

REVISION WORKSHEET

CLASS VII

1. Fill in the blanks:

- (a) An image that cannot be obtained on a screen is called _____.
- (b) Image formed by a convex _____ is always virtual and smaller in size.
- (c) An image formed by a _____ mirror is always of the same size as that of the object.
- (d) An image which can be obtained on a screen is called a _____ image.
- (e) An image formed by a concave _____ cannot be obtained on a screen.

2. Mark 'T' if the statement is true and 'F' if it is false:

- (a) We can obtain an enlarged and erect image by a convex mirror.
- (b) A concave lens always form a virtual image.
- (c) We can obtain a real, enlarged and inverted image by a concave mirror.
- (d) A real image cannot be obtained on a screen.
- (e) A concave mirror always form a real image.

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

Column I	Column II
(a) A plane mirror	(i) Used as a magnifying glass.
(b) A convex mirror	(ii) Can form image of objects
(c) A convex lens	(iii) Used by dentists to see enlarged image of teeth.
(d) A concave mirror	(iv) The image is always inverted and magnified.
(e) A concave lens	(v) The image is erect and of the same size as the object.
	(vi) The image is erect and smaller

4. State the characteristics of the image formed by a plane mirror.

5. Find out the letters of English alphabet or any other language known to you in which the image formed in a plane mirror appears exactly like the letter itself. Discuss your findings.

6. What is a virtual image? Give one situation where a virtual image is formed.

7. State two differences between a convex and a concave lens.

8. Give one use each of a concave and a convex mirror.

9. Which type of mirror can form a real image?

10. Which type of lens forms always a virtual image?

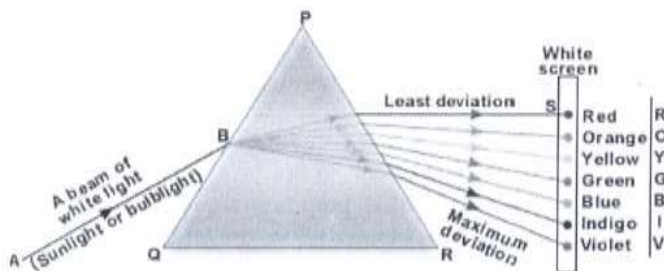
Choose the correct option in questions 11–13

11. A virtual image larger than the object can be produced by a
(i) concave lens (ii) concave mirror
(iii) convex mirror (iv) plane mirror

12. David is observing his image in a plane mirror. The distance between the mirror and his image is 4 m. If he moves 1 m towards the mirror, then the distance between David and his image will be
(i) 3 m (ii) 5 m
(iii) 6 m (iv) 8 m

13. The rear view mirror of a car is a plane mirror. A driver is reversing his car at a speed of 2 m/s. The driver sees in his rear view mirror the image of a truck parked behind his car. The speed at which the image of the truck appears to approach the driver will be
(i) 1 m/s (ii) 2 m/s
(iii) 4 m/s (iv) 8 m/s

The diagram below shows a prism used to split light from the sun into parts of the electromagnetic spectrum including the colors of the spectrum. (Total: 3 marks)



- (a) Will green light passing through a prism result in a spectrum?
(b) What will happen if the screen is again replaced by a prism?
(c) What conclusion can you draw?

15 @ What is the difference between Tornado & Cyclone?

(a) Explain the formation of wind currents.

ELECTRIC CURRENT AND ITS EFFECTS

I Fill in the blanks :

1. A thin wire in the bulb that glows when an electric current passes through it is called the _____.
2. When the bulb gets _____, its filament is broken.
3. The coil of wire in an electric heater is known as _____.
4. The amount of heat produced in a wire depends on its, _____, _____ and _____.
5. When an electric current flows through a wire, it behaves like a _____.
6. The _____ of an electric bell acts as an electromagnet in its working.

II State whether the following statements are True or False :

1. When the electric current is switched off, the coil generally loses its magnetism.
2. The wires used for making electric circuits do not normally become hot.
3. The filament of an electric bulb never gets heated.
4. In a battery, the electric cells are always placed one after the other.
5. Connecting many devices in a single socket does not affect the flow of current in a circuit.
6. Wear and tear of insulated wires can cause short circuits.
7. CFLs consume more electricity than ordinary bulbs.

III Name the following :

1. The name of the scientist who first noticed the magnetic effect of current.
2. The switches being used in place of fuses.
3. A diagram made using symbols of electric components.
4. The mark of safety necessary on electrical appliances.

IV Define :

1. Battery
2. Electromagnet
3. Fuse

LN. 15 : LIGHT

I. Fill in the blanks :

1. The change in the direction of light by a mirror is called _____.
2. The image formed by a _____ lens is always virtual, erect and smaller in size.
3. White light is composed of _____ colours.
4. The image of an object formed by a _____ cannot be obtained on a screen.
5. _____ are used by dentists to see an enlarged image of the teeth.

II Name the following :

1. An image that can be obtained on the screen -

2. The lens which is thinner in the middle than at the edges -
3. The lens known as magnifying glass -
4. The lens known as diverging lens -
5. The mirror which can form both real as well as virtual images.
6. The large arc of seven colours VIBGYOR in the sky.

III State whether True or False :

1. The image formed by a plane mirror is inverted -
2. A convex lens is thicker in the middle than at the edges -
3. A concave mirror always forms real image -
4. Any polished or shining surface can act as mirror -

IV Define :

Reflection of light

V Distinguish:

Real image & Virtual image