

DOON PUBLIC SCHOOL, BHUJ

Home Assignment

Dear Students,

This is your home assignment which you have to complete in your Science notebook. Write all the following chapters very neatly in the notebook and learn the same. This Assignment will be checked on reopening of the school. Manage your time effectively as time is free, but it is priceless. I wish you to have great time with your family during this vacation. Take care and stay safe!

Sub: Science

Class: VIII

Ch-1 Crop Rotation and Management

Date: 08/05/2020

(Textbook Exercise)

Tick (✓) the correct answer from the given four options.

1. Which of the following is a cereal crop?

- a) **wheat**
- b) gram
- c) mustard
- d) sugar cane

2. The agricultural tools use in ploughing are

- a) plough and khurpi
- b) **plough and hoe**
- c) khurpi and seed drill
- d) khurpi and harrow

3. The process of separating grains from the crop is called

- a) winnowing
- b) harvesting
- c) **threshing**
- d) weeding

4. Which of the following is not a kharif crop?

- a) Paddy
- b) Groundnut
- c) Cotton
- d) **Wheat**

5. Large scale rearing of fish is called

- a) apiculture
- b) **pisciculture**
- c) animal husbandry

d) agriculture

Fill in the blanks:

1. Grain or cereal crops include wheat and rice.
2. Sowing of seeds by hand is called broadcasting.
3. Hoe is an agricultural tool used for removing weeds/loosening the soil.
4. Weedicides should be handled with care as these are poisonous.
5. The first step in crop production is preparation of soil.
6. The practice of leaving the field uncultivated is called fallowing.
7. Manure obtain by the decomposition of dead plants and animals is called compost.
8. NPK fertilizer supplies nitrogen, phosphorous and potassium in the crops.

Match the pair:

- | A | B |
|-------------------|------------------------------------|
| 1. Pea, groundnut | i) Rabi crop |
| 2. Wheat, gram | ii) Loosening and turning of soil |
| 3. Paddy, maze | iii) Removal of undesirable plants |
| 4. Ploughing | iv) Legume plants |
| 5. Weeding | v) Kharif crop |

Answers:

(1 – iv) (2 – i) (3 – v) (4 – ii) (5 – iii)

State whether the following statements are True (T) or False (F).

1. Potato is a kharif crop. **False**
2. The first step in crop production is sowing of seeds. **False**
3. Damaged seeds sink in water. **False**
4. Paddy is first grown in small plots called nurseries. **True**
5. Plough is used for removing weeds. **True**
6. Crop rotation reduces soil fertility. **False**
7. Groundnut is a legume crop. **True**
8. Sprinkler system of irrigation is a wasteful method. **False**

Answer Briefly

1. Name the different crops on the basis of the products obtained, giving two examples of each.

Ans. The different crops on the basis of the products obtained are

- Cereal crops: Rice, Wheat
- Pulse or legume crops: Gram, Pea.
- Oilseed crops: Soyabean, Groundnut
- Fibre crops: Cotton, Jute
- Root crops: Sweet potato, Carrot
- Tuber crops: Potato, Tapioca

2. What is the role of a leveler in the preparation of soil?

Ans. Leveler is used for leveling the field before sowing the seeds.

3. What are the advantages of transplanting seedlings?

Ans. The advantages of transplanting seedlings are

- It helps the farmer to select only the healthy seedlings.
- Seedlings can be planted at proper distance.
- It increases crop production.

4. Why should fallowing be followed?

Ans. Fallowing allows the soil to naturally regain the nutrients.

5. Why are fertilizers not good for the soil?

Ans. Fertilizers are not good for the soil because

- They make the soil less fertile.
- They are source of water pollution.

6. Discuss the various sources of irrigation.

Ans. The various sources of irrigation are ponds, lakes, canals, wells, tube wells, rivers and dams.

7. Why do most farmers remove weeds from the crop field?

Ans. Weeds reduce crop yield as they compete with the crops for water, minerals and sunlight. So, it is necessary to remove them from field time to time.

8. What is the significance of growing legume plants in crop rotation?

Ans. Leguminous crops are used in crop rotation. These are able to fix atmospheric nitrogen and convert into usable nitrogen.

