

6 Light from an object forms an image in a plane mirror.

(a) Tick (✓) the **two** correct statements.

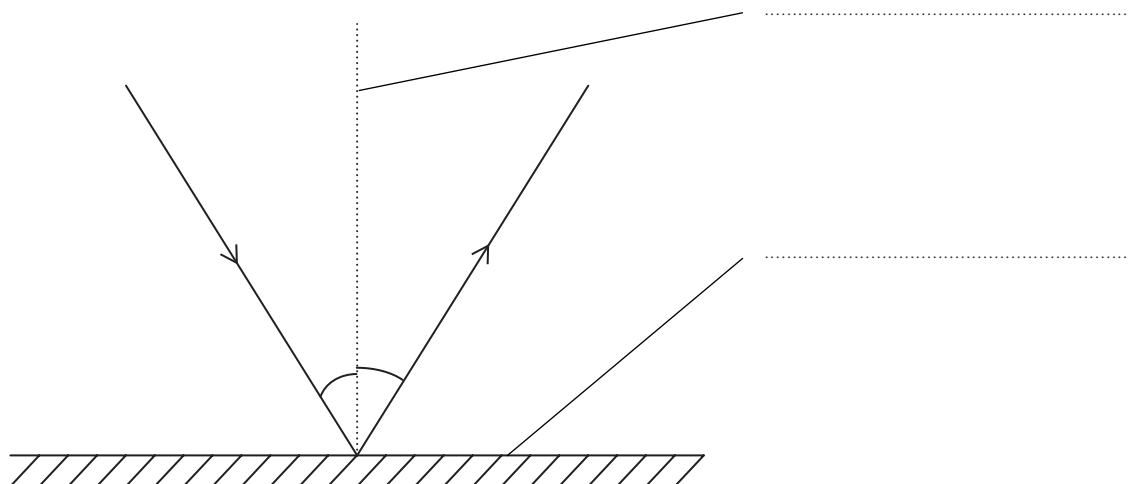
(2)

Statement	Tick
the image in a plane mirror is virtual	
light from the object passes through the image in a plane mirror	
light waves are longitudinal	
the angle of incidence equals the angle of reflection	
the incident ray is always at right angles to the reflected ray	

(b) (i) Use words from the box to complete the labels on the diagram below.

(2)

mirror    normal    ray    reflection

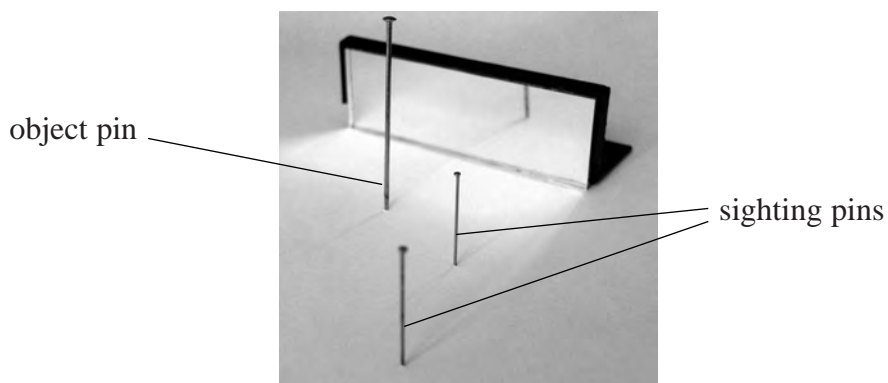


(ii) Write  $r$  on the diagram above to show the angle of reflection.

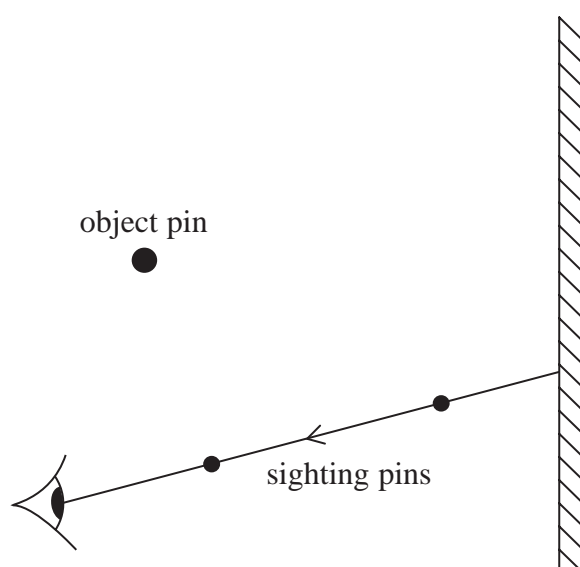
(1)



- (c) A student investigates the formation of the image in a plane mirror, using the apparatus shown in the photograph.



She uses the holes that the pins make to construct this diagram.



- (i) Add to the diagram to show how the student should find the position of the image. (3)
- (ii) Explain how the student could confirm that the position of the image is correct. (2)

.....

.....

.....

.....

(Total for Question 6 = 10 marks)

