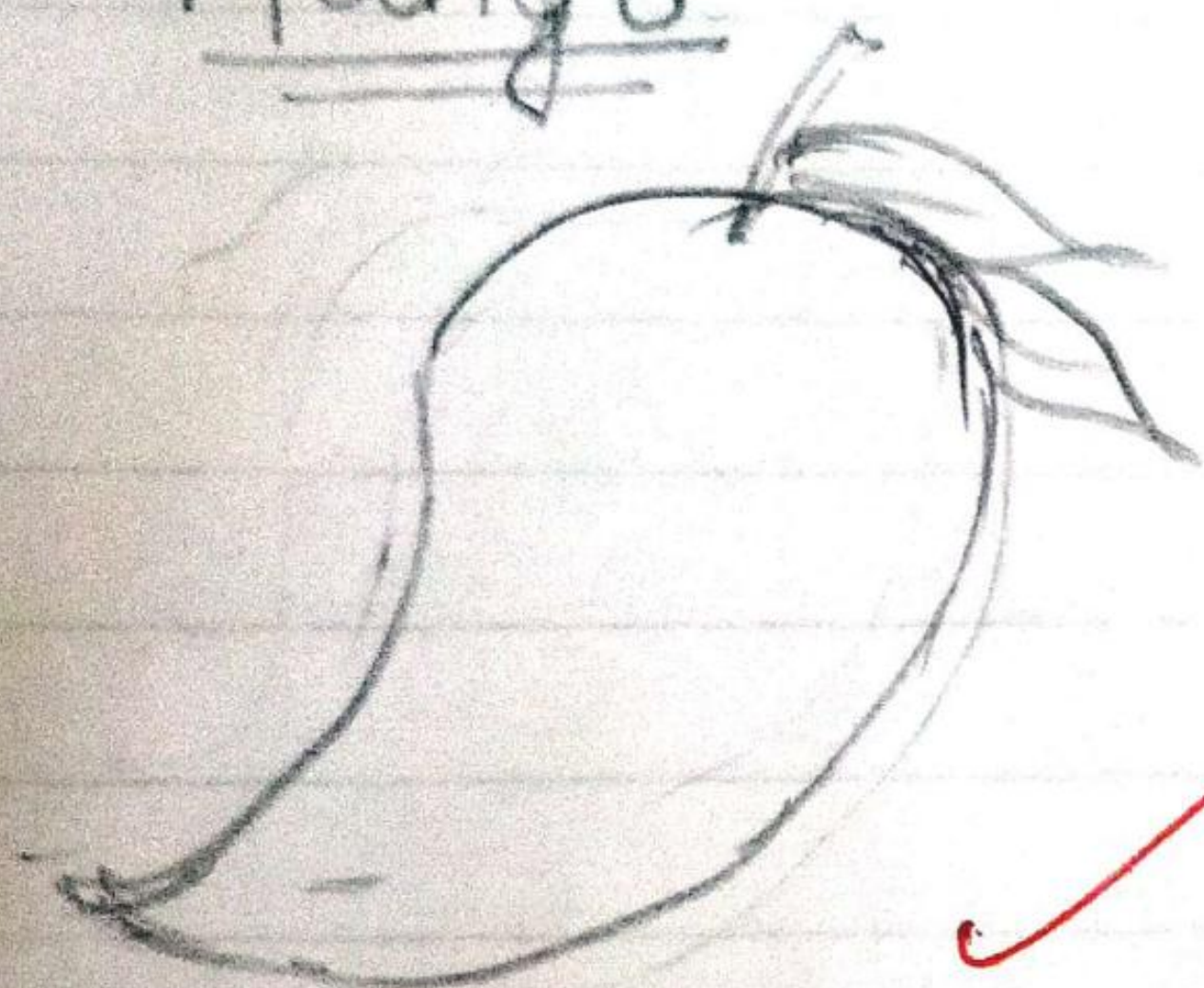
Parts of a plant.



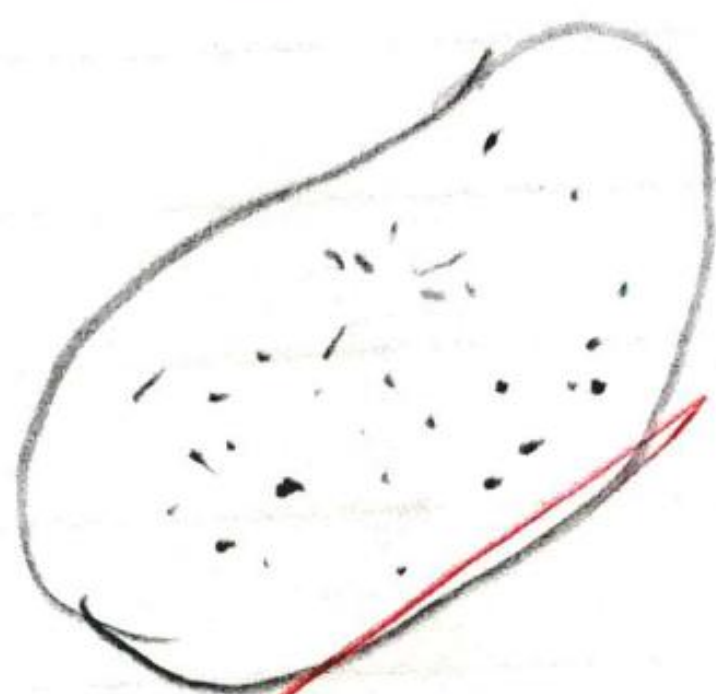
Draw two sources of each of the following nutrients

