

DR. M.K.K. ARYA MODEL SCHOOL, PANIPAT

CLASS- VII (SCIENCE)

ASSIGNMENT CH-LIGHT

1. What is light?

Light is a form of energy which helps us to see the things around us.

2. What is rectilinear propagation of light?

Light always travel along a straight line. This is known as rectilinear propagation of light.

3. What is real image?

The image that can be obtained on a screen is known as real image.

4. What is virtual image?

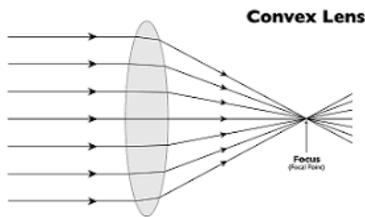
The image that cannot be obtained on a screen is known as virtual image.

5. Define spherical mirror?

Any reflecting surface which is a part of sphere is said to be spherical mirror.

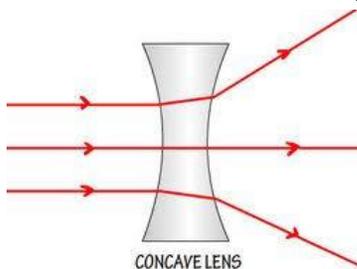
6. Which lens is known as “converging lens” and why?

Convex lens is called converging lens because it converges all the light rays falling on it.



7. Which lens is known as “diverging lens” and why?

Concave lens is called diverging lens because it diverges all the light rays falling on it.



8. What is lateral inversion?

In an image formed by plane mirror the left of the object appears on the right and the right appears on the left. This is known as lateral inversion.

9. What does a Newton’s disc prove?

White light is composed of seven colours. These colours are violet, indigo blue, green, yellow, orange and red.

10. What is the difference between a lens and a mirror?

A mirror reflects light and whereas a lens allows light to pass through it.

11. Give examples of instances where you can see the light being dispersed.

Rainbow, compact disc, soap bubble and a prism

12. Why is the word AMBULANCE written with the sides interchanged?

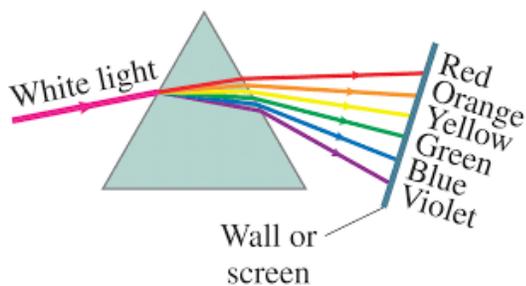
The word AMBULANCE is written laterally inverted because when seen in rear view mirror, the image of the word would get inverted and driver can read the word properly.

13. What is reflection of light?

A mirror changes the direction of light that falls on it. This change in direction of light is known as reflection of light.

14. What is dispersion of light?

Splitting of white light into seven colours is known as dispersion of light. . Rainbow is a natural phenomenon showing dispersion.



15. What is convex mirror?

If the reflecting surface of spherical mirror is outwards, it is called convex mirror



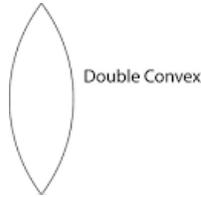
16. What is concave mirror?

If the reflecting surface of spherical mirror is inwards, it is called concave mirror.



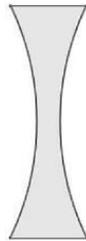
17. What is convex lens?

A convex lens is a lens that is thicker in the middle and thinner at the edges. It is also called converging lens.



18. What is concave lens?

A concave lens is a lens that is thinner in the middle and thicker at the edges. It is also called diverging lens.



19. How is rainbow formed?

A rainbow is formed by dispersion of sunlight by tiny water droplets present in atmosphere. It appears in the section of sky directly opposite to the sun

20. Differentiate between convex mirror and concave mirror.

Convex mirror	Concave mirror
1. Here, the reflecting surface is outwards.	1. Here, the reflecting surface is inwards.
It always forms virtual, erect and diminished image.	2. When the mirror is held close to the object, it forms virtual erect and magnified image.
	3. When the mirror is held away from the object, it forms real and inverted (magnified or diminished) image

21. Differentiate between convex and concave lens.

Convex lens	Concave lens
1. It is thicker in the middle and thinner at edges.	1. It is thicker at the edges and thinner in the middle.
2. When the lens is held close to the object, it forms virtual, erect	It always forms virtual, erect

and magnified image	and diminished image
3. When the lens is held away from the object, it forms real and inverted image (magnified or diminished)	

22. List the characteristics of image formed by a plane mirror.

- a. Image is erect.
- b. Image is of same size as the object.
- c. Image is formed at the same distance behind the mirror as the object is placed in front of it
- d. It is virtual.
- e. It shows lateral inversion.

23. List some uses of convex and concave mirror?

Uses of convex mirror

1. It is used as rear view mirror in vehicles
2. It is used as reflectors in street lamps.

Uses of concave mirror

1. It is used by doctors to see an enlarge image of eye, ear, throat and teeth etc
2. It is used as reflectors in car headlights, torches etc