

Girls' High School & College, Prayagraj

Physical Parctical
Session 2020-2021
Class - IX A B C D E F
Subject-Physics

Instructions:-

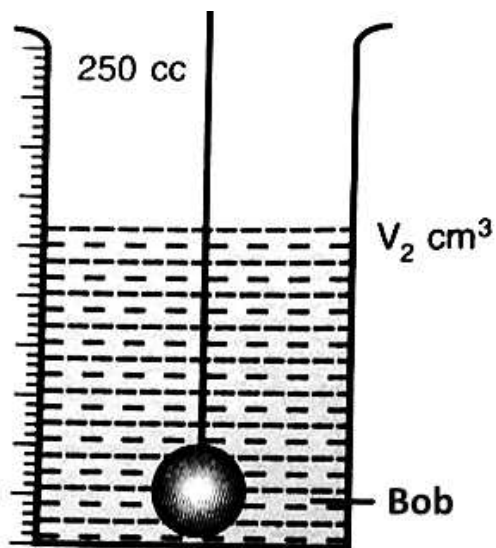
1. Parents are expected to ensure that the student writes all experiments in Guided Physics Practical Work-Book (D N publications).
2. Observation and reading will be done, when the school re-opens.
3. Each experiment should start from a new page.
4. Well labelled diagrams to be drawn on the left page only.

EXPERIMENT NO.5

AIM: - To determine the volume of a metallic bob.

APPARATUS REQUIRED: - A measuring cylinder, a metallic bob, a thin string and water.

THEORY: - When a bob is completely immersed in the liquid then it displaces liquid equal to its own volume. Thus, increased volume of liquid gives the volume of the bob.



OBSERVATIONS:-

S.No.	Initial reading of the water level in the measuring cylinder V_1 (in cm^3)	Reading of the water level in the measuring cylinder with bob immersed V_2 (in cm^3)	Volume of the bob $V=(V_2-V_1)$ cm^3
1.			
2.			
3.			
4.			
Mean Reading=			

The diameter 'd' of the bob =cm

The radius 'r' of the bob = $d/2 =$cm

The volume of the bob = $4/3\pi r^3 =$
 $=$ cm^3

RESULT :- The volume of the given bob is cm^3

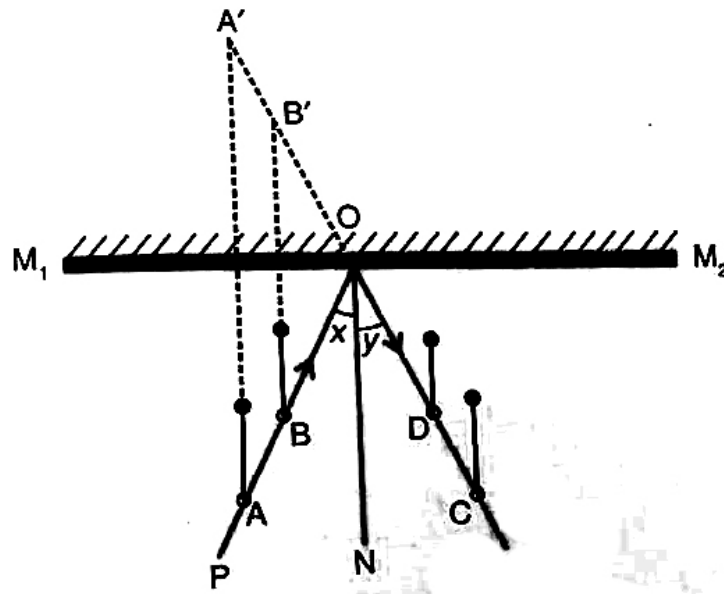
EXPERIMENT NO.6

AIM:- To verify the laws of reflection of light.

APPARATUS REQUIRED:- A drawing board, a plane mirror with a support, a white sheet of paper, drawing pins, common pins, pencil and protractor.

LAWS OF REFLECTION:-

1. The angle of incidence is equal to the angle of reflection.
2. The incident ray, the reflected ray and the normal at the point of incidence, lie in the same plane.



OBSERVATIONS:-

S.No.	Angle of incidence X (degrees)	Angle of reflection Y (degrees)
1.		
2.		
3.		
4.		

RESULT :-

1. The angle of incident is almost equal to the angle of reflection, hence the first law of reflection of light is verified.
2. By inspection the incidence ray, reflected ray and normal lie on the same plane at the point of incidence which verifies the second law of reflection of light.

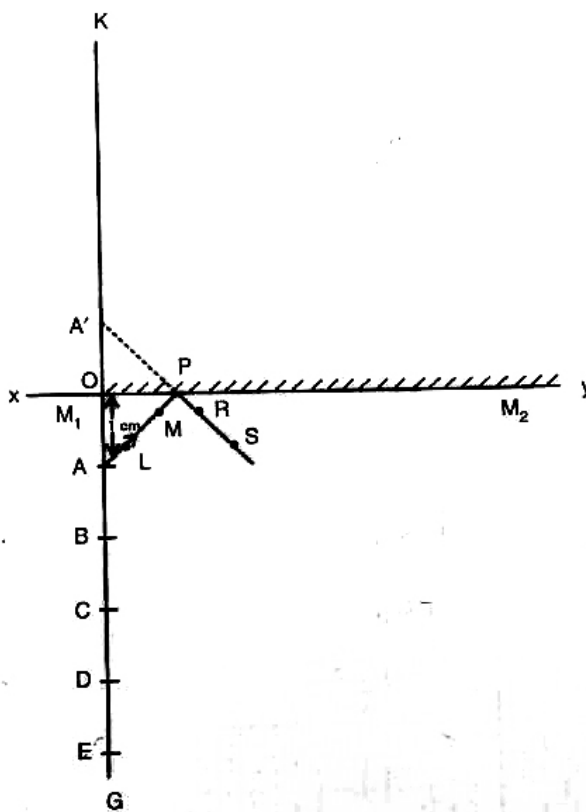
EXPERIMENT NO.7

AIM:- To verify that the image formed is as far behind the mirror as the object is in front of a plane mirror.

APPARATUS REQUIRED:- A drawing board, a plane mirror with a support, a white sheet of paper, drawing pins, common pins, pencil and ruler.

LAWS OF REFLECTION:-

1. The angle of incidence is equal to the angle of reflection.
2. The incident ray, the reflected ray and the normal at the point of incidence, lie in the same plane.



OBSERVATIONS:-

S. No.	Distance of object from mirror X (in cm)	Distance of image from mirror Y (in cm)
1.		
2.		
3.		
4.		

RESULT :- Since distances of the object and image from mirror in all the cases are equal; the image formed is as far behind as the object is in front of the plane mirror.

END