

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 1 – Food – Where Does It Come From

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 1 – Food – Where Does It Come From

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 1 Food – Where Does It Come From NCERT Solution is given below.

Question 1:

Do you find that all living beings need the same kind of food?

Answer:

No. The food requirements of all living organisms vary. On the basis of food requirements, living organisms are grouped into three categories:

(i) Herbivores: These animals eat only plants or plant products. For example:

Cow, elephant, rabbit, horse, etc.

(ii) Carnivores: These animals eat other animals. For example: Lion, tiger, lizard, etc.

(iii) Omnivores: These animals eat both plants and animals. For example: Dog, cat, crow, etc.

Question 2:

Name five plants and their parts that we consume.

Answer:

Plant	Edible plant part
Carrot	Root
Peas	Seed
Apple	Fruit
Cauliflower	Flower
Cabbage	Leaf

Question 3:

Match the items given in Column A with those in Column B.

Column A	Column B
Milk, curd, paneer, ghee	eat other animals
Spinach, cauliflower, carrot	eat plants and plant products
Lions and tigers	are vegetables
Herbivores	are all animal products

Answer:

Column A	Column B
Milk, curd, paneer, ghee	are all animal products
Spinach, cauliflower, carrot	are vegetables
Lions and tigers	eat other animals
Herbivores	eat plants and plant products

Question 4:

Fill up the blanks with the words given:

herbivore, plant, milk, sugarcane, carnivore

- (a) Tiger is a _____ because it eats only meat.
- (b) Deer eats only plant products and so, is called _____.
- (c) Parrot eats only _____ products.
- (d) The _____ that we drink, which comes from cows, buffaloes and goats is an animal product.
- (e) We get sugar from _____ .

Answer:

- (a) Tiger is a carnivore because it eats only meat.
- (b) Deer eats only plant products and so, is called herbivore.
- (c) Parrot eats only plant products.
- (d) The milk that we drink, which comes from cows, buffaloes and goats is an animal product.
- (e) We get sugar from sugarcane.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 2 – Components of Food

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 2 – Components of Food

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 2 Components of Food NCERT Solution is given below.

Question 1:

Name the major nutrients in our food.

Answer:

The major nutrients in our food are: Carbohydrates, proteins, fats, vitamins, and minerals.

Question 2:

Name the following :

- (a) The nutrients which mainly give energy to our body.

- (b) The nutrients that are needed for the growth and maintenance of our body.
- (c) A vitamin required for maintaining good eyesight.
- (d) A mineral required for keeping our bones healthy.

Answer:

- (a) Carbohydrates and fats
- (b) Proteins and minerals
- (c) Vitamin A
- (d) Calcium

Question 3:

Name two foods each rich in:

- (a) Fats
- (b) Starch
- (c) Dietary fibre
- (d) Protein

Answer:

- (a) Groundnut and Butter
- (b) Rice and Mango
- (c) Potatoes and pulses
- (d) Fish and Gram

Question 4:

Tick (||) the statements that are correct.

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

Answer:

- (a) By eating rice alone, we can fulfil the nutritional requirement in our body. (x)
- (b) Deficiency diseases can be prevented by eating a balanced diet. (||)
- (c) A balanced diet for the body should contain a variety of food items. (x)
- (d) Meat alone is sufficient to provide all nutrients to the body. (x)

Question 5:

Fill in the blanks:

- (a) _____ is caused by the deficiency of vitamin D.
- (b) Deficiency of _____ causes a disease known as beri-beri.

- (c) Deficiency of vitamin C causes a disease known as _____.
- (d) Night blindness is caused due to deficiency of _____ in our food.

Answer:

- (a) Rickets is caused by the 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.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 3 – Fibre to Fabric

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 3 – Fibre to Fabric

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 3 – Fibre to Fabric

NCERT Solution is given below.

Question

1:

Classify the following fibres as natural or synthetic: Nylon, wool, cotton, silk, polyester, jute

Answer:

Fibres that are obtained from nature, i.e., from plants and animals are called natural fibres and those made by humans by chemical methods are known as synthetic fibres. Wool and silk are obtained from animals and cotton and jute are obtained from plants. Hence, they are natural fibres. Nylon and polyester on the other hand are prepared artificially and are therefore synthetic fibres.

Question

2:

State whether the following statements are 'true' or 'false':

- a) Yam is made from fibre.
- b) Spinning is a process of making fibres.
- c) Jute is an outer covering of coconut.
- d) The process of removing seeds from cotton is called ginning.
- e) Weaving of yarn makes a piece of fabric.
- f) Silk fibre is obtained from the stem of a plant.
- g) Polyester is a natural fibre.

Answer:

- a) Yam is made from fibre. (True)
- b) Spinning is a process of making fibres. (False)

- c) Jute is an outer covering of coconut. (False)
- d) The process of removing seeds from cotton is called ginning. (True)
- e) Weaving of yarn makes a piece of fabric. (True)
- f) Silk fibre is obtained from the stem of a plant. (False)
- g) Polyester is a natural fibre. (False)

Question

3:

Fill in the blanks:

- (a) Plant fibres are obtained from _____ and _____.
- (b) Animal fibres are _____ and _____.

Answer:

- (a) Plant fibres are obtained from fruits and stems.
- (b) Animal fibres are wool and silk.

Question

4:

Cotton and jute are obtained from which parts of plants?

Answer:

Cotton fibres are obtained from the fruit of cotton plants. The fruit of a cotton plant is known as cotton bolls. Jute fibres are obtained from the stem of jute plants.

Question

5:

Name two items that are made from coconut fibre.

Answer:

- Two items that are made from coconut fibre are:
- (i) Ropes
- (ii) Baskets

Question

6:

Explain the process of making yarn from fibre.

Answer:

The process of making yarn from fibre is called spinning. The fibres are first drawn out from their source and then twisted into yarn. Two devices used in spinning are takli and charkha.

Question

7:

Find the odd one out from the following:

- (a) Chair, Bed, Table, Baby, Cupboard
- (b) Rose, Jasmine, Boat, Marigold, Lotus
- (c) Aluminium, Iron, Copper, Silver, Sand
- (d) Sugar, Salt, Sand, Copper sulphate

Answer:

- (a) Baby
- (b)
- (c)
- (d) Sand

Boat
Sand

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 4 – Sorting Materials Into Groups

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 4 – Sorting Materials Into Groups

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 4 Sorting Materials Into Groups NCERT Solution is given below.

Question

1:

Classify the following fibres as natural or synthetic: Nylon, wool, cotton, silk, polyester, jute

Answer:

Fibres that are obtained from nature, i.e., from plants and animals are called natural fibres and those made by humans by chemical methods are known as synthetic fibres. Wool and silk are obtained from animals and cotton and jute are obtained from plants. Hence, they are natural fibres. Nylon and polyester on the other hand are prepared artificially and are therefore synthetic fibres.

Question

2:

Select those objects from the following which shine: Glass bowl, plastic toy, steel spoon, cotton shirt

Answer:

Glass bowl and steel spoon

Question

3:

Match the objects given below with the materials from which they could be made. Remember, an object could be made from more than one material and a given material could be used for making many objects.

Object	Material
Book	Glass
Tumbler	Wood
Chair	Paper

Toy	Leather
Shoes	Plastics

Answer:

Object	Material
Book	Paper
Tumbler	Glass, plastic
Chair	Wood, plastic
Toy	Wood, paper, plastic
Shoes	Leather

Question

4:

State whether the statements given below are 'True' or 'False'.

- (i) Stone is transparent, while glass is opaque.
- (ii) A notebook has lustre, while an eraser does not.
- (iii) Chalk dissolves in water.
- (iv) A piece of wood floats on water.
- (v) Sugar does not dissolve in water.
- (vi) Oil mixes with water.
- (vii) Sand settles down in water.
- (viii) Vinegar dissolves in water.