(1) Two sources of carbohydrates

Mango

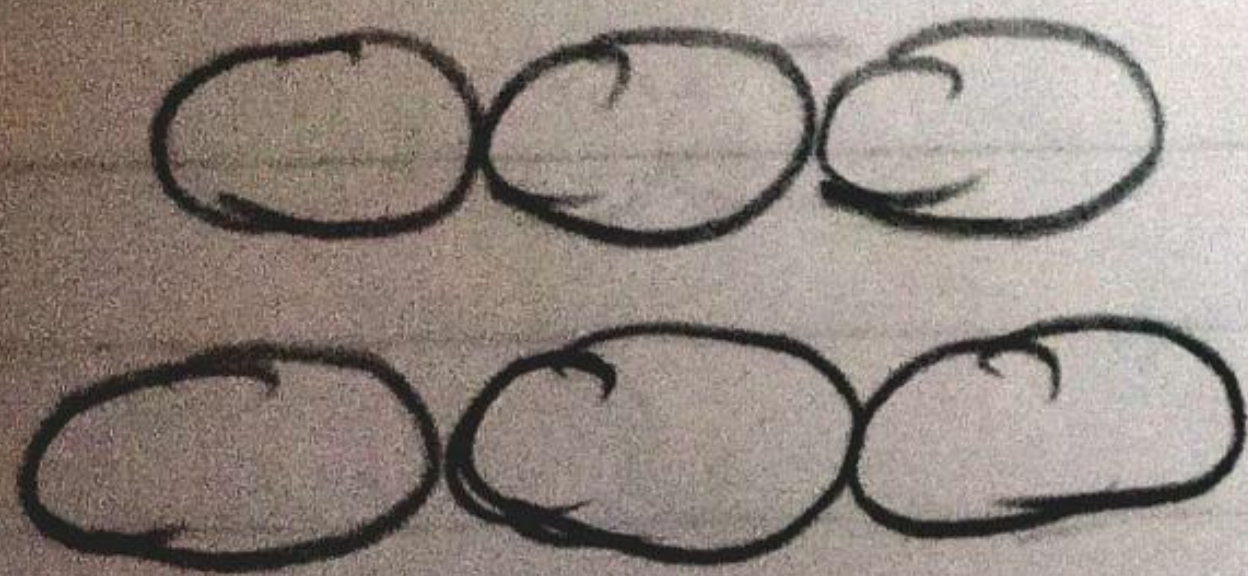


Potato



(2) Two sources of fats from plants

Groundnuts



Coconut oil

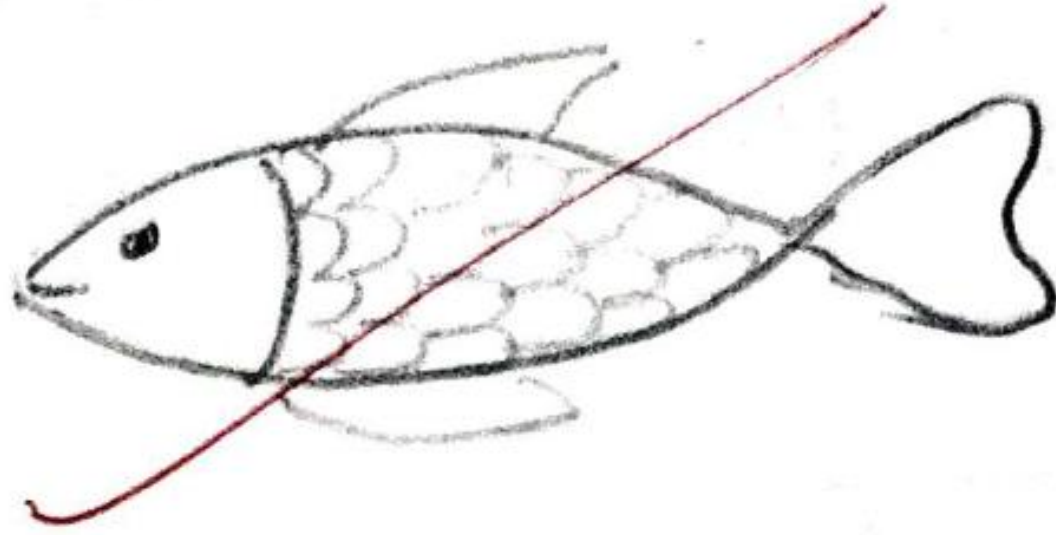


(3) Two sources of fats from animals

Eggs

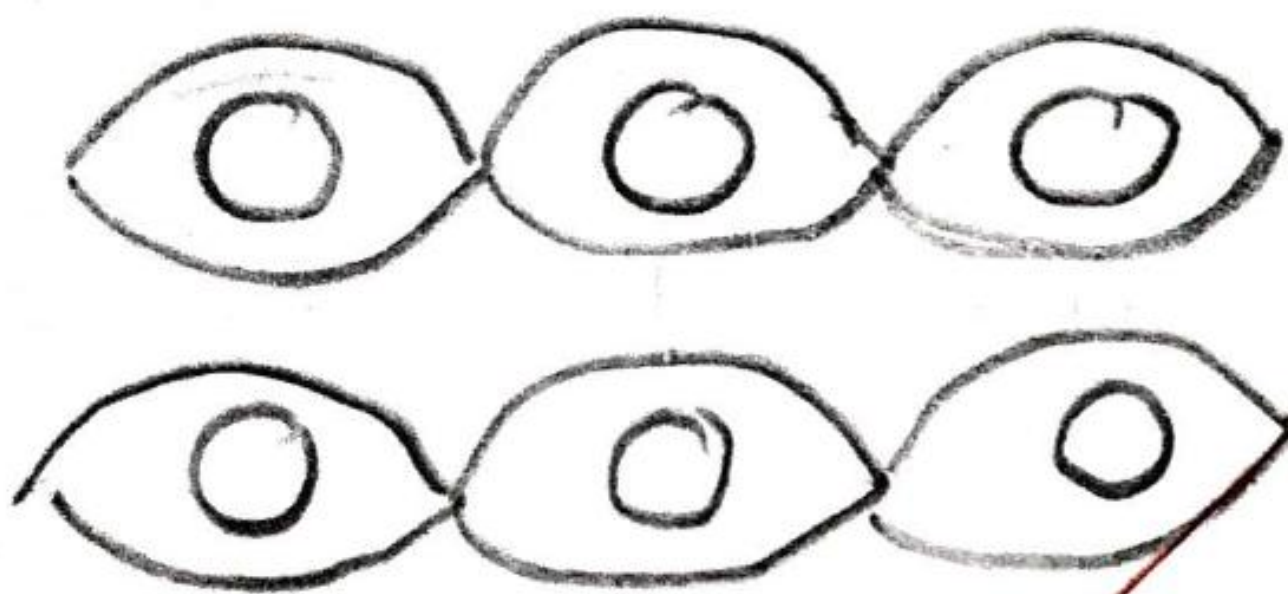


Fish



(4) Two sources of proteins from plants

Peas

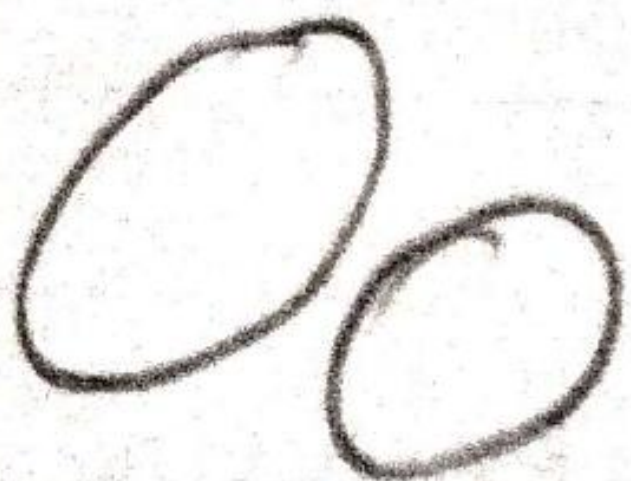


Soyabeans

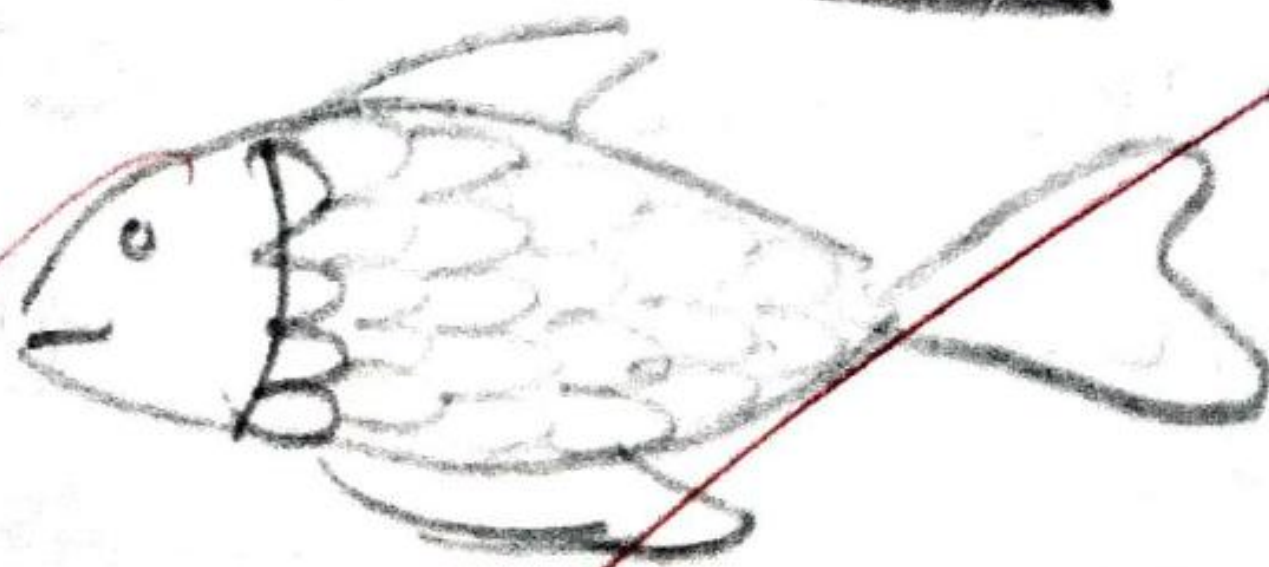