9. Make a flow chart showing the different agricultural practices in sequential order.

Ans. Seven basic agricultural practices are:

- Preparation of soil
- Sowing of seeds
- Application of manures and fertilizers
- Irrigation
- Weeding – removal of weeds
- Harvesting
- Storage

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Class: VIII

Ch-14 Light

Date: 08/05/2020

(Textbook Exercise)

Tick (✓) the correct answer from the given four options.

1. On increasing the angle between two the reflecting surfaces, the number of images

- a) decreases
- b) **increases**
- c) does not change
- d) none of these

2. According to the second law of reflection, the angle of incidence is equal to the

- a) 0°
- b) angle of refraction
- c) **angle of reflection**
- d) 180°

3. The number of images formed when the angle between two mirrors is 24° is

- a) 18
- b) 20
- c) 16
- d) **14**

4. When the ciliary muscles relax, the thickness of the lens

- a) increases

- b) reduces
- c) remains the same
- d) sometime reduces and sometime increases

5. The image of an object is retained on the retina for about

- a) one-sixteenth of a second
- b) one-fifteenth of a second
- c) one-seventeenth of a second
- d) one-tenth of a second

6. A man is suffering from myopia. Which of the following statements holds true for him?

- a) He can correct this defect by using convex lenses.
- b) He is not able to see the nearby objects clearly.
- c) This defect can only be treated surgically or through laser.
- d) He wears spectacles with concave lenses of appropriate focal length.

Fill in the blanks:

1. **Normal** is a line perpendicular to the surface of the mirror at the point of the incidence.
2. The image formed by a **plane** mirror is always erect.
3. On **increasing** the angle between the two reflecting surfaces, the number of images **decreases**.
4. A **prism** can split white light or it can recombine seven colours to form **white** light.
5. **Sclera** is the visible white part of the eye filled with watery fluid.
6. The image of an object is retained on the retina of eye for about **one-sixteenth** of a second.
7. The **far** point for a normal eye is infinity.

Match the pair:

- | A | B |
|----------------------------|--|
| 1. Optic nerve | i) Tape recorders, compact discs (CDs) |
| 2. VIBGYOR
normal | ii) The angle between the incident ray and the |
| 3. Cataract | iii) Carries visual messages to the brain |
| 4. Auditory aids | iv) Does not have rods and cones |
| 5. Divergent beam of light | v) Produced when white light splits |
| 6. Angle of incidence | vi) Eye lens become cloudy or opaque |
| 7. Blind spot | vii) Spread or appear to spread from a point |
| | viii) Has rods and cones |

Answers:

(1 – iii) (2 – v) (3 – vi) (4 – i) (5 – vii)
(6 - ii) (7 - iv)

State whether the following statements are True (T) or False (F).

1. To keep your eyes healthy you should eat a balanced diet with vitamin A. **True**
2. The reflection seen in unused stainless steel plate is diffused reflection. **False**
3. The light rays from an object enter the eye through cornea. **False**
4. Hypermetropia can be corrected by using a convex lens. **True**
5. The Braille is a tactual aid. **True**

Answer Briefly

1. Define the following:

- a) **Accommodation:** The ability of the eye to alter the focal length of its lens so that it can clearly see all objects with a certain range.
- b) **Light:** A form of energy which gives us the sensation of seeing objects
- c) **Multiple reflection:** The phenomenon in which we get multiple images of the object.
- d) **Beam of light:** A group of light rays coming from the same source in the same direction.
- e) **Reflection:** The phenomenon of bouncing back of light from an object.
- f) **Near point:** The least distance at which a normal eye can see an object clearly.

2. State the two laws of reflection.

Ans.

- **LAW 1** : The incident ray, the reflected ray and the normal to the reflecting surface lie in the same plane.
- **LAW 2** : The angle of incidence is always equal to the angle of reflection.

3. What do you understand by the term dispersion of light?

Ans. The phenomenon of splitting of white light into its component colours.

4. What is multiple reflection? What formula do you use to find out the number of images form by two mirrors?

Ans.

- Multiple reflection is the phenomenon in which we get multiple images of the object because the image formed by one mirror acts as an object for the second mirror.
- The number of images formed by mirror kept at an angle can be calculated by using the formula
$$n = \frac{360}{\Theta} - 1$$
Where, n is the number of images and Θ is the angle between the two mirrors.