Answer:

- (i) Stone is transparent, while glass is opaque. (False)
- (ii) A notebook has lustre, while an eraser does not. (False)
- (iii) Chalk dissolves in water. (False)
- (iv) A piece of wood floats on water. (True)
- (v) Sugar does not dissolve in water. (False)
- (vi) Oil mixes with water. (False)
- (vii) Sand settles down in water. (True)
- (viii) Vinegar dissolves in water. (True)

Question

5:

Given below are the names of some objects and materials: Water, basket ball, orange, sugar, globe, apple, and earthen pitcher
Group them as:

- (a) Round shaped and other shapes
- (b) Eatables and non-eatables

Answer:

- (a) Round-shaped: Basketball, orange, globe, apple, earthen pitcher Other shapes: Water,

sugar

(b) Eatables: Water, orange, sugar, apple Non-eatables: Basketball, globe, earthen pitcher

Question

6:

List all items known to you that float on water. Check and see if they will float on oil or kerosene.

Answer:

Some items that float on water are listed below :

1. Plastic bottle
2. Piece of paper
3. Piece of sponge
4. Piece of thermocol
5. Wood
6. Bamboo
7. Plastic ball
8. Cork

However, none of these items floats on oil or kerosene.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 5 – Separation of Substances

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Subject: Science

Chapter: Chapter 5 – Separation of Substances

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 5 Separation of Substances NCERT Solution is given below.

Question

1:

Why do we need to separate different components of a mixture? Give two examples.

Answer:

Different components of a mixture are separated in order to either separate the unrequired components from a mixture or sometimes, to separate more than one useful components from a mixture.

For example, grain purchased from shops can contain several impurities such as pieces of stone, husk, broken grains, etc. Thus, grain is separated from these impurities to make it edible.

Similarly, after preparing tea, we strain it to remove the used tea leaves from tea.

Question**2:**

What is winnowing? Where is it used?

Answer:

Winnowing is the process of separation of the heavier components from the lighter components of a mixture by wind or by blowing air. It is generally used by farmers to separate the lighter impurities such as husk particles from the heavier grains.

Question**3:**

How will you separate husk or dirt particles from a given sample of pulses before cooking?

Answer:

The dirt particles that are present in the pulses are removed by washing the latter with water. Being heavier, the pulses settle down, while the dirt particles being lighter keep floating in water. This process is called sedimentation. The dirty water can be removed by the method of decantation, leaving the pulses at the bottom.

Question**4:**

What is sieving? Where is it used?

Answer:

Sieving is the method of separation of fine particles from bigger particles by allowing the finer particles to pass through the holes of a sieve, leaving the bigger particles in the sieve itself.

It is generally used in homes to separate flour from impurities such as pieces of stone, stalk, and husk. It is also used at construction sites to separate sand from small stones.

Question**5:**

How will you separate sand and water from their mixture?

Answer:

Sand is not soluble in water. Hence, the mixture of sand and water can be separated by two methods:

1. Combination of sedimentation and decantation: As sand is insoluble and heavier than water, it settles down at the bottom of the container containing the mixture. This process is called sedimentation. After the process of sedimentation is complete, water is slowly transferred to another container and sand remains in the original container. This process is called decantation.

2. Filtration: the mixture is poured on a strainer or a piece of cloth or a filter paper so that the water goes through the strainer and the sand remains on the strainer.

Question**6:**

Is it possible to separate sugar mixed with wheat flour? If yes, how will you do it?

Answer:

Yes. It is possible to separate a mixture of sugar and wheat flour. This can be done by the process of sieving. If the mixture of sugar and wheat flour is allowed to pass through a sieve, then the fine wheat flour particles would pass through the sieve, the sugar particles would be retained by the sieve.

Question**7:**

How would you obtain clear water from a sample of muddy water?

Answer:

Clear water can be obtained from a sample of muddy water by the method of filtration. In this method, the sample of muddy water is poured through a cloth having fine pores or through a filter paper. Water will pass through the filtering medium, leaving behind the mud.

Question**8:**

Fill in the blanks:

- (a) The method of separating seeds of paddy from its stalk is called _____.
- (b) When milk is cooled after boiling and poured on a piece of cloth, cream (malai) is left behind on it. This process of separating cream from milk is an example of _____.
- (c) Salt is obtained from seawater by the process of _____.
- (d) Impurities settled at the bottom when muddy water was kept overnight in a bucket. Clear water was then poured from top. The process of separation used in this example is called _____.

Answer:

- (a) The method of separating seeds of paddy from its stalk is called threshing.
- (b) When milk is cooled after boiling and poured on a piece of cloth, cream (malai) is left behind on it. This process of separating cream from milk is an example of filtration.
- (c) Salt is obtained from seawater by the process of evaporation.
- (d) Impurities settled at the bottom when muddy water was kept overnight in a bucket. Clear water was then poured from top. The process of separation used in this example is called decantation.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 6 – Changes Around Us

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 6 – Changes Around Us

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 6 Changes Around Us NCERT Solution is given below.

Question 1:

To walk through a waterlogged area, you usually shorten the length of your dress by folding it. Can this change be reversed?

Answer:

Yes. The length of the dress can again be increased by unfolding it. Hence, this change can be reversed.

Question 2:

You accidentally drop your favourite toy and break it. This is a change you did not want. Can this change be reversed?

Answer:

No. This change cannot be reversed.

Question 3:

Some changes are listed in the following table. For each change, write in the blank column whether the change can be reversed or not.

S. No.	Change	Can be reversed (Yes/No)
1.	Sawing of a piece of wood	–
2.	Melting of ice candy	–
3.	Dissolving sugar in water	–
4.	Cooking food	–
5.	Ripening of a mango	–
6.	Souring of milk	–

Answer:

S. No.	Change	Can be reversed (Yes/No)
1.	Sawing of a piece of wood	No
2.	Melting of ice candy	Yes
3.	Dissolving sugar in water	Yes
4.	Cooking food	No
5.	Ripening of a mango	No
6.	Souring of milk	No

Question 4:

A drawing sheet changes when you draw a picture on it. Can you reverse this change?

Answer:

If we draw a picture on a drawing sheet with a pencil, we can get back the original drawing sheet by erasing the drawing with an eraser. In this case, the change can be reversed. However, if we draw with a pen, then the original drawing sheet cannot be obtained back because we cannot erase ink. Hence, in this case, the change cannot be reversed.

Question 5:

Give examples to explain the differences between changes that can or cannot be reversed.

Answer:

To explain the differences between changes that can or cannot be reversed, some examples are given below :

(i) If we inflate a balloon, the size and shape of the balloon undergoes a change. However, the original size and shape of the balloon can be obtained back by allowing the air to escape from the balloon. This means that the change that occurs by inflating a balloon can be reversed. But, if the balloon bursts after being inflated, then its original size and shape cannot be obtained back. Thus, in this case, the change cannot be reversed.

(ii) If we fold a piece of paper, then the shape and size of the paper undergoes a change. In this case, the original shape and size of the original paper can be obtained back. Thus, this change can be reversed. However, if we cut the piece of paper, the change in the shape and size of the paper cannot be reversed.

(iii) After we roll out a chapatti from a ball of dough, the chapatti can be converted back into a ball. Thus, the change occurring here can be reversed. But, if we cook the chapatti on a tawa, then it cannot be converted back into a ball of dough. Thus, the change is irreversible.

Question 6:

A thick coating of Plaster of Paris (POP) paste is applied over the bandage on a fractured bone. It becomes hard on drying to keep the fractured bone immobilized. Can the change in POP be reversed?

Answer:

When water is added to plaster of Paris (POP), it changes to another substance and on drying it hardens. Once the POP has hardened, its shape cannot be changed. Therefore, the change in POP cannot be reversed.