(5) Two sources of proteins from animals

Eggs

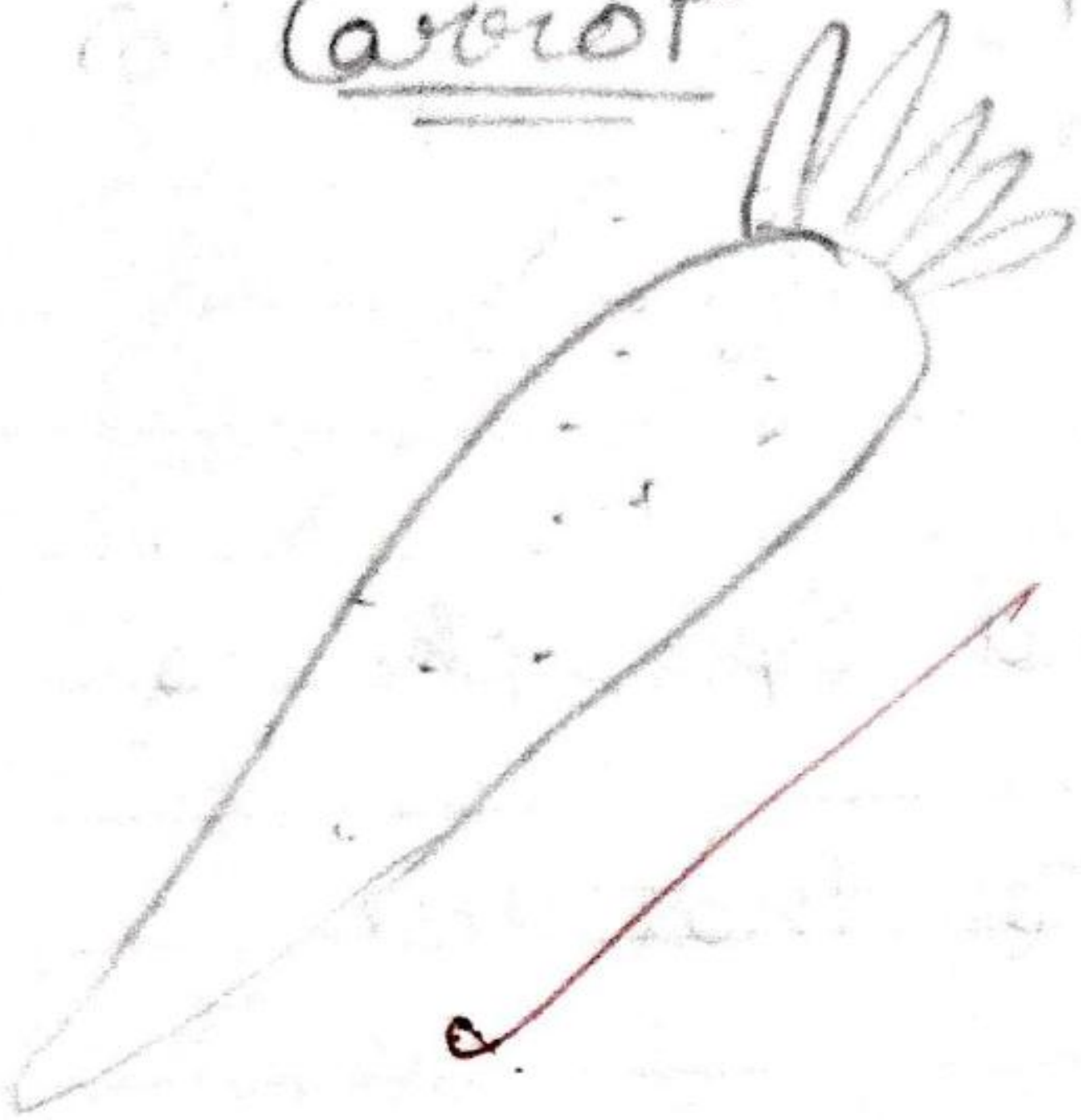


Fish

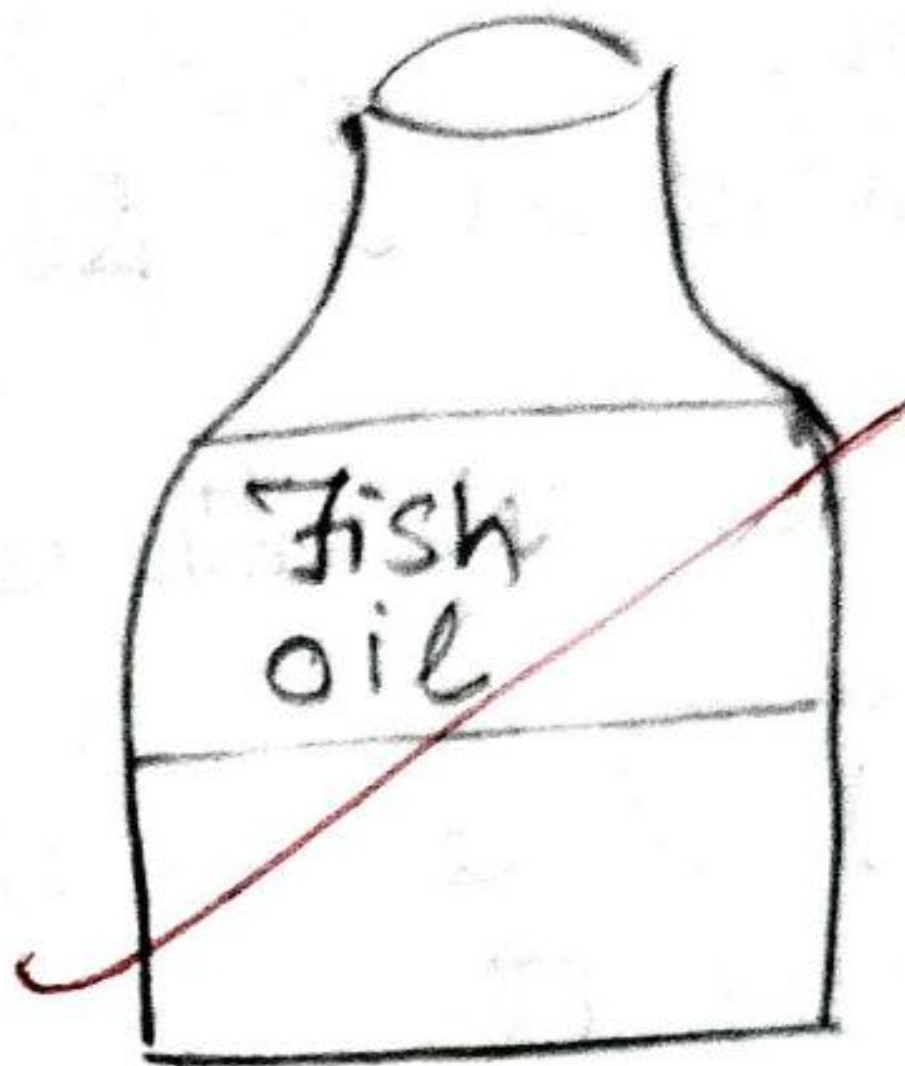


(6) Two sources of vitamin A.

Carrot

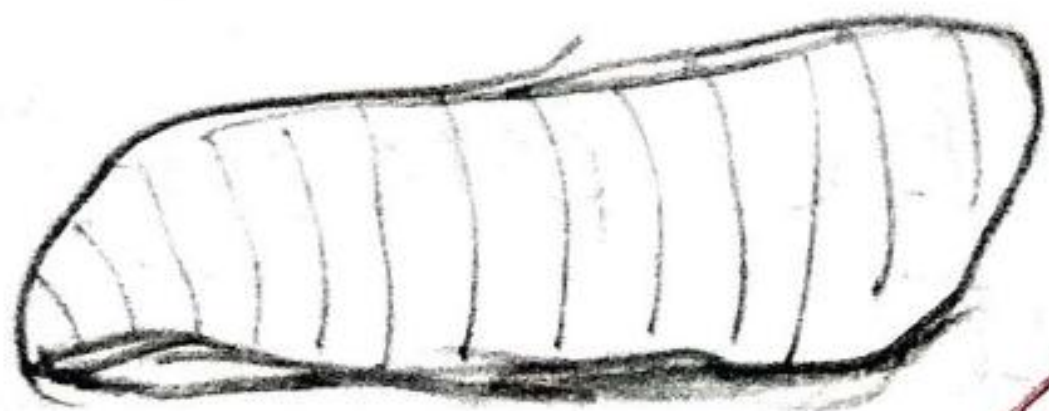


Fish oil



(7) Two sources of Vitamin B.

Liver

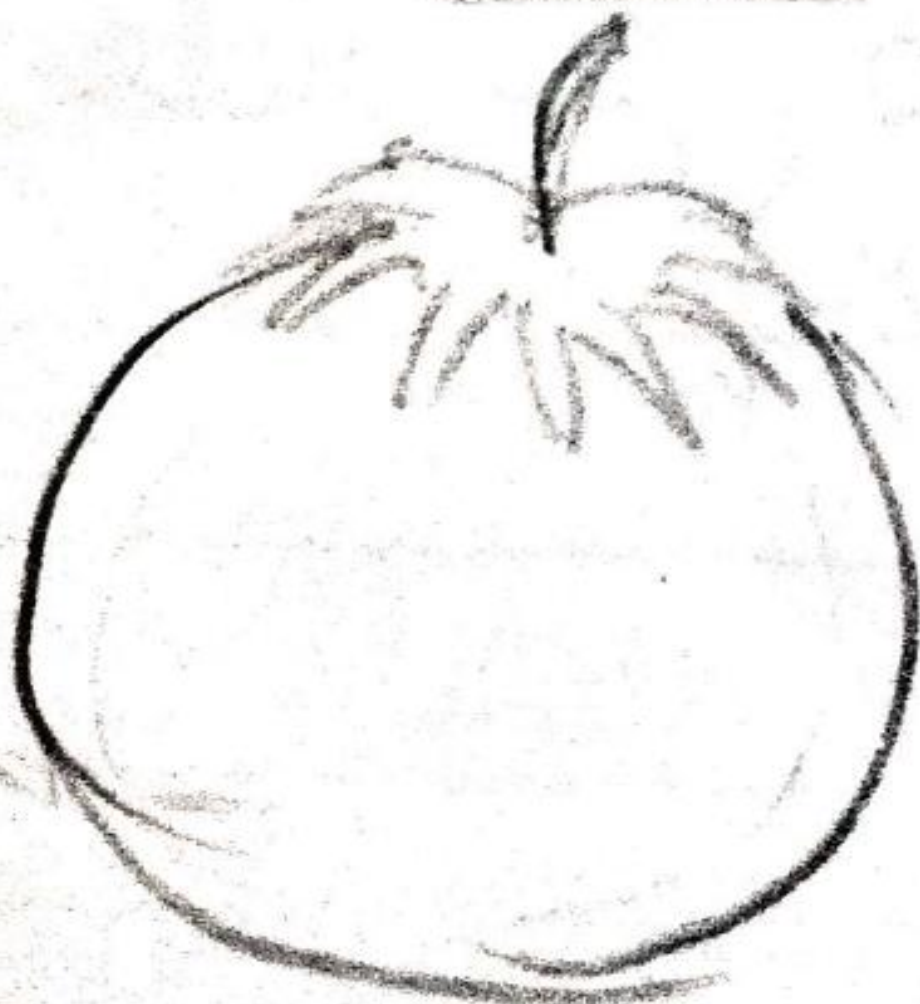


Unpolished rice

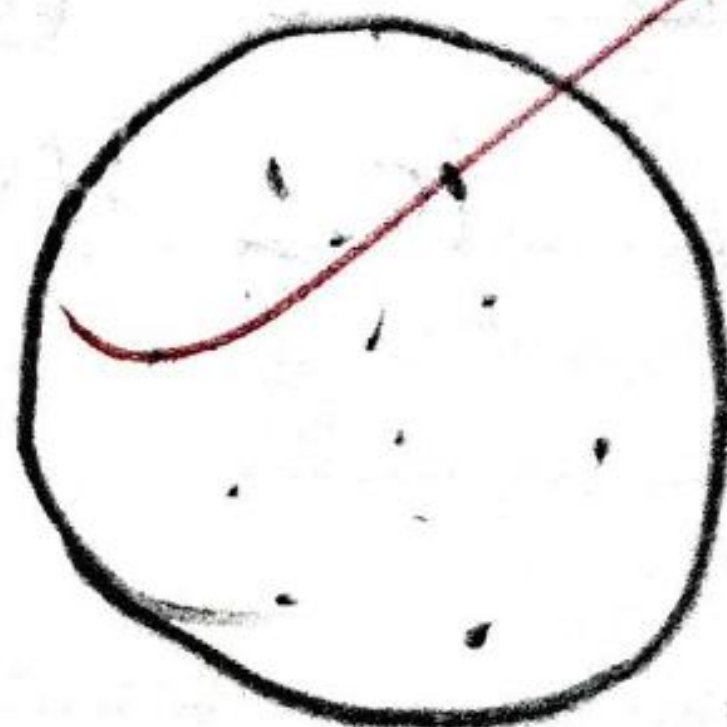


(8) Two sources of vitamin C.

