

EXPERIENTIAL LEARNING

CLASS: VII

SUBJECT: SCIENCE

CHAPTER: 15 – LIGHT

SUB – TOPIC: REFLECTION OF LIGHT

NAME OF THE ACTIVITY: HANDS ON ACTIVITY

MATERIALS REQUIRED: A plane mirror, Pen/Pencil or a lighted candle, Chessboard, pencil sharpener / pen cap with a clip along its side, a screen (white paper / board) .

METHODOLGY OF ACTIVITY:

- Students are divided into 4 groups.
- Each group is assigned to do 4 different activities and to note down their observations.

ACTIVITY 1(GROUP 1): A pen / pencil or a lighted candle is kept in front of a plane mirror.

Students are asked to observe the top portion of the object (pen, pencil or flame of candle) and that of the image formed on the plane mirror.

1. Is the image formed on the plane mirror erect (upright) or inverted?
2. Is there any change in the size of the image when compared to that of the object?

ACTIVITY 2(GROUP 2): A pen / pencil or a lighted candle is kept in front of a plane mirror. A screen is kept on the other side of the object.

Students are asked to observe whether the image is formed on the screen or a shadow is formed.

1. Is the image formed a real image or virtual image?

ACTIVITY 3(GROUP 3): Students are asked to take a chessboard and keep a plane mirror on it. Then a sharpener or pen cap (with a clip on your right side) is placed in one of the squares of the board.

Students are asked to observe the position of the object by counting the number of squares between the object and the mirror and that between the image of the object and the mirror.

1. Is the position of the object from the mirror and that of the image from the mirror same?

ACTIVITY 4(GROUP 4): Students are asked to repeat activity 3 and asked to observe the position of the clip of the cap in the object and that of the image by raising the hand of a student facing the image.

1. Does the right hand of the student and clip of the object appear the same way in the mirror?

CURIOSITY QUESTIONS:

Why is the word 'AMBULANCE' written left to right 'ECNALUBMA' on the van?

ANSWER GUIDE:

- Will you give way for a vehicle coming behind you?
- Can the Ambulance (an emergency service) with the patient inside wait for traffic signal?
- Can you read a word correctly through a mirror if it is written from right to left?