Question 7:

A bag of cement lying in the open gets wet due to rain during the night. The next day, the sun shines brightly. Do you think the changes that have occurred in the cement can be reversed?

Answer:

In this case, the changes cannot be reversed. This is because the cement that hardens up after getting wet cannot be obtained back.

Question 9:

State whether the following statements are 'True' or 'False'?

- (a) A mixture of milk and water can be separated by filtration.
- (b) A mixture of powdered salt and sugar can be separated by the process of winnowing.
- (c) Separation of sugar from tea can be done through filtration.
- (d) Grain and husk can be separated by the process of decantation.

Answer:

- (a) A mixture of milk and water can be separated by filtration. (False)
- (b) A mixture of powdered salt and sugar can be separated by the process of winnowing. (False)
- (c) Separation of sugar from tea can be done through filtration. (False)
- (d) Grain and husk can be separated by the process of decantation. (True)

Question 10:

Lemonade is prepared by mixing lemon juice and sugar in water. You wish to add ice to cool it. Should you add ice to the lemonade before or after dissolving sugar? In which case would it be possible to dissolve more sugar?

Answer:

The solubility of a substance decreases with decreases in temperature. After the addition of ice, the temperature of the lemonade decreases and dissolving sugar in cold water is difficult. Therefore, ice should be added to lemonade after dissolving the sugar.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 7 – Getting to Know Plants

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 7 – Getting to Know Plants

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 7 Getting to Know Plants NCERT Solution is given below.

Question**1:**

- Correct the following statements and rewrite them in your notebook.
- (a) Stem absorbs water and minerals from the soil.
 - (b) Leaves hold the plant upright.

- (c) Roots conduct water to the leaves.
- (d) The number of petals and sepals in a flower is always equal.
- (e) If the sepals of a flower are joined together, then its petals are also joined together.
- (f) If the petals of a flower are joined together, then the pistil is joined to the petal.

Answer:

- (a) Root absorbs water and minerals from the soil.
- (b) Stem holds the plant upright.
- (c) Stem conducts water to the leaves.
- (d) The number of petals and sepals in a flower may be different in different plants.
- (e) If the sepals of a flower are joined together, then its petals may or may not be joined together.
- (f) If the petals of a flower are joined together, then the stamen may or may not be joined to the petal.

Question

2:

Draw (a) a leaf, (b) a taproot, and (c) a flower that you have studied for Table 7.3.

Answer:

(a)



Leaf of a rose plant

(b)



Taproot of a rose plant

(c)



Flower of a rose plant

Question

3:

Can you find a plant in your house or in your neighbourhood which has a long but a weak stem? Write its name. In which category would you classify it?

Answer:

The money plant has a long and weak stem. It comes under the category of climbers. Climbers are plants that readily take support on neighbouring structures as they have a weak stem.

Question

4:

What is the function of a stem in plant?

Answer:

The main function of a stem in plants is that it helps in the conduction of water and minerals from the roots to the leaves and other parts of plants. It also provides support to branches, leaves, flowers, fruits, and buds of plants.

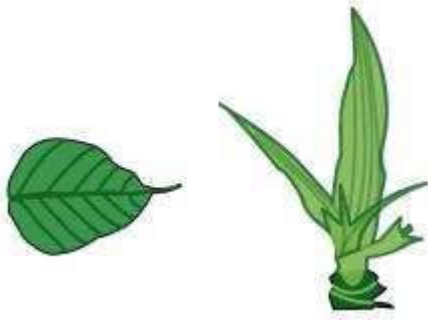
Question

5:

Which of the following leaves have reticulate venation? Wheat, tulsi, maize, grass, coriander (dhania), China rose

Answer:

The leaves of tulsi, coriander, and China rose have reticulate venation, whereas maize, grass, and wheat have parallel venation. In leaves with reticulate venation, the veins are arranged in a net-like pattern. In parallel venation, the veins are arranged parallel to one another.



Leaves with reticulate and parallel venation

Question

6:

If a plant has fibrous roots, what type of venation are its leaves likely to have?

Answer:

Plants with fibrous roots have parallel venation in their leaves. For example, grass, wheat, maize, etc. have fibrous roots with parallel venation.



Fibrous roots with parallel venation

Fibrous roots have thin and moderately growing branches arising from the stem. Parallel venation, on the other hand, has leaves in which the veins are arranged parallel to each other.

Question

7:

If a plant has leaves with reticulate venation, then what kind of roots does it have?

Answer:

Plants with reticulate venation in their leaves are likely to have tap roots. For example, a carrot or a rose plant has leaves with reticulate venation and its roots are called tap roots.



Taproots and reticulate venation

In tap roots, there is one main root known as the 'tap root' that grows straight down from the stem. It also has smaller roots known as 'lateral roots'. In leaves with reticulate venation, the veins are arranged in a net-like pattern.

Question

8:

Is it possible for you to recognize leaves without seeing them? How?

Answer:

Yes. We can recognize leaves without seeing them. You can look for the type of roots of the plant and identify the type of leaf. If the plant has fibrous roots, then its leaves have parallel venation, and if the plant has tap roots, then its leaves have reticulate venation.

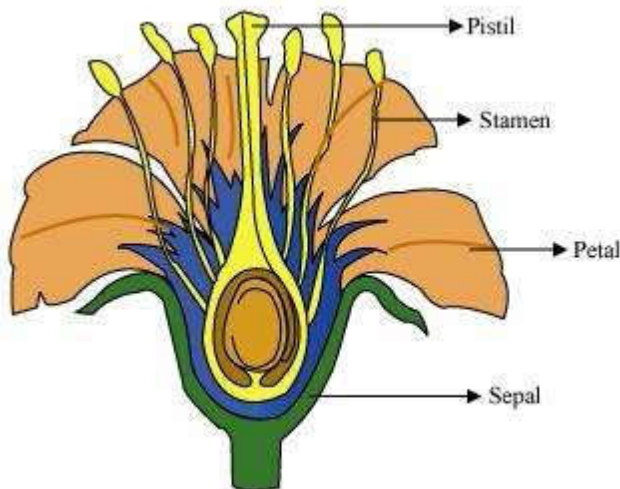
Question

9:

Write the names of the parts of a flower.

Answer:

A flower consists of sepals, petals, stamens, and pistils. A stamen has two parts called the anther and the filament. A pistil has three parts called the stigma, style, and ovary.



A flower showing all its parts

Question**10:**

Which of the following plants have you seen? Of those that you have seen, which ones have flowers?

Grass, maize, wheat, chilli, tomato, tulsi, pipal, shisham, banyan, mango, jamun, guava, pomegranate, papaya, banana, lemon, sugarcane, potato, groundnut

Answer:

The given examples are flowering plants. But, in some plants such as tulsi, pipal, sugarcane, etc. the flowers are not visible. They are so small that they cannot be seen with naked eyes.

Question**11:**

Name that part of plants which produces food. Name this process.

Answer:

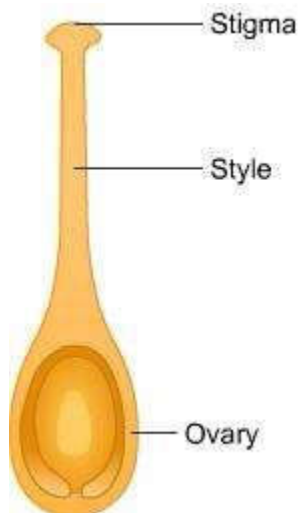
The part of plants which prepares food is the leaf. Leaves of a plant prepare food in the presence of sunlight. The process of making food by utilizing water and carbon dioxide in the presence of sunlight is called photosynthesis.

Question**12:**

In which part of a flower, you are likely to find the ovary?

Answer:

Pistil is the part of the flower that contains the ovary.

**The structure of a pistil showing all its parts****Question****13:**

Name two flowers each with joined and separated sepals.