Tomato



Lemon



(9) Two sources of Vitamin D.

Fish

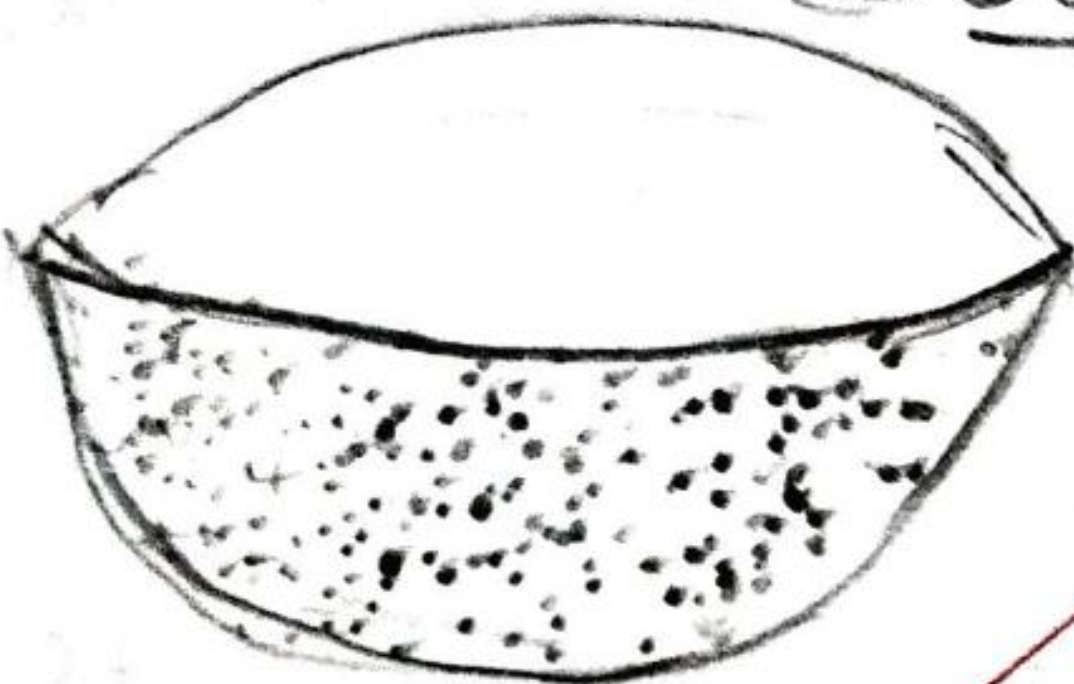


Eggs

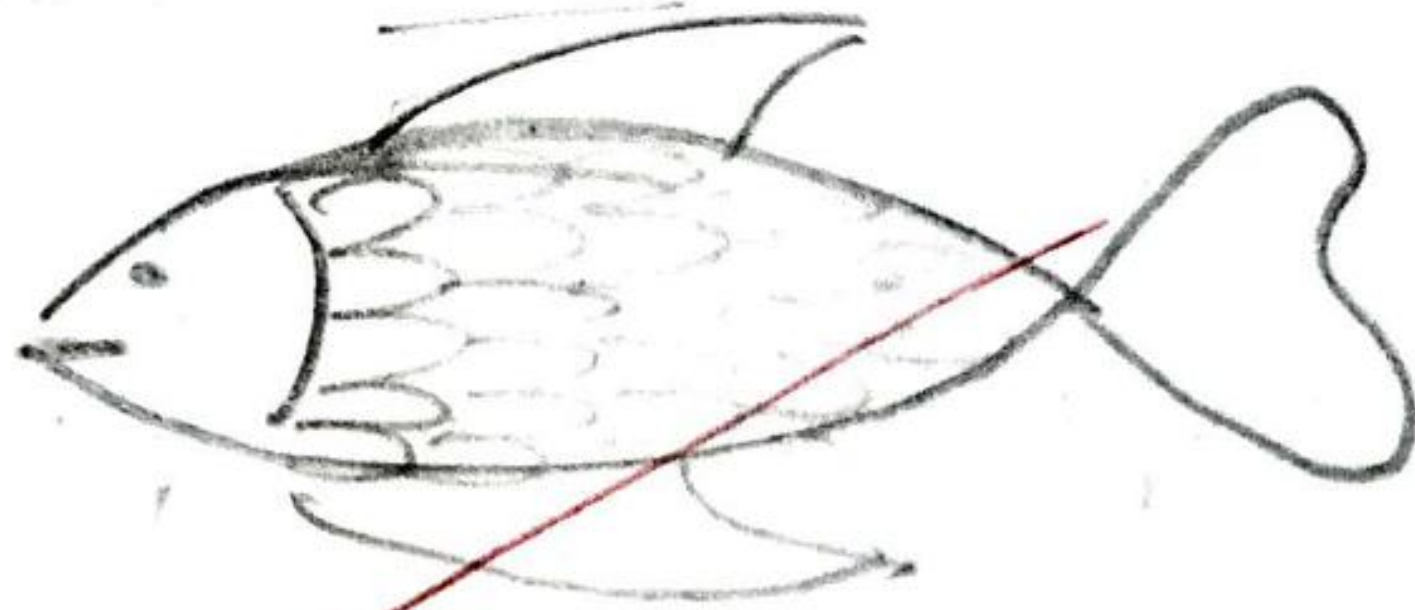


(10) Two sources of Iodine.

