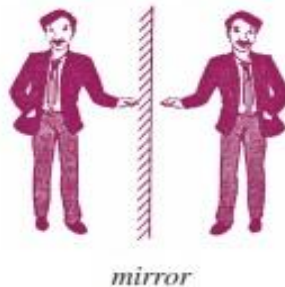


National Institute of Open Schooling
Secondary Course: Science and Technology
Lesson 15 – Light Energy
Worksheet-15

1. Light is the common form of energy. It makes the objects visible to us. Explain how an object becomes visible to us? Is it possible to see an object in the absence of light?
2. Observe your surroundings and list luminous objects. Explain why these objects are known as luminous objects. Differentiate between luminous objects and non-luminous objects.
3. Perform an activity for formation of images due to reflection. Also differentiate between Regular Reflection and Diffused Reflection.
4. Put your left hand near a plane mirror. What do you see in the image formed by reflection? The image of your left hand appears as right hand on the image as shown in Figure below.



Observe the phenomenon and give reason/reasons for this.

5. A spherical mirror is a section of a hollow sphere whose inner or outer surface is polished. Thus, there are mainly two types of spherical mirrors. Name and differentiate two types of spherical mirrors.
6. Dip a pencil in water in a glass tumbler and note down the observation. Repeat the same experiment with different liquids like, kerosene or turpentine. Will the observations be same if instead of water we use liquids like, kerosene or turpentine? Support your answer with reasons.
7. A lens is a portion of a transparent refracting medium bounded by two surfaces. List the different types of lens depending upon the nature of surfaces. Draw the all possible ray diagrams for image formation in concave lens and convex lens
8. We all have seen rainbow (the most colourful phenomenon in nature) after it rains. Explain the phenomenon beyond formation of rainbow. Perform an activity to observe the phenomenon rainbow and name the colours in a rainbow in sequence.
9. All the different parts of our eyes work together to help us see. Draw image formation in eye and explain the different defects in the eye.
10. If image of the object does not form at retina the eye has some defects of vision. Observe your surroundings and list the common defects of vision and how these defects can be removed.