Answer:

Flowers with joined sepals are Periwinkle (Sadabahar) and Hibiscus (China rose).
Flowers with separated sepals are Rose and Magnolia.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 8 – Body Movements

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 8 – Body Movements

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 8 Body Movements NCERT Solution is given below.

Question 1:

Fill in the blanks:

- (a) Joints of bones help in the _____ of body.
- (b) A combination of bones and cartilages forms the _____ of the body.
- (c) Bones at the elbow are joined by a _____ joint.
- (d) The contraction of the _____ pulls the bones during movement.

Answer:

- (a) Joints of bones help in the movement of body.
- (b) A combination of bones and cartilages forms the skeleton of the body.
- (c) Bones at the elbow are joined by a hinge joint.
- (d) The contraction of the muscle pulls the bones during movement.

Question 2:

Indicate true (T) or false (F) for the following sentences.

- (a) Movement and locomotion of all animals is exactly the same. ()
- (b) Cartilages are harder than bones. ()
- (c) Finger bones do not have joints. ()
- (d) The fore arm has two bones. ()
- (e) Cockroaches have an outer skeleton. ()

Answer:

- (a) Movement and locomotion of all animals is exactly the same. (False)
- (b) Cartilages are harder than bones. (False)
- (c) Finger bones do not have joints. (False)
- (d) The fore arm has two bones. (True)
- (e) Cockroaches have an outer skeleton. (True)

Question 3:

Match the items in Column I with one or more items in Column II.

Column I	Column II
----------	-----------

Upper jaw	have fins on the body
Fishes	has an outer skeleton
Ribs	can fly in the air
Snail	is an immovable joint
Cockroach	protect the heart
–	shows very slow movement
–	have a streamlined body

Answer:

Column I	Column II
Upper jaw	is an immovable joint
Fishes	have a streamlined body; have fins on the body
Ribs	protect the heart
Snail	shows very slow movement
Cockroach	has an outer skeleton; can fly in the air

Question 4:

Answer the following :

- What is a ball and socket joint?
- Which of the skull bones are movable?
- Why can our elbow not move backwards?

Answer:

- Ball and socket joint is a movable joint. It consists of a bone that has a round head, which fits into a cup like depression of another bone. This helps the bone to rotate freely. Examples of such joints are hip and shoulder joints.
- Mandible bone which forms the lower jaw is the only skull bone that is movable.
- The elbow has a hinge joint. This type of a joint allows the movement in one plane only. Therefore, our elbow cannot move backwards.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 9 – The Living Organisms and Their Surroundings

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 9 – The Living Organisms and Their Surroundings

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 9 The Living Organisms and Their Surroundings NCERT Solution is given below.

Question**1:**

What is a habitat?

Answer:

A habitat is a natural environment where an organism lives. It is basically the address of an organism. Different plants and animals live in different habitats. For example, the habitat of a frog species is fresh water, while the habitat of a camel is a desert.

Question**2:**

How is a cactus adapted to survive in a desert?

Answer:

A cactus is able to survive in the desert as it is adapted to the hot and humid conditions of the desert. To survive in a desert, the cactus has the following adaptations:

- (i) It has long roots that go deep inside the soil for absorbing water.
- (ii) Its leaves are present in the form of spines to prevent water loss through transpiration.
- (iii) Its stem is covered with a thick waxy layer to retain water.

Question**3:**

Fill in the blanks:

- (a) The presence of specific features, which enable a plant or an animal to live in a particular habitat, is called _____.
- (b) The habitats of plants and animals that live on land are called _____ habitat.
- (c) The habitats of plants and animals that live in water are called _____ habitat.
- (d) Soil, water, and air are _____ factors of a habitat.
- (e) Changes in our surrounding that makes us respond to them are called _____.

Answer:

- (a) The presence of specific features, which enable a plant or an animal to live in a particular habitat, is called adaptation.
- (b) The habitats of plants and animals that live on land are called terrestrial habitat.
- (c) The habitats of plants and animals that live in water are called aquatic habitat.
- (d) Soil, water, and air are abiotic factors of a habitat.
- (e) Changes in our surrounding that makes us respond to them are called stimuli.

Question**4:**

Which of the things in the following list are non-living?

Plough, Mushroom, Sewing Machine, Radio, Boat, Water Hyacinth, Earthworm

Answer:

In the given list, the non-living things are plough, sewing machine, radio, and boat. On the other hand, mushroom, water hyacinth, and earthworms are living things.

Question**5:**

Give an example of a non-living thing that shows any two characteristics of living things.

Answer:

Car is an example of a non-living thing that shows two characteristics of living things. A car can move from one place to another. Also, it requires energy just like living things.

Question**6:**

Among the non-living things listed below, which things were once a part of living things? Butter, Leather, Soil, Wool, Electric Bulb, Cooking Oil, Salt, Apple, Rubber

Answer:

The non-living things which were once a part of living things are butter, leather, wool, cooking oil, apple, and rubber. The sources of these non-living things are given below:

- (a) Butter is made by churning milk, which is obtained from dairy animals.
 - (b) Leather is obtained from animal skin.
 - (c) Wool is a fabric made from the hair of sheep.
 - (d) Cooking oil is obtained from the seeds of the some plants.
 - (e) Apple is a fruit obtained from apple tree.
 - (f) Rubber is obtained from the latex of rubber tree.
- Soil, electric bulb, and salt are non-living things which were never a part of any living thing.

Question**7:**

List the common characteristics of living things.

Answer:

- Some common characteristics of living things are that they
- (a) require food
 - (b) respire and excrete waste material
 - (c) respond to stimuli in their environment
 - (d) reproduce to maintain their number
 - (e) move from one place to another
 - (f) grow and die

Question**8:**

Explain why speed is important for survival in the grasslands for animals that live there (Hint: There are few trees or places for animals to hide in grasslands habitat).

Answer:

In grasslands, mainly grasses are found. Trees are very few in number. Predators such as lion, tiger, etc. that feed upon other animals are commonly found in these regions. It is very

easy for these predators to locate their prey in the grass. Therefore, to protect themselves from these predators, animals adapt themselves by increasing their speed. The increased speed of the animal helps the weaker animals to escape their predator, thereby protecting themselves and increasing the chances of their survival.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 10 – Motion and Measurement of Distances

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 10 – Motion and Measurement of Distances

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 10 Motion and Measurement of Distances NCERT Solution is given below.

Question 1:

Give two examples each of modes of transport used on land, water, and air.

Answer:

Two examples of modes of transport used on land are buses and wheel carts.

Two examples of modes of transport used on water are ships and boats.

Two examples of modes of transport used in air are aeroplanes and helicopters.

Question 2:

Fill in the blanks:

(i) One metre is _____ cm.

(ii) Five kilometres is _____ m.

(iii) Motion of a child on a swing is _____.

(iv) Motion of the needle of a sewing machine is _____.

(v) Motion of wheel of a bicycle is _____.

Answer:

(i) One metre is 100 cm.

(ii) Five kilometres is 5000 m.

1 km = 1000 m

5 km = 1000 × 5 = 5000 m

Hence, the answer is 5000 m.

(iii) Motion of a child on a swing is periodic.

Periodic motion:

The motion of a swing repeats itself at a certain time interval. Therefore, it has

periodic motion. Hence, a child on a swing is said to have periodic motion.

(iv) Motion of the needle of a sewing machine is periodic.

Periodic motion:

The needle of a sewing machine moves up and down repeatedly with a certain time interval. Hence, it is an example of periodic motion.

(v) Motion of the wheel of a bicycle is circular.

Circular motion:

The central part of the wheel of a bicycle is attached to a fixed point. The wheel rotates about this fixed point as the bicycle moves. Hence, the wheel has circular motion.

Question 3:

Why can a pace or a footstep not be used as a standard unit of length?