Iodised
Salt

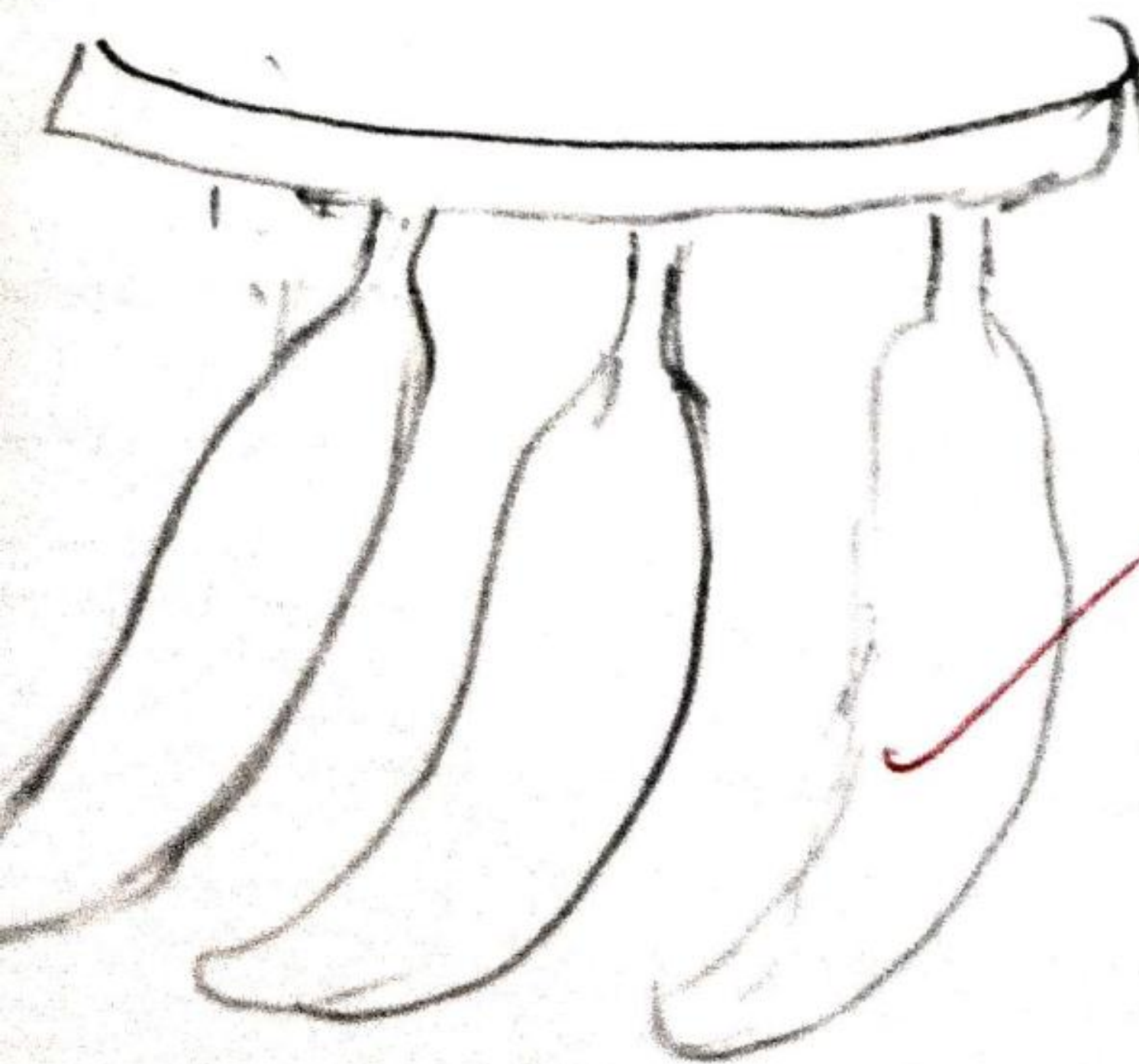


Fish

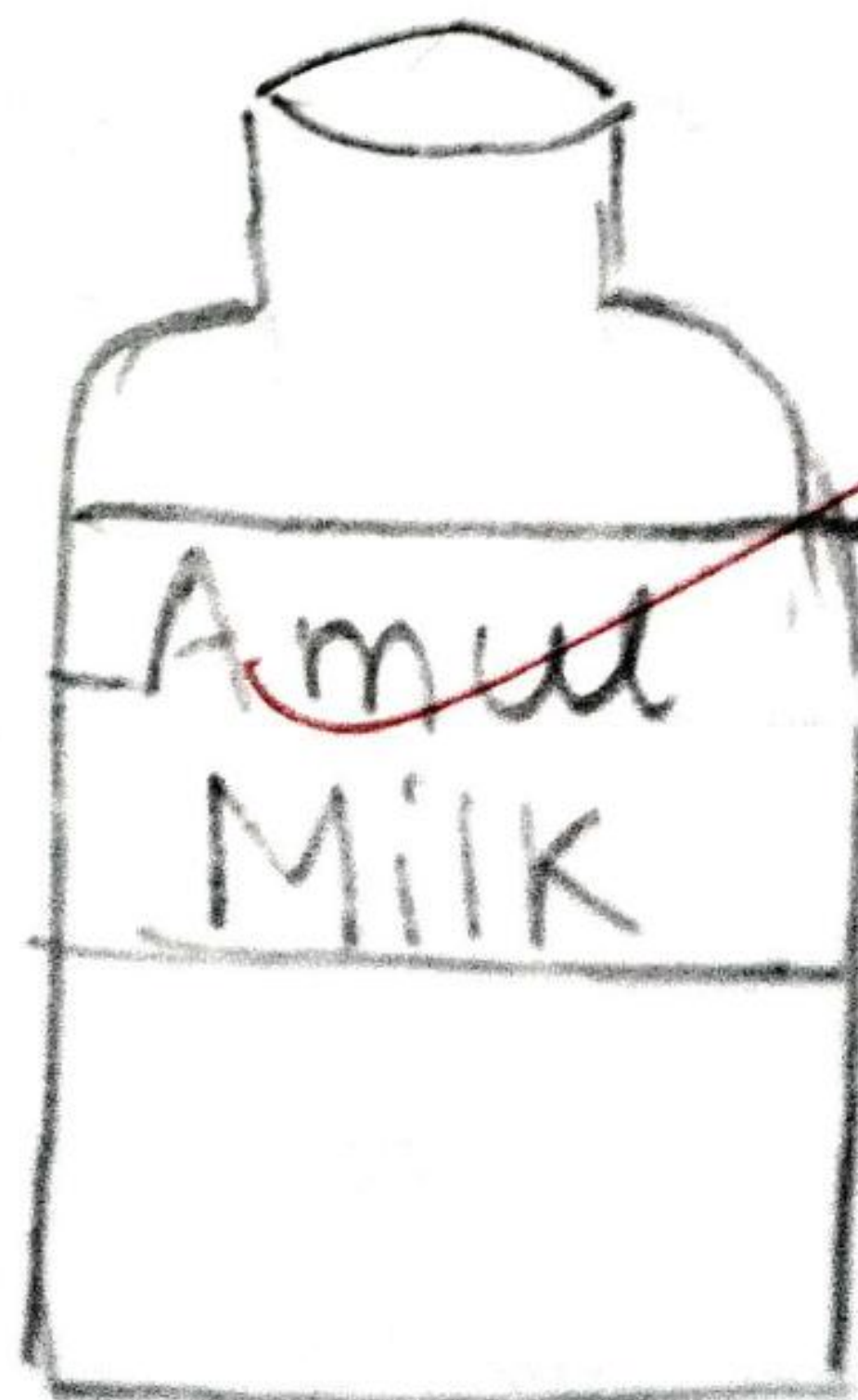


(11) Two sources of phosphorus

Banana



Milk



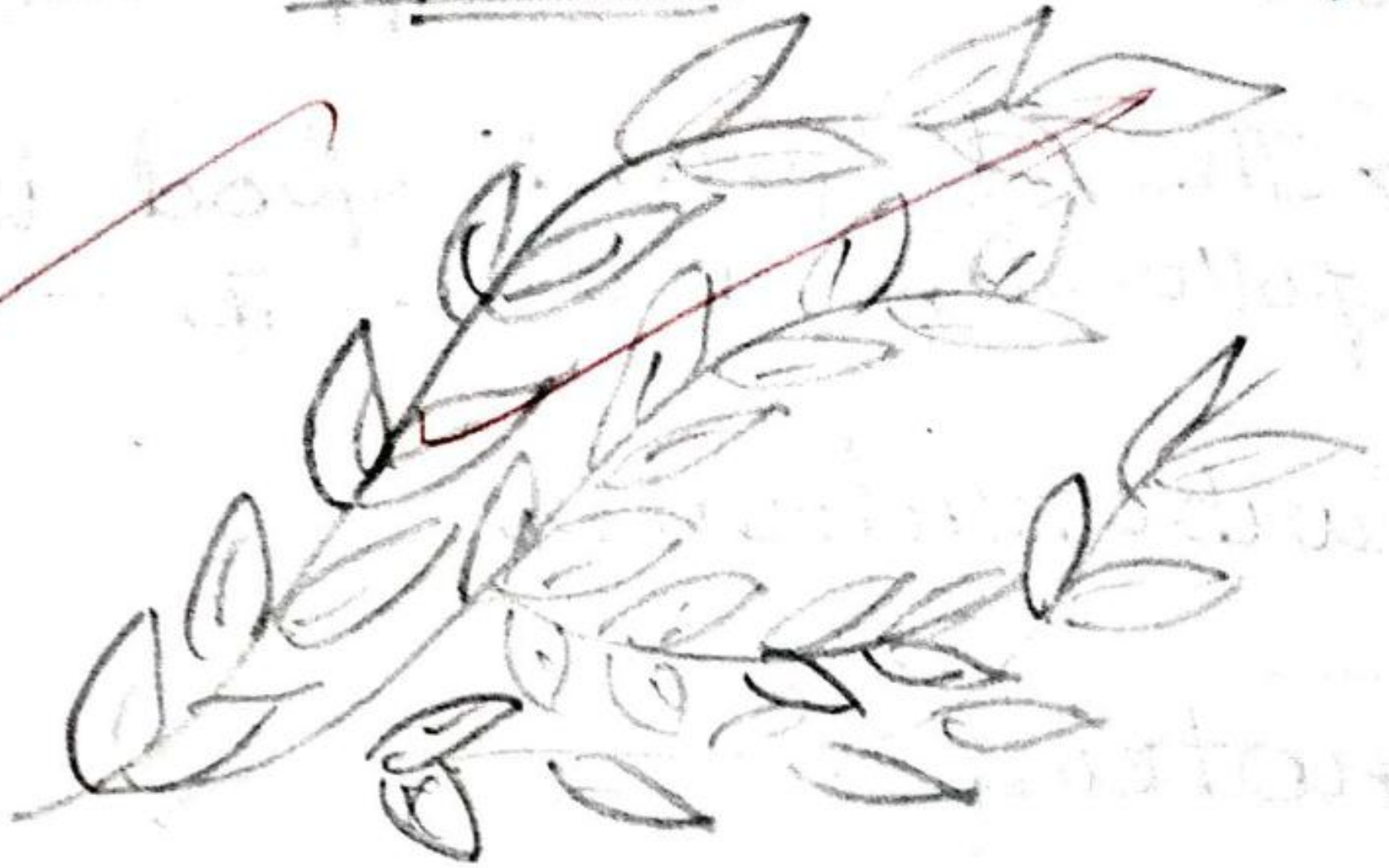
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(12) Two sources of Iron

