

GRADE: X WORKSHEET SUB: PHYSICS DATE: 30.07.22

1. A person with a myopic eye cannot see objects beyond 1.2 m distinctly. What should be the type of the corrective lens used to restore proper vision? Draw the corresponding diagram.
2. Define near point and far point of human eye. What is the value of far point and near point of the human eye with normal vision?
3. A student has difficulty reading the blackboard while sitting in the last row. What could be the defect the child is suffering from? How can it be corrected?
4. The far point of a myopic person is 80 cm in front of the eye. What is the nature and power of the lens required to correct the problem?
5. Make a diagram to show how hypermetropia is corrected. The near point of a hypermetropic eye is 1 m. What is the power of the lens required to correct this defect? Assume that the near point of the normal eye is 25 cm.
6. A student cannot see clearly a chart hanging on a wall placed at a distance 3 metre from his eye.  
   (i) Name the defect of vision he is suffering from. List two causes.  
   (ii) Draw a diagram to illustrate this defect.  
   (iii)With the help of diagram show how this defect can be corrected?
7. (a) Explain the following terms used in relation to defects in vision and correction provided by them

(i) Myopia (ii) Bifocal lenses (iii) Far-sightedness.

(b) Why is the normal eye unable to focus on an object placed within 10 cm from the eye?

1. What is hypermetropia? List two causes. Draw a diagram to illustrate this defect. Also show a diagram how this defect can be corrected using a lens.