

BRAIN INTERNATIONAL SCHOOL

PHYSICS ASSIGNMENT

CLASS -X

OCT'2018

CH- LIGHT ( REFRACTION )

1. Define refraction.
2. Write laws of refraction.
3. Write the cause of refraction.
4. Define refractive index.
5. Find the refractive index of a transparent medium in which light travels with a speed of  $1.8 \times 10^{10}$  m/s.
6. Draw the ray diagram of image formation by a convex lens for all position of object.
7. Write uses of concave and convex lens.
8. A concave lens has focal length of 15 cm. At what distance should the object from the lens be placed so that it forms an image at 10 cm from the lens. Also find magnification produced by the lens.
9. What is the focal length of combination of lens formed with the lenses having power of +2.5 D and -3.75 D.
10. A convex lens of focal length 20 cm is placed in contact with a concave lens of focal length 30 cm. Calculate focal length of combination of lens. What is its power.