Apple



Spinach

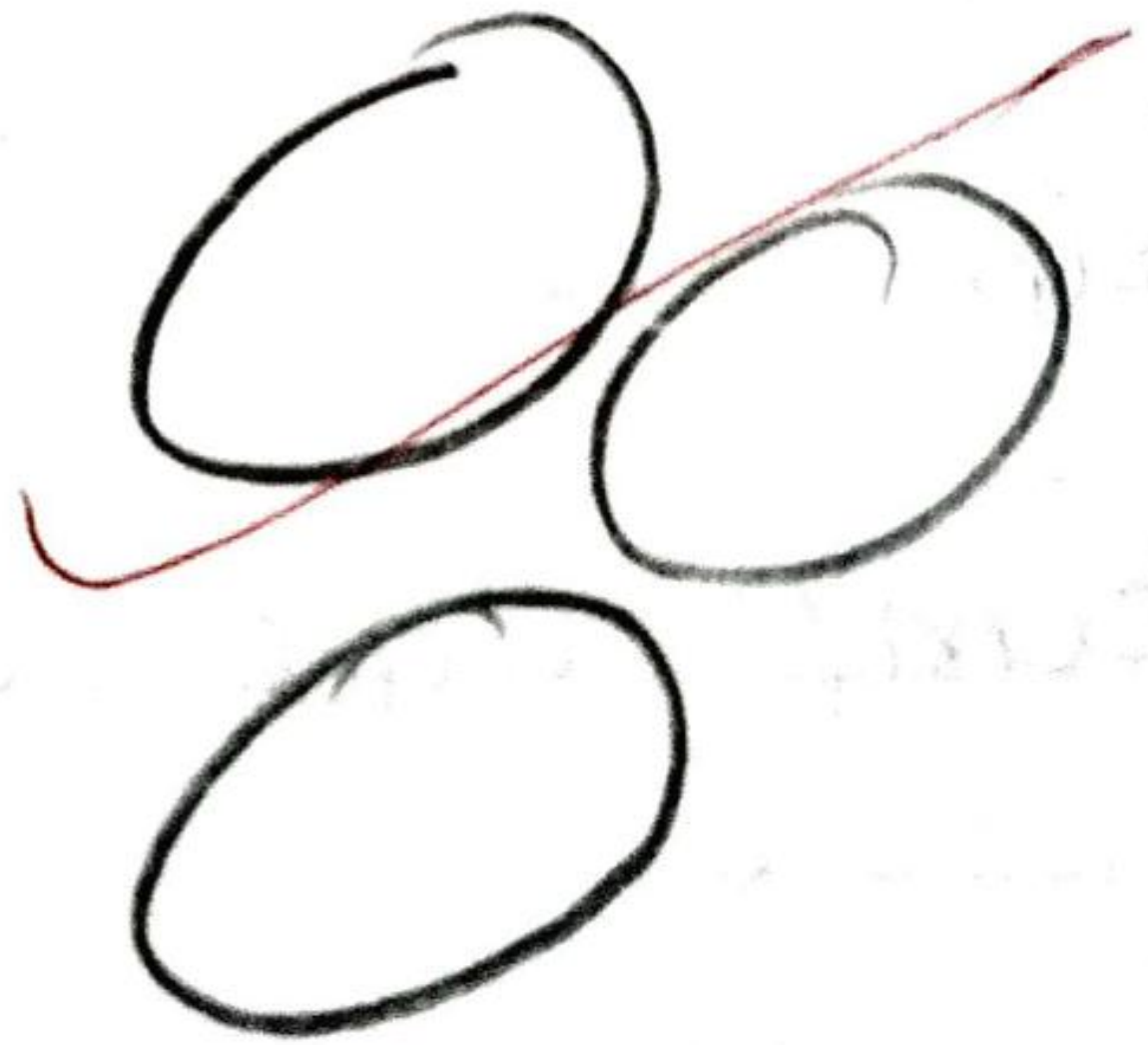


(13) Two sources of Calcium

Milk



Eggs





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CHAPTER - 3 FIBRE TO FABRIC

Que-1 Classify the following fibres as natural or synthetic:

- Nylon, wool, cotton, silk, polyester, & jute
- Nylon - Synthetic
Wool - Natural
cotton - Natural
Silk - Natural
Polyester - Synthetic
Jute - Natural

Que-2 State whether the following statements are True or false:

1. Yarn is made from fibres. - True
2. Spinning is a process of making fibres. - False
3. Jute is the outer covering of coconut. - False
4. The process of removing seed from coconut cotton is called ginning. - True
5. Weaving of yarn makes a piece of fabric. - True
6. Silk is obtained from the stem of a plant. - F

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7. Polyester is a natural fibres. - False

Que-3 Fill in the blanks:

1. Plant fibres are obtained from cotton and jute.
2. Animals fibres are silk and wool.

Q.4 From which parts of the plant, cotton and jute are obtained?

Ans → 1. Cotton is obtained from the fruits of cotton plants called as cotton bolls.

2. Jute is obtained from the stem of jute plant.

Q.5 Name two items that are made of from coconut fibre.

1. Door mats 3. Strong ropes

2. Coir mattress 4. Bags etc.

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Q.6 Explain the process of making yarn from fibre.

Ans - The process of making yarn from fibre is called spinning. In this process fibres from a mass of cotton wool is drawn out and twisted. This brings the fibres together to form a yarn.

Extra Question

Q.1. What are yarns made up of?

Ans → Yarns are made up of fibres.

Q.2 What are artificial & natural fibres?

Ans → Artificial fibres - The fibres made of chemical substances synthetically are called synthetic or artificial fibres.

2. Natural fibres - Fibres which are obtained from plants and animals naturally are called natural fibres. eg:

Examples of artificial fibres

Nylon

Polyester

Raylene

Examples of natural fibres

Cotton (plant)

Jute (plant)

Silk (silkworm)

Wool (sheep)

Q.3. Define Ginning

Ans → The process of separating cotton from the cotton seeds by combing is called ginning.

Q.4 Define Spinning

Ans → The process of making yarn from ~~file~~ fibre is called as spinning.

Q.5 What are yarns?

Ans → Yarns are the small threads spinned from fibres by spinning machines.

Q.6) What are the 2 main process of making fabrics from yarns?

Ans - The 2 main process of making fabrics from yarn are weaving and ~~knitting~~.
Weaving -

The process of arranging two sets of yarn together to make a fabric is called weaving. Weaving is done on looms. Looms are either hand operated or machine operated.

Knitting -

A single yarn is used to make a ^{piece of} fabric. This is called as ~~knit~~ knitting. It is done by needles manually or done with help of machines.

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for a long a time are called as insoluble substances. Eg → Sand and mustard oil.

Q.4 → What are opaque objects?

Ans → The materials through which we are not able to see are called as opaque objects. Eg → Cardboard, wooden box, bricks, etc.

Q.5 → What are translucent objects?

Ans → The materials through which we can see but not clearly are called as translucent objects. Eg → Butter-paper, tinted glass, and coloured plastics.

Q.6 → What are transparent objects?

Ans → Those materials through which objects can be seen clearly are called as transparent objects. eg → glass, clear water and air.

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Q.7 What are fibres?

Ans → The fibres are the thinnest and basic thread which are obtained from plants and animals.

Q.8 Name two sample devices used for spinning?

Ans → 1) Hand spindle or Takli
2) Charka.

Q.9 Which device did Mahatama ~~pe~~ Gandhi popularized as a part of Independence movement?

Ans → The use of Charka was popularized by Mahatama Gandhi as a part of Independence movement.

Q.10 How is fibre made from jute plant?

Ans → The stems of the harvested jute

plant are immersed for a few days. The stem rots and the jute fibres are separated by hand.

Q.11 What kind of climate and soil does the cotton plant require to give a good yield?

Ans → Cotton plants require ~~to~~ warm climate and black soil to give good yield.

Q.12 How did early man cover his body before fibres were discovered?

Ans - Early man used big leaves and ~~at~~ barks of trees and animal skin and fur to protect their bodies.

Q.13 Name some ~~is~~ unstitched pieces of fabrics that are used even today.

Ans → Saree,
Lungi
Dhoti &
Turban

CHAPTER - 4Sorting materials into groupsTEXT BOOK QUESTIONS

Q.1 Name five objects which can be made from wood.

Ans →

Ans →

- ① Table ② Door ③ Chair
④ Cupboard ⑤ Scale.