Answer:

The size of the foot varies from person to person. If footsteps of two persons are used to measure the length respectively, then the two distances may not be equal. Thus, a footstep is not a constant quantity. Hence, it cannot be used as a standard unit of length.

Question 4:

Arrange the following lengths in their increasing magnitude :

1 metre, 1 centimetre, 1 kilometre, 1 millimetre

Answer:

1 cm = 10 mm

1 m = 100 cm = 1000 mm

Again, 1 km = 1000 m = 100000 cm = 10000000 mm.

Hence, 1 mm is smaller than 1 cm, 1 cm is smaller than 1 m, and 1 m is smaller than 1 km, i.e.,

1 millimetre < 1 centimetre < 1 metre < 1 kilometre

Question 5:

The height of a person is 1.65 m. Express this in cm and mm.

Answer:

Height of the person = 1.65 m

1 m = 100 cm

1.65 m = 100 × 1.65 = 165 cm

Hence, the height of the person is 165 cm.

Again, 1 m = 100 cm = 1000 mm

Therefore, 1.65 m = 1.65 × 10 = 1650 mm

Hence, the height of the person is 1650 mm.

Question 6:

The distance between Radha's home and her school is 3250 m. Express this distance in km.

Answer:

The distance between Radha's home and her school is 3250 m.

1 km = 1000 m

i.e., 1000 m = 1 km

$$3250 \text{ m} = \frac{1}{1000} \times 3250 = 3.25 \text{ km}$$

Question 7:

List the common characteristics of living things.

Answer:

Some common characteristics of living things are that they

- (a) require food
- (b) respire and excrete waste material
- (c) respond to stimuli in their environment
- (d) reproduce to maintain their number
- (e) move from one place to another
- (f) grow and die

Question 8:

Write the similarities and the differences between the motion of a bicycle and a ceiling fan that has been switched on.

Answer:

Similarities between the motion of a bicycle and a ceiling fan:

- (i) The blades of a fan and the wheels of a bicycle are fixed at a point.
- (ii) Both have circular motion about their respective fixed points.

Differences between the motion of a bicycle and a ceiling fan:

- (i) A bicycle has linear motion, whereas the blades of a ceiling fan do not have linear motion.
- (ii) The motion of the blades of a fan is periodic, whereas the motion of a bicycle is rectilinear motion.

Question 9:

Why can you not use an elastic measuring tape to measure distance? What would be some of the problems you would meet in telling someone about a distance you measured with an elastic tape?

Answer:

An elastic measuring tape is stretchable. It cannot be used to measure distances because the length of the tape may change on stretching. As a result, the measured length would not be correct.

If you measure the length of an object twice using an elastic tape, then you may get different values of the same length each time. This is because elastic tapes are stretchable.

Question 10:

Give two examples of periodic motion.

Answer:

Examples of periodic motion:

(i) Motion of a pendulum

The bob of a pendulum repeats itself at a certain time period. This motion is called periodic motion.

(ii) Motion of a boy sitting on a swing

The motion of a swing repeats itself at a certain time period. Hence, a boy sitting on a swing has periodic motion.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 11 – Light Shadows and Reflection

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 11 – Light Shadows and Reflection

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 11 Light Shadows and Reflection NCERT Solution is given below.

Question 1:

Rearrange the boxes given below to make a sentence that helps us understand opaque objects.

OWS AKE OPAQ UE O
BJEC TSM SHAD

Answer:

OPAQ UE O BJEC TS M AKE SHAD OWS

Opaque objects make shadows.

Question

2:

Classify the objects or materials given below as opaque, transparent or translucent, luminous or non-luminous:

Air, water, piece of rock, sheet of aluminium, mirror, wooden board, sheet of polythene, CD, smoke, sheet of plane glass, fog, piece of red hot iron, umbrella, lighted fluorescent tube, wall, sheet of carbon paper, flame of a gas burner, sheet of cardboard, lighted torch, sheet of cellophane, wire mesh, kerosene stove, sun, firefly, moon.

Answer:

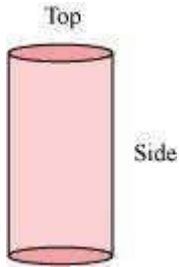
Object	Object is Transparent/Translucent/Opaque	Object is Luminous/Nonluminous
Air	Transparent	Non-luminous
Water	Transparent	Non-luminous
Piece of rock	Opaque	Non-luminous
Sheet of aluminium	Opaque	Non-luminous
Mirror	Opaque	Non-luminous
Wooden board	Opaque	Non-luminous
Sheet of polythene	Translucent	Non-luminous
CD	Translucent	Non-luminous
Smoke	Translucent	Non-luminous
Sheet of plane glass	Transparent	Non-luminous
Fog	Translucent	Non-luminous
Piece of red hot iron	Opaque	Luminous
Umbrella	Opaque	Non-luminous
Lighted fluorescent tube	Opaque	Luminous
Wall	Opaque	Non-luminous
Sheet of carbon paper	Opaque	Non-luminous
Flame of a gas burner	Translucent	Luminous
Sheet of cardboard	Opaque	Non-luminous
Lighted torch	Opaque	Luminous
Sheet of cellophane	Translucent	Non-luminous
Wire mesh	Translucent	Non-luminous
Kerosene stove	Opaque	Luminous
Sun	Opaque	Luminous
Firefly	Opaque	Luminous
Moon	Opaque	Non-luminous

Question 3:

Can you think of creating a shape that would give a circular shadow if held in one way and a rectangular shadow if held in another way?

Answer:

When a cylinder is held in sunlight, then a circular shadow or a rectangular shadow can be obtained depending on its orientation related to the Sun.



When the top of the cylinder faces the Sun, then the shadow formed is circular. On the other hand, when the side of the cylinder faces the Sun, then the shadow formed is rectangular.

Question

4:

In a completely dark room, if you hold up a mirror in front of you, will you see your reflection in the mirror?

Answer:

An image is formed due to reflection of light by a plane mirror. In a completely dark room, there is no light present in the room. Thus, no reflection of light takes place by the mirror placed in the room. Hence, no image will get formed by a mirror in a completely dark room.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 12 – Electricity and Circuits

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 12 – Electricity and Circuits

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 12 Electricity and Circuits NCERT Solution is given below.

Question

1:

Fill _____ in _____ the _____ blanks:

(a) A device that is used to break an electric circuit is called a _____ .

(b) An electric cell has _____ terminals.

Answer:

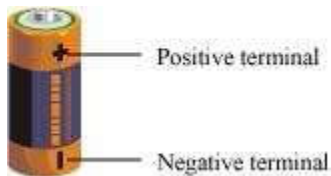
(a) A device that is used to break an electric circuit is called a switch.

Switch:

A switch is an electric device that is used to break a circuit. When the switch is in 'OFF' position, then the circuit is not complete. Then, the circuit is called an open circuit. An electric current cannot flow through this circuit.

(b) An electric cell has two terminals. Two terminals:

An electric cell has two terminals, a negative terminal and a positive terminal (as shown in the given figure).



Question

2:

Mark 'True' or 'False' for the following statements:

- (a) Electric current can flow through metals.
- (b) Instead of metal wires, a jute string can be used to make a circuit.
- (c) Electric current can pass through a sheet of thermocol.

Answer:

(a) True
Metals are good conductors of electricity. They allow an electric current to flow through them easily. Hence, an electric current can flow through metals.

(b) False
Jute string is a bad conductor of electricity. If jute string is used to make an electric circuit, then the current will not flow through it. Hence, strings made of jute cannot be used to make circuits.

(c) False
Thermocol is a bad conductor of electricity. Hence, electric current cannot pass through it.

Question

3:

Explain why the bulb would not glow in the arrangement shown in Fig.12.13.

