Sec 3 Physics e-Learning Revision

Topics: Chapter 7 Reflection of light   **Date : _____**

Name : _____ (   )   **Class: _____**

Instructions:
- Use the online sites to do a thorough revision. Fill in the blanks and complete the exercises and quizzes on this handout.   **OR**
- You may also complete the exercises and quizzes first before checking the answers online.

Website:
From http://johnlittlephysics.pbwiki.com/
→ Ch 7: Reflection of light → Online revision cum quiz!
[may also download into PC from http://www3.moe.edu.sg/edsoftware/ir/physics.htm]

7.1   Reflection terms

- Normal: _____

- Incident ray: _____

- Angle of incidence: _____

- Reflected ray: _____

- Angle of reflection: _____

7.2   Laws of reflection *(highlight or underline the key words!)*
- 1st law states that   _____

  _____

- 2nd law states that   _____

  _____

7.3   Properties of image in a mirror
- It is at the same _____ behind the mirror as the object is in _____
- It is u_____   (*not inverted*)
- It has the same _____ as the object
- It is laterally _____
- It is v_____   (*cannot be formed on a screen*)

7.4   Construction of ray diagrams
- Go through the key steps in the construction:

  (1) Locate position of image
→ (2) Ray from image to eye
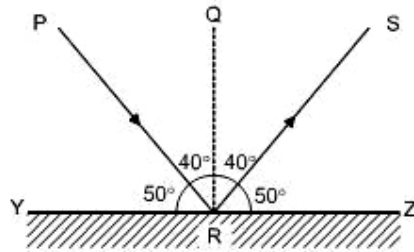→ (3) Ray from object to mirror
→ (4) Construct 2nd ray in similar way
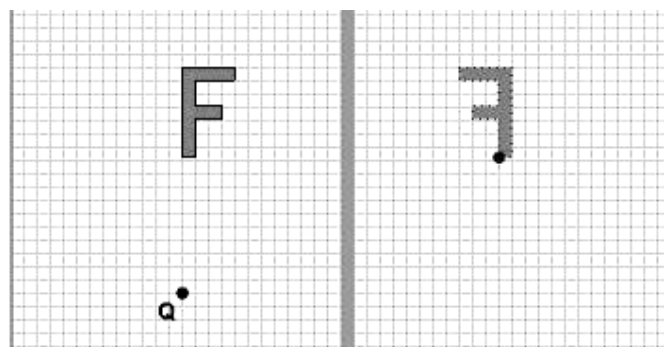
7.5   Practice
- Draw 2 light rays to show how an observer at point **Q** can see the bottom of the image of "F" as shown by the dot.

7.6   Quiz (5 questions)

1. Below is a diagram that shows a plane mirror YZ. A ray of light is reflected by the mirror. Which of the following statements is completely correct?


A. RS is the reflected ray and angle of reflection is 50°.

B. QR is the normal and angle of incidence is 50°.

C. PR is the reflected ray and angle of incidence is 40°.

D. PR is the incident ray and angle of incidence is 40°.

2. The diagram shows a single ray directed at a plane mirror. What are the angles of incidence and reflection?
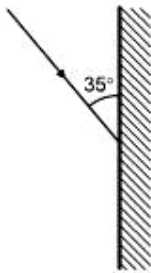
	Angle of incidence	Angle of reflection
A.	35°	35°
B.	35°	55°
C.	55°	35°
D.	55°	55°

5. The diagram shows a person standing 2.0 m in front of a plane mirror. How far from the person is his image?
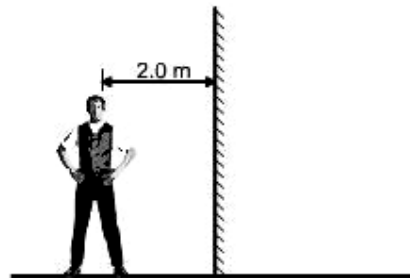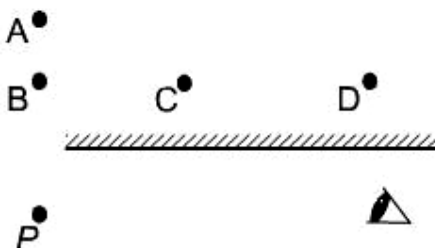

A. 1.0 m

B. 2.0 m

C. 3.0 m

D. 4.0 m

3. Which of the following describes the image formed by a plane mirror when compared to the object.

	Image type	Image size
A.	Virtual	Smaller
B.	Virtual	Same
C.	Virtual	Larger
D.	Real	Same

4. A pin **P** is placed in front of a plane mirror as shown in the diagram. At which point is the image of the pin seen?

Prepare well and do your best ☺