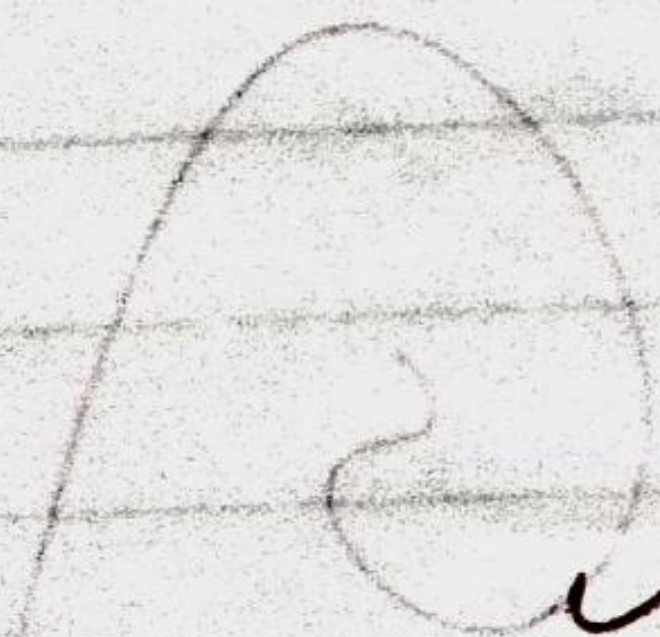
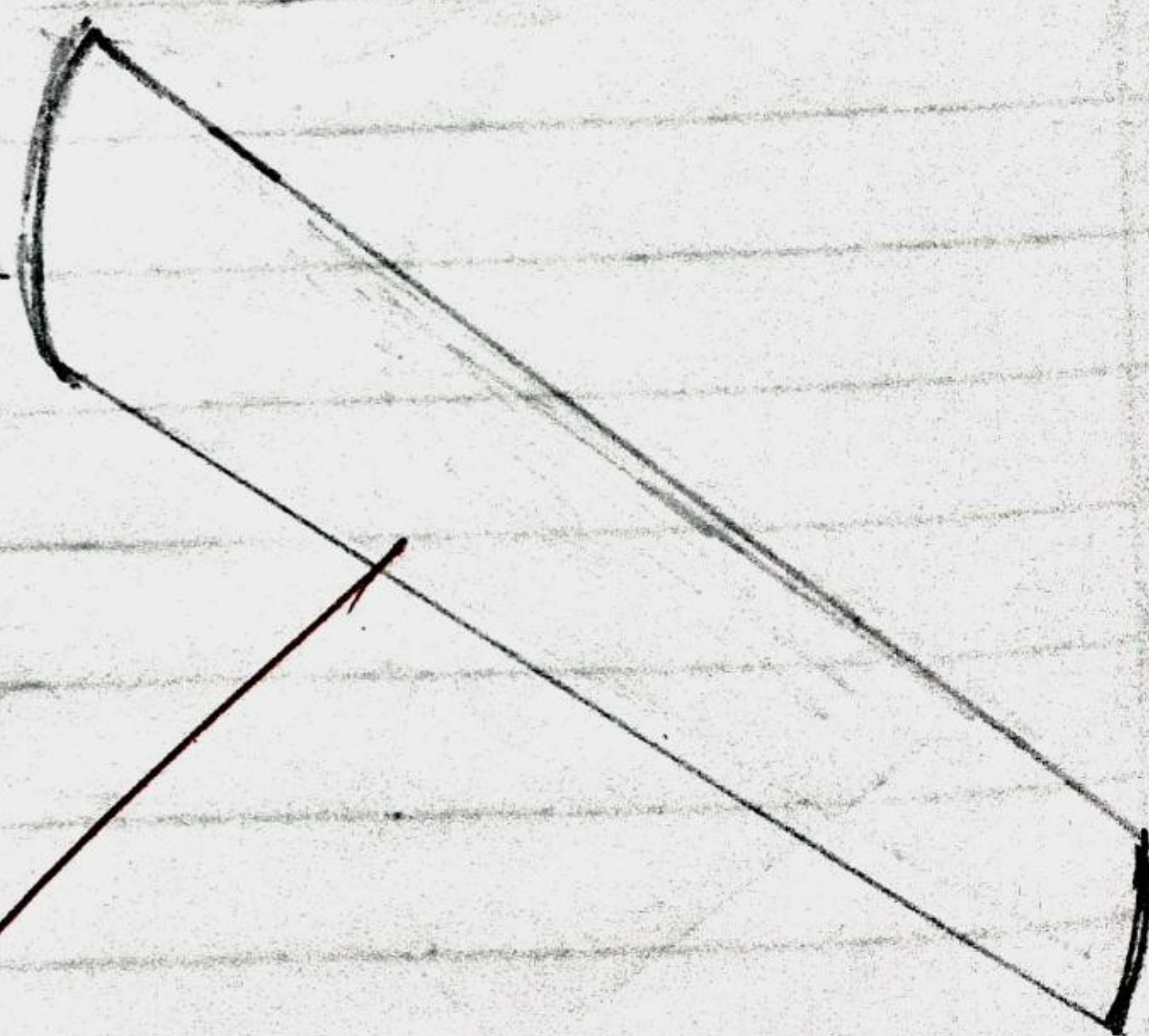
Q.2 Select those objects ^{of} ~~from~~ the following which shine.

glass bowl, plastic toy, steel spoon and cotton shirt

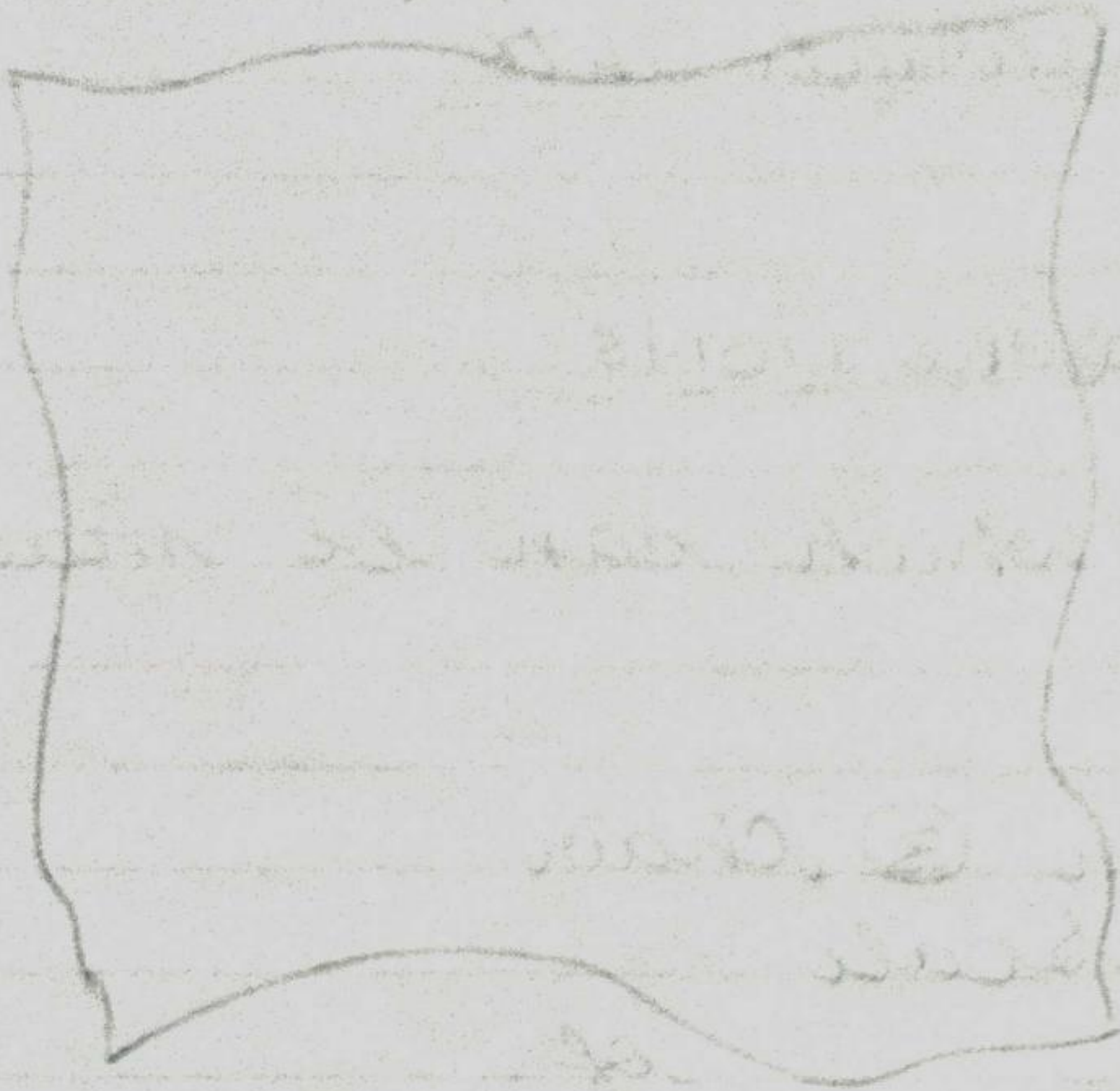
Ans → ① glass bowl (when light falls on it)
② steel spoon

(Q-3 to Q-7 → Done in the book.)