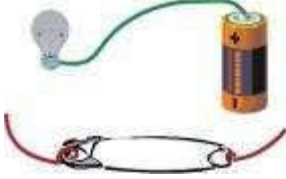


Answer:

An electric current cannot pass through objects such as plastic scales, tester holders, etc., because these objects are bad conductors of electricity. From the given figure, it can be observed that one terminal of the bulb is connected to a tester holder. A current will not flow through the circuit. Hence, the bulb would not glow.

Question**4:**

Complete the drawing shown in Fig 12.14 to indicate where the free ends of the two wires should be joined to make the bulb glow.

**Answer:**

The given circuit is not complete. To complete the circuit, the positive terminal of the cell should be connected to one end of the switch, and the other terminal of the bulb should be connected to the other end of the switch. The closed circuit is shown in the following figure:

**Question 5:**

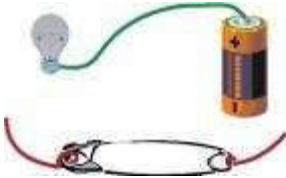
What is the purpose of using an electric switch? Name some electrical gadgets that have switches built into them.

Answer:

A switch is an electric device that is used to complete or break an electric circuit. If the switch is 'ON', then a current can flow through the circuit. However, if the switch is 'OFF', then the current cannot flow through the circuit. Electrical appliances such as table fans, electric lamps, washing machines, juicers and mixers, TV, radio, etc. have switches built into them.

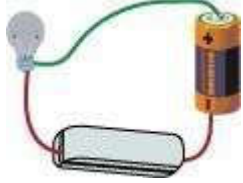
Question**6:**

Would the bulb glow after completing the circuit shown in Fig. 12.14, if we use an eraser instead of a safety pin?

**Answer:**

Erasers are bad conductors of electricity. They do not conduct electricity. The circuit becomes an open circuit. Hence, the bulb will not glow if a safety pin is replaced with

an eraser.



Question

7:

Would the bulb glow in the circuit shown in Fig. 12.15?



Answer:

The bulb will not glow. This is because the two terminals of the cell are connected to the single terminal of the bulb. This is equivalent to the bulb not being connected in the circuit at all. The two terminals of the battery should be connected to the two terminals of the cell.

Question

8:

Using the 'conduction tester' on an object, it was found that the bulb begins to glow. Is the object a conductor or an insulator? Explain.

Answer:

When the two free ends of a conductor tester are touched with an object, then the bulb of the tester would glow if the object conducts electricity. However, the bulb would not glow if the object does not conduct electricity. Since the bulb glows when the tester is touched with the object, the object must conduct electricity. Hence, the object is a conductor.

Question

9:

Why should an electrician use rubber gloves while repairing an electric switch at your home? Explain.

Answer:

An electric switch is an electrical appliance. It conducts electricity through its internal parts. When its internal parts are touched with naked hands, then it may cause an electric shock. Therefore, it should be touched with rubber gloves in hand because rubber cannot conduct electricity. Hence, electricians wear rubber gloves while repairing a switch or any other electrical appliance.

Question**10:**

Handles of tools such as screwdrivers and pliers used by electricians for repair work usually have plastic or rubber cover on them. Can you explain why?

Answer:

Rubber is a bad conductor of electricity. It does not allow current to flow through it. Hence, handles of tools such as screwdrivers, pliers, etc. which are used by electricians for repair work usually have plastic or rubber cover on them. This protects them from electric shocks.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 13 – Fun with Magnets

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 13 – Fun with Magnets

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 13 Fun with Magnets

NCERT Solution is given below.

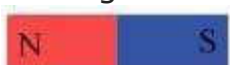
Question**1:**

Fill in the blanks:

- (i) Artificial magnets are made in different shapes such as _____, _____, and _____.
- (ii) The materials which are attracted towards magnets are called _____.
- (iii) Paper is not a _____ material.
- (iv) In olden days, sailors used to find direction by suspending a piece of _____.
- (v) A magnet always has _____ poles.

Answer:

- (i) Artificial magnets are made in different shapes such as bar magnets, horse-shoe magnets, and cylindrical magnets.
- (ii) Materials which are attracted towards magnets are called magnetic materials.
- (iii) Paper is not a magnetic material. Paper is not attracted by magnet. Hence, it is not a magnetic material.
- (iv) In olden days, sailors used to find direction by suspending a piece of bar magnet. A freely suspended magnet always comes to rest in the North-South direction. Hence, sailors used to find direction by suspending a piece of bar magnet.
- (v) A magnet always has two poles. A magnet has two poles called the south pole (S) and the north pole (N).



Question

2:

State whether the following statements are 'True' or 'False'.

- (i) A cylindrical magnet has only one pole.
- (ii) Artificial magnets were discovered in Greece.
- (iii) Similar poles of a magnet repel each other.
- (iv) Maximum iron filings stick in the middle of a bar magnet when it is brought near them.
- (v) Bar magnets always point towards the North–South direction.
- (vi) A compass can be used to find the East–West direction at any place.
- (vii) Rubber is a magnetic material.

Answer:

(i) False

Magnets always have two poles; the north pole and the south pole. A cylindrical magnet also has two poles.

(ii) False

Artificial magnets were not discovered in Greece. Only natural magnets were discovered in Greece.

(iii) True

Like poles of magnets repel each other, while unlike poles of magnets attract each other. The south pole of a magnet attracts the north pole of another magnet and repels the south pole of that magnet.

(iv) False

The amount of iron filings that stick to a bar magnet depends on the strength of the magnet. The magnetism of a bar magnet is maximum at its two poles and minimum in the middle. Hence, maximum iron filings will stick at the two ends of the magnet and minimum in the middle.

(v) True

A freely suspended magnet always points towards the North–South direction.

(vi) True

A magnetic compass always points towards the North–South direction.



If the North–South direction is known, then the East–West direction can also be determined. This direction is perpendicular to the North–South direction, i.e., perpendicular to the compass needle in the same plane.

(vii)

False

Rubber is not attracted by a magnet. Hence, it is a non-magnetic material.

Question

3:

It was observed that a pencil sharpener gets attracted by both the poles of a magnet, although its body is made of plastic. Name a material that might have been used to make some part of it.

Answer:

The blade of a pencil sharpener is made of iron. Iron is a magnetic material. Since magnets can attract objects made of magnetic materials, a pencil sharpener gets attracted towards both poles of a magnet.

Question

4:

Column I shows different positions in which one pole of a magnet is placed near the other. Column II indicates the resulting action between them for each situation. Fill in the blanks.

Column I	Column II
N – N	_____
N – ___	Attraction
S – N	_____
___ – S	Repulsion

Answer:

Like magnetic poles repel each other, while unlike magnetic poles attract each other.

Column I	Column II
N – N	<u>Repulsion</u>
N – <u>S</u>	Attraction
S – N	<u>Attraction</u>
<u>S</u> – S	Repulsion

Question

5:

Write any two properties of a magnet.

Answer:

Two properties of a magnet are:
(i) Magnets attract objects made of magnetic materials like iron.
(ii) Like magnetic poles repel each other, while unlike magnetic poles attract each other.

Question

6:

Where are the poles of a bar magnet located?

Answer:

At both ends. The north pole (N) and the south pole (S) of a bar magnet are located at its two ends (as shown in the given figure).



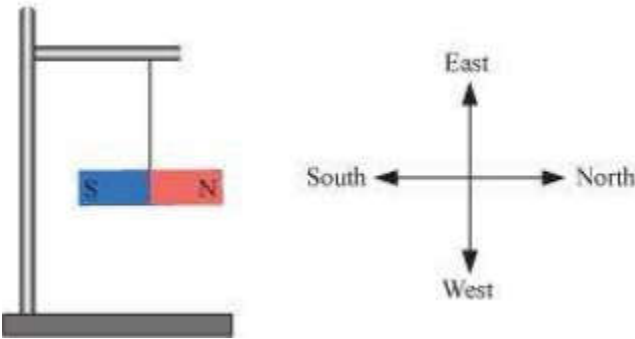
Question

7:

A bar magnet has no markings to indicate its poles. How can you find out the location of the north pole?

