## Question 1

(d) On which of the paths $\mathbf{A}, \mathbf{B}$ or $\mathbf{C}$ will the incoming ray of light travel after striking the mirror?


## Question 2

(a) A student carried out an investigation to show that white light is composed of different colours. A beam of white light was passed through a prism as shown below.
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Name the colours labelled A and B in the band of colours formed.

Colour A $\qquad$
Colour B $\qquad$


## Question 3

(b) A student then carried out another experiment on light as shown in the diagram.

Answer the questions that follow.
What would the student see if the card in the middle is moved sideways?


What does this experiment tell us about light?

## Question 4

(a) A rainbow is seen when white light is separated into its colours.
(i) Name the process that happens when white light is separated into its colours. $\qquad$
(ii) Name a piece of laboratory apparatus which can be used to separate white light into its colours. $\qquad$


## Question 5

(a) Diagram A shows two rays of light hitting a plane mirror.

Diagram B shows two rays of light travelling from water into air.
Diagram C shows two rays of light hitting a concave lens.
(i) Complete the ray diagrams below.

(ii) Name the process that occurs when rays of light pass from water into air.
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## Question 6

(e) The photograph, taken from a satellite above the earth, shows the shadow of the moon on the earths surface.
(i) Where does the light falling on the earths surface come from?

Where? $\qquad$
(ii) What property of light enables the formation of shadows?


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(1)

What? $\qquad$

## Question 7

(a) (i) Why is the word Ambulance painted in reverse on the front of many ambulances?

Why? $\qquad$

(ii) A pupil made a simple periscope using two plane (flat) mirrors.

The mirrors were arranged as shown in the diagram. The pupil looked through the periscope at the word 'Science' written on a card pinned to the laboratory wall.


Did the pupil see image A or image $\mathbf{B}$ when she looked through the periscope? Give a reason for your answer.

Image? $\qquad$
Reason $\qquad$