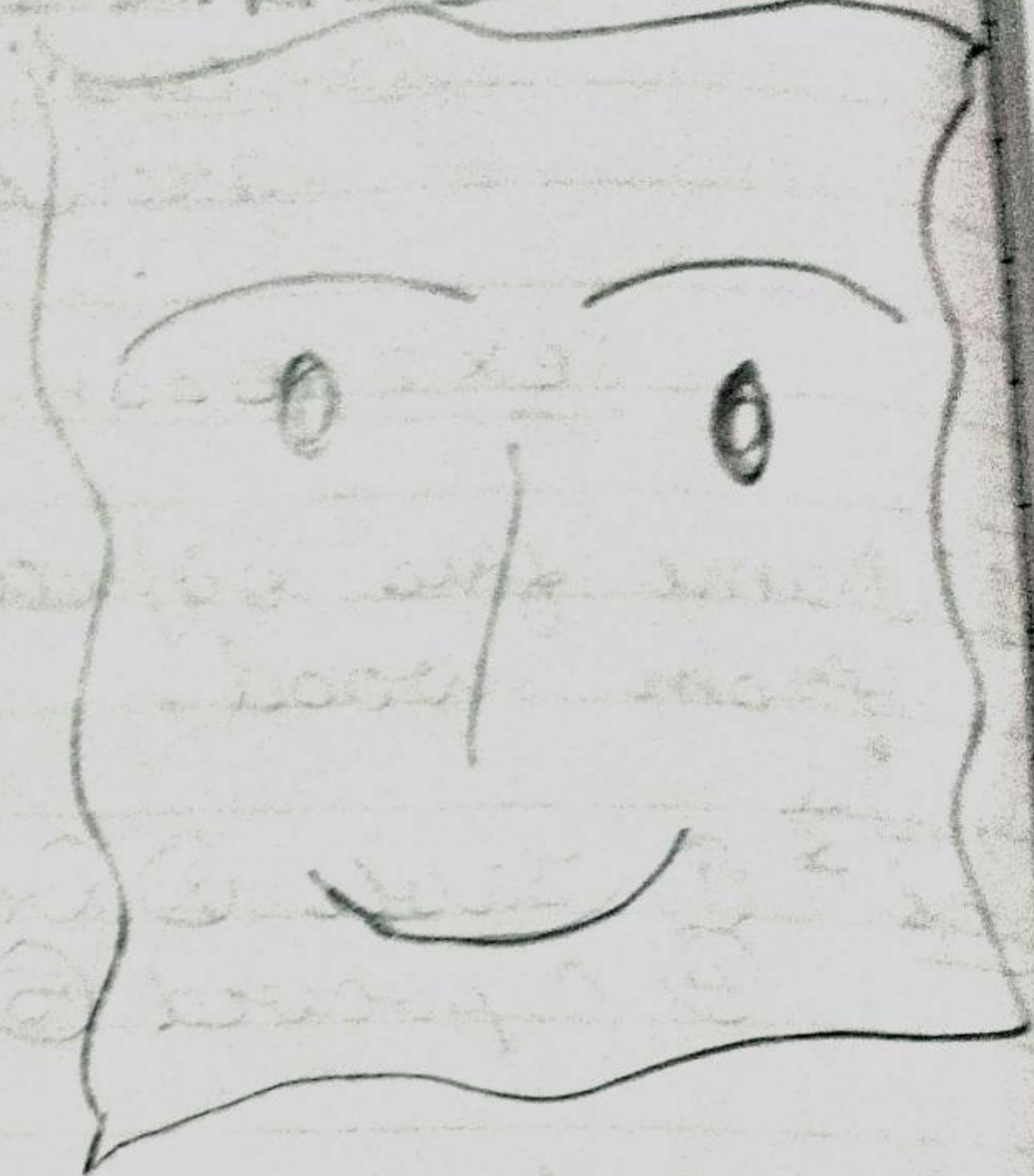
CUTTING PIECES OF MATERIALS TO SEE IF
THEY HAVE LUSTRE



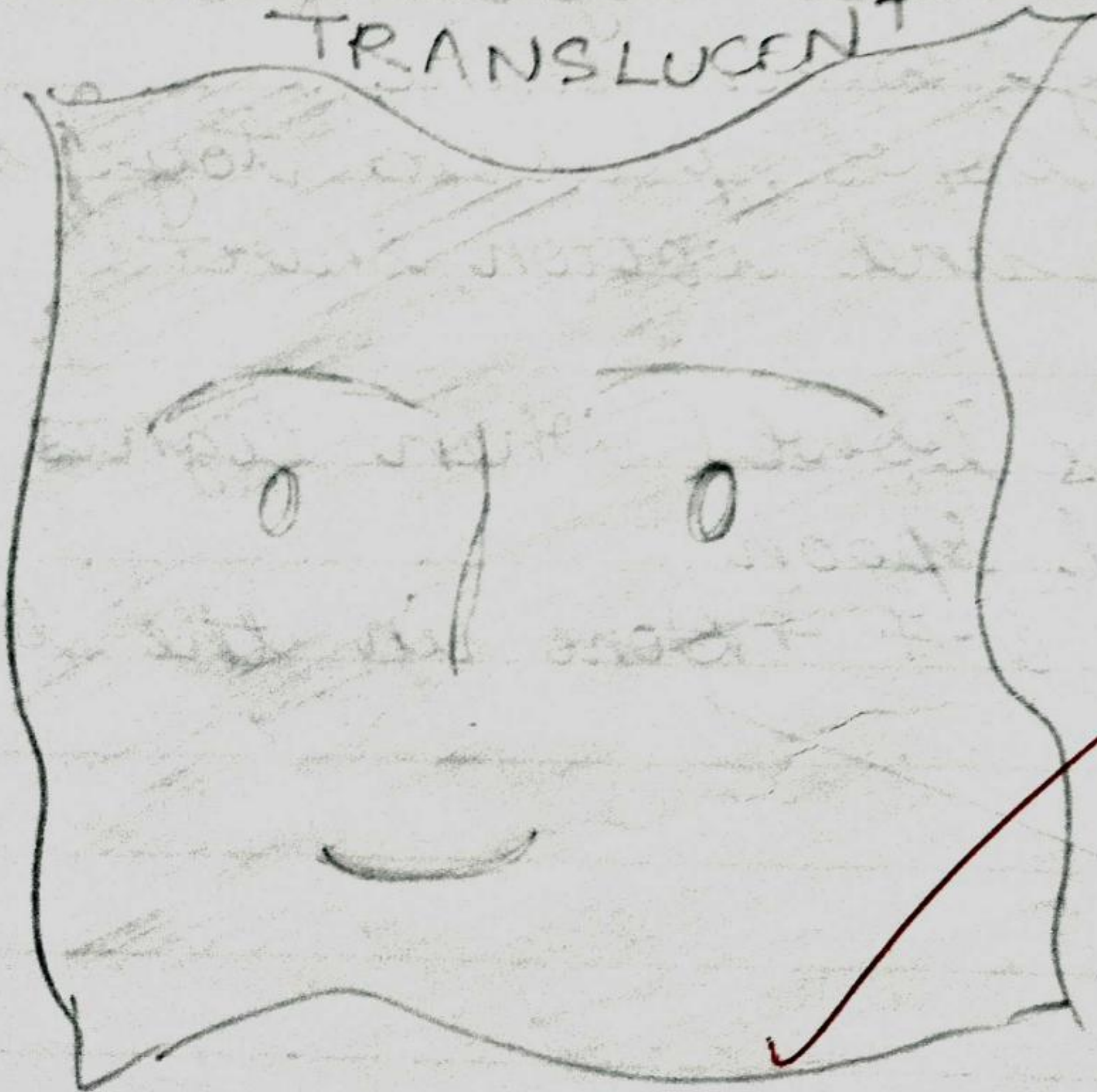
OPAQUE



TRANSPARENT



TRANSLUCENT



LOOKING THROUGH OPAQUE, TRANSPARENT & TRANSLUCENT
OBJECTS

Extra Questions

Q.1 → How are materials grouped?

Ans → The materials are grouped on the basis of similarities and differences and the uniqueness of the object.

Q.2 → What is lusture? Which materials have lusture? give examples.

Ans → The glowing shine on some objects is called ~~lusture~~ lusture. ~~eg~~ →
Eg → Aluminium, copper, silver and gold.

Q.3 → Which materials are said to be soluble and insoluble substances?

Ans → 1. The substances which dissolve easily in water are called soluble substances. Eg → Sugar, salt, vinegar, etc.

2. The substances which do not mix with water even after stirring for

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for a long a time are called as insoluble substances. Eg → Sand and mustard oil.

Q.4 → What are opaque objects?

Ans → The materials through which we are not able to see are called as opaque objects. Eg → Cardboard, wooden box, bricks, etc.

Q.5 → What are translucent objects?

Ans → The materials through which we can see but not clearly are called as translucent objects. Eg → Butter-paper, tinted glass, and coloured plastics.

Q.6 → What are transparent objects?

Ans → Those materials through which objects can be seen clearly are called as transparent objects. Eg → glass, clear water and air.

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Q.7 What role does water play in the functioning of our body?

Ans → Water is an 'universal solvent'. It dissolves every substance except a few. Water plays an important role in functioning of our body by dissolving a lot of materials. It also helps in the transportation of food materials in blood and taking out ~~water~~ waste materials to be removed. Therefore water plays an important role in the functioning of our body.

Q.8 What are hard and soft materials?

Ans → Materials which can be scratched or compressed ^{easily} are called as soft materials. eg → cotton and sponge. Materials which cannot be scratched or compressed ^{easily} are called as hard materials. eg → Iron and rock.

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Q.9 How do aquatic plants and animals survive in water?

Ans → Water usually dissolves a number of salts and gases such as oxygen and carbon dioxide. Oxygen helps the aquatic plants and animals to respire. Carbon dioxide dissolved in water helps the plants to perform photosynthesis. Thus aquatic plants and animals survive in water.

Q.10 How can you make a paper translucent?
(OR)

Ans Write an activity to make a paper translucent?

Ans → Aim - To make a paper translucent.

Materials required - A sheet of paper, oil and a source of light.

Method → ① Take a sheet of paper and hold it against light

② ~~Add~~ Put 2-3 drops of oil on the paper and smear it.

③ Again hold the paper against light and observe.

Observation → We observe that the source of light which was not visible through the clear paper can be seen through the oil smeared paper. Through this it is not seen clearly but it is partially visible.

Conclusion → Thus through the above method we can make a paper translucent.

Q.11 → Why do metals often lose their shine and appear dull?

Teacher's Signature _____

Ans → Some metals often appear lose their shine and appear dull because of action of air and moisture on them. Therefore we can see the lusture only on the freshly cut surface metal.

Q12 Name two liquids and two gases that dissolve in water -

Ans → Two liquids → Vinegar and lemon juice.

Two gases → oxygen and carbon dioxide.