Answer:

A freely suspended bar magnet always comes to rest in the North–South direction. The north facing end of the magnet is its north pole, and the south facing end is its south pole (as shown in the given figure).



Hence, the unknown poles of a bar magnet can be marked by suspending it freely by a string.

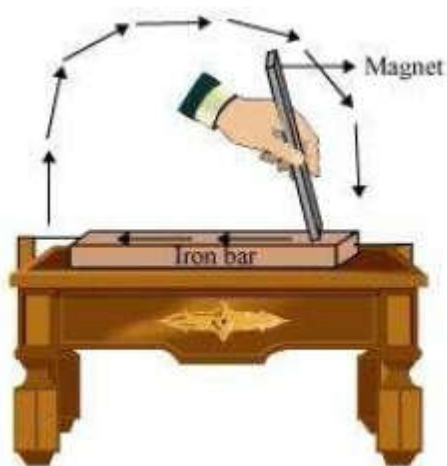
Question

8:

You are given an iron strip. How will you make it into a magnet?

Answer:

'Touch and stroke' method can be used to make an iron strip into a magnet. For this, a bar magnet is required. The bar magnet is moved along the length of the iron strip starting from one end to the other end (as shown in the given figure).



Then, the bar magnet is lifted from the other end and brought to the starting point again with the same pole of the bar magnet. On repeating the process for at least 40 to 50 times, the iron strip will become a bar magnet with two poles.

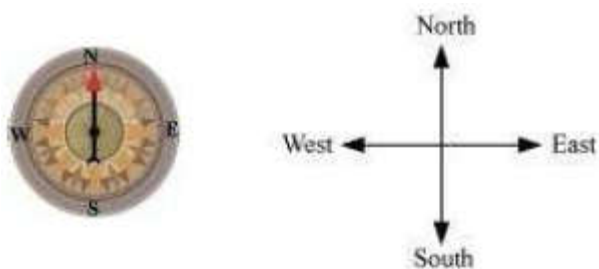
Question

9:

How is a compass used to find directions?

Answer:

A compass always points towards the North–South direction. The red arrow of the compass needle indicates its north pole. The arrow always points in the North direction (as shown in the given figure).



If we know the North direction, then we can find all the other three directions at that place. If North is towards the front, then South would be towards the back, East towards the right of North, and West towards the left of North.

Question

10:

A magnet was brought from different directions towards a toy boat that has been floating on water in a tub. The effect observed in each case is stated in Column I. Possible reasons for the observed effects are mentioned in Column II. Match the statements given in Column I with those in Column II.

S.No	Column I	Column II
1.	Boat gets attracted towards the magnet	Boat is fitted with a magnet with the north pole towards its head

2.	Boat is not affected by the magnet	Boat is fitted with a magnet with the south pole towards its head
3.	Boat moves towards the magnet when the north pole of the magnet is brought near its head	Boat has a small magnet fixed along its length
4.	Boat moves away from the magnet when the north pole is brought near its head	Boat is made of magnetic material
5.	Boat floats without changing its direction	Boat is made of a non-magnetic material

Answer:

S.No	Column I	Column II
1.	Boat gets attracted towards the magnet	Boat is made of a magnetic material
2.	Boat is not affected by the magnet	Boat is made of a non-magnetic material
3.	Boat moves towards the magnet when the north pole of the magnet is brought near its head	Boat is fitted with a magnet with the south pole towards its head
4.	Boat moves away from the magnet when the north pole is brought near its head	Boat is fitted with a magnet with the north pole towards its head
5.	Boat floats without changing its direction	Boat has a small magnet fixed along its length

1. Magnetic materials get attracted towards a magnet.
2. Non-magnetic materials do not get attracted towards a magnet.
3. Unlike poles of magnets attract each other.
4. Like poles of magnets repel each other.
5. Magnets always point towards the North-South direction.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 14 – Water

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 14 – Water

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 14 Water NCERT

Solution is given below.

Question**1:**

Fill _____ in _____ the _____ blanks:

- (a) The process of changing water into its vapour state is called _____.
- (b) The process of changing water vapour into water is called _____.
- (c) No rainfall for a year or more may lead to _____ in the region.
- (d) Excessive rains may cause _____.

Answer:

- (a) The process of changing water into its vapour state is called evaporation.
- (b) The process of changing water vapour into water is called condensation.
- (c) No rainfall for a year or more may lead to drought in the region.
- (d) Excessive rains may cause floods.

Question**2:**

State for each of the following whether it is due to evaporation or condensation:

- (a) Water drops appear on the outer surface of a glass containing cold water.
- (b) Steam rising from wet clothes while they are ironed.
- (c) Fog appearing on a cold winter morning.
- (d) Blackboard dries up after wiping it.
- (e) Steam rising from a hot girdle when water is sprinkled on it.

Answer:

- (a) Water drops appear on the outer surface of a glass containing cold water. (Condensation)
- (b) Steam rising from wet clothes while they are ironed. (Evaporation)
- (c) Fog appearing on a cold winter morning. (Condensation)
- (d) Blackboard dries up after wiping it. (Evaporation)
- (e) Steam rising from a hot girdle when water is sprinkled on it. (Evaporation)

Question**3:**

Which of the following statements are 'True'?

- (a) Water vapour is present in air only during the monsoon. ()
- (b) Water evaporates into air from the oceans, rivers, and lakes, but not from soil. ()
- (c) The process of water changing into its vapour is called evaporation. ()
- (d) The evaporation of water takes place only in sunlight. ()
- (e) Water vapour condenses to form tiny droplets of water in the upper layer of air, where it is cooler. ()

Answer:

- (a) Water vapour is present in air only during the monsoon. (False)

- (b) Water evaporates into air from the oceans, rivers, and lakes, but not from soil. (False)
- (c) The process of water changing into its vapour is called evaporation. (True)
- (d) The evaporation of water takes place only in sunlight. (True)
- (e) Water vapour condenses to form tiny droplets of water in the upper layer of air, where it is cooler. (True)

Question

4:

Suppose you want to dry your school uniform quickly. Would spreading it near an anghiti or heater help? If yes, how?

Answer:

Yes, spreading of clothes near an angithi or a heater would help dry the clothes quicker. This is because heat generated from an angithi or a heater causes the water to evaporate at a faster rate.

Question

5:

Take out a cold bottle of water from the refrigerator and keep it on the table. After some time, you will notice a puddle of water around it. Why?

Answer:

This is because water vapour near the cold bottle collides with it, becomes cool, and condenses into water droplets. These water droplets collect and form a puddle of water around the bottle.

Question

6:

To clean their spectacles, people often breathe out on glasses to make them wet. Explain why the glasses become wet.

Answer:

During exhalation (or breathing out), carbon dioxide is released along with water vapours. If one breathes out onto glass, the released water vapours collide with the surface of the glass, thereby making it cooler. As a result, the water vapours present in the air surrounding the glass condense and get attached to the glass surface. Consequently, the glass becomes wet.

Question

7:

How are clouds formed?

Answer:

Clouds are formed by the process of evaporation and condensation. Water from the oceans, rivers, lakes, ponds, plants, fields, and other land surfaces evaporates, gets into air, and rises up in the atmosphere. At a certain height when the air becomes cooler, water vapour

contained in air condenses. On condensation, these form water droplets. These water droplets collect and float in air as clouds.

Question

8:

When does a drought occur?

Answer:

A drought occurs if there is no rainfall for a long time. Usually, water lost by soil due to evaporation is returned to it by rains. But no rainfall occurs for a long time, it leads to a decrease in the water level of various ponds and wells. This leads to the condition of drought.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 15 – Air Around Us

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6

Subject: Science

Chapter: Chapter 15 – Air Around Us

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 15 – Air Around Us NCERT Solution is given below.

Question

1:

What is the composition of air?

Answer:

Air is a mixture of 79% nitrogen, 20% oxygen, 1% carbon dioxide, water vapours and some other gases. Air also contains dust particles.

Question

2:

Which gas in the atmosphere is essential for respiration?

Answer:

Oxygen is essential for respiration.

Question

3:

How will you prove that air supports burning?

Answer:

Take a candle. Place it in a tub. Light the candle and also fill the tub with some water. Cover the candle with an inverted glass. You will find that the candle blows out after burning for some time, and the water level inside the inverted glass rises up to some extent.



The component, oxygen, of air inside the glass is used up in burning. Therefore, water occupies that space. This shows that air supports burning.

Question

4:

How will you show that air is dissolved in water?

Answer:

To show that air is dissolved in water we take water in a pan and heat it. Just before it boils, you will notice some bubbles at the inner surface of the pan. These bubbles are formed because of air dissolved in water.

Question

5:

Why does a lump of cotton wool shrink in water?

Answer:

A lump of cotton wool shrinks when immersed in water. This is because air present in the cotton wool escapes. Thus, the volume of the cotton wool decreases.

Question

6:

The layer of air around the Earth is known as _____.

Answer:

The layer of air around the Earth is known as atmosphere.

Question

7:

The component of air used by green plants to make their food is _____.

Answer:

The component of air used by green plants to make their food is carbon dioxide.

Question

8:

List five activities that are possible due to the presence of air.

Answer:

- (i) Respiration
- (ii) Photosynthesis
- (iii) Burning
- (iv) Movement of sailing yachts, gliders, parachutes, airplanes
- (v) Generation of electricity by windmills

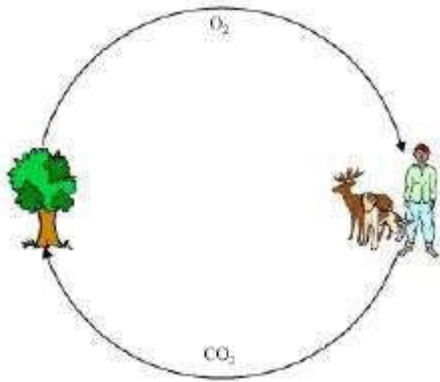
Question

9:

How do plants and animals help each other in exchange of gases in the atmosphere?

Answer:

Plants utilize carbon dioxide present in the atmosphere for the process of photosynthesis. They release oxygen in the atmosphere. This oxygen is inhaled by humans and in turn, carbon dioxide is exhaled.



In this way, plants and animals help each other in exchange of gases in the atmosphere.

NCERT Solutions for Class 6th Science

freehomedelivery.net Chapter 16 – Garbage In Garbage Out

National Council of Educational Research and Training (NCERT) Book Solutions for Class 6
Subject: Science

Chapter: Chapter 16 – Garbage In Garbage Out

NCERT Solutions for Class 6th Science freehomedelivery.net Chapter 16 Garbage In Garbage Out NCERT Solution is given below.

Question

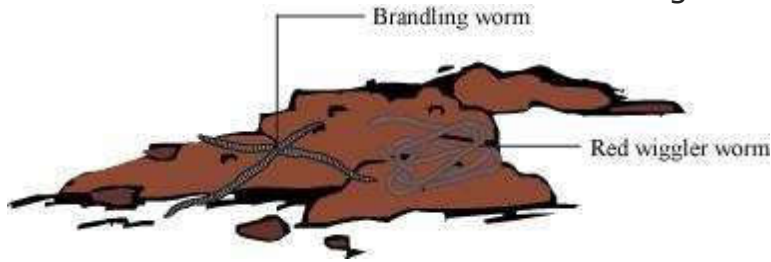
1:

- (a) Which kind of garbage is not converted into compost by redworms?
- (b) Have you seen any other organism besides redworms in your pit? If yes, try to find out their names. Draw pictures of them.

Answer:

- (a) The garbage which contains pieces of cloth, broken glass, aluminium wrappers, polythene bags, nails, broken toys, and old shoes cannot be converted into compost by red worms.
- (b) Yes. A pit might contain other soil microbes such as bacteria, other species

of earthworms such as brandling worm and red wiggler worm.



Question

2:

Discuss:

- (a) Is garbage disposal the responsibility only of the government?
- (b) Is it possible to reduce problems relating to the disposal of garbage?

Answer:

(a) Proper disposal of garbage should be a concern of every citizen, and not just of the government. Each and every individual must reduce activities that pollute the environment. A lot of waste is generated from homes, offices, schools, hospitals, etc. It includes food waste, paper, plastic, glass, metal, etc. Therefore, it is required that every individual must reduce the production of wastes and must help in the proper disposal of these wastes.

(b) Yes, it is possible to reduce problems related to disposal of garbage. Here are some steps that can be observed by every individual to reduce the problem of garbage disposal.

- (i) Avoid using plastic bags. Encourage shopkeepers to use paper bags or always carry a cloth or jute bag while shopping.
- (ii) Save paper. Use both sides of paper to write.
- (iii) Use separate bins for recyclable and non-recyclable waste.
- (iv) Kitchen waste that includes fruit and vegetable peels, waste food, tea leaves, etc. can be used to make manure.
- (v) Encourage your family, friends, and others to follow proper disposal practices.

Question

3:

- (a) What do you do with left over food at home?
- (b) If you and your friends are given the choice of eating in a plastic plate or a banana leaf platter at a party, which one would you prefer and why?

Answer:

- (a) Left over food can be collected and used to make compost. Compost provides nutrients essential for the growth and development of plants.
- (b) We would prefer to eat food in a banana leaf platter. This is because a leaf platter is a

harmless substance that can be used to make manure by the process of composting, whereas plastic plates cannot be converted into harmless substances by composting. They remain in the environment and create many problems.

Question

4:

- (a) Collect pieces of different kinds of paper. Find out which of these can be recycled.
- (b) With the help of a lens look at the pieces of paper you collected for the above question. Do you see any difference in the material of a recycled paper and a new sheet of paper?

Answer:

- (a) All type of paper can be recycled.
- (b) It is impossible to find out the difference between a recycled and a new sheet of paper. However, it is believed that recycled paper is usually of low quality.

Question

5:

- (a) Collect different kinds of packaging material. What was the purpose for which each one was used? Discuss in groups.
- (b) Give an example in which packaging could have been reduced?
- (c) Write a story on how packaging increases the amount of garbage.

Answer:

- (a) The different kinds of packaging materials commonly used includes:
 - (i) plastic bags for carrying eatables or other household things
 - (ii) cloth or jute bags for carrying fruits, vegetables, or other groceries
 - (iii) paper bags for carrying small groceries, packing of food, etc.
- (b) The usage of plastic bags must be reduced as packaging of cooked food items in plastic bags might affect our health. Also, plastic bags are non-recyclable and burning of plastic bags may release harmful gases that can cause many health diseases.
- (c) Packaging increases the amount of garbage as we keep on throwing the packaging materials carelessly on roads and other places. Also, since these packaging materials (mainly plastic covers) are non-recyclable, they keep lying on the roads and cannot be properly disposed off. Sometimes, they get into drains and sewer systems and block them, creating more problems.

Question

6:

Do you think that it is better to use compost instead of chemical fertilizers? Why?

Answer:

Yes, it is better to use compost instead of chemical fertilizers. This is because compost is prepared from plant and animal wastes, therefore, it easily gets decomposed. It does

not add any harmful chemicals to the soil, whereas an excessive use of chemical fertilizers causes soil and water pollution.

