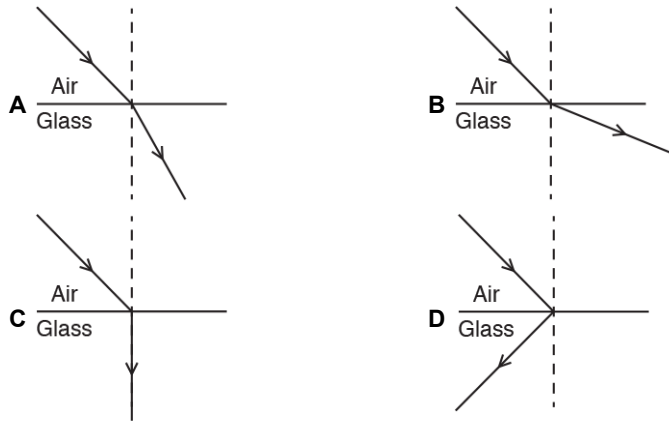


Wave Interaction (F)

1. A light ray passes from air into glass.

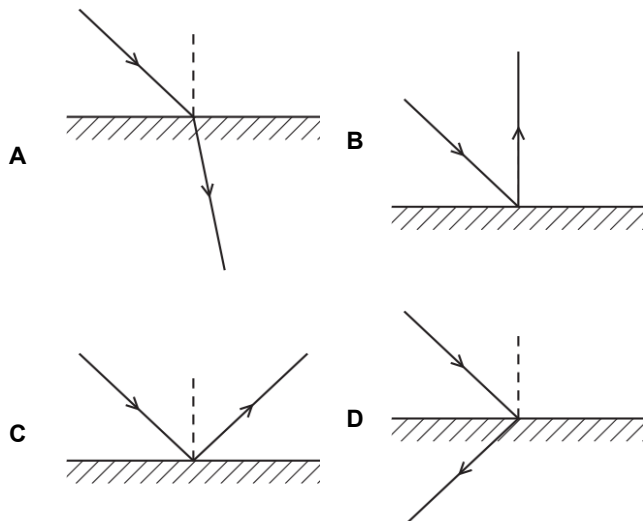
Which diagram shows the **refraction** of this light ray?



Your answer

[1]

2. Which diagram shows **reflection** of a light ray using a plane mirror?



Your answer

[1]

3 (a). A student looks at coloured paper in different coloured light.

Fig. 18.3 is a diagram of her experiment.

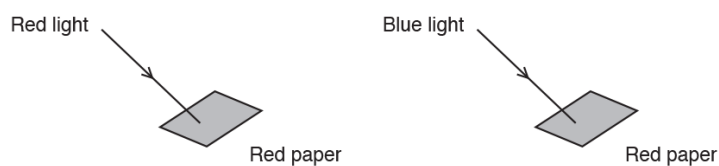


Fig. 18.3

She looks at red paper with red light. The paper appears red.

What colour does the red paper appear in blue light?

Explain your answer.

----- [2]

(b). Lenses can be used to help people see clearly.

Fig. 18.1 is a diagram of a convex lens.



Fig. 18.1

i. A student models the lens using two glass **prisms** and a glass **block**.

Complete the ray diagram Fig. 18.2 to show how light rays travel through the model lens (glass prism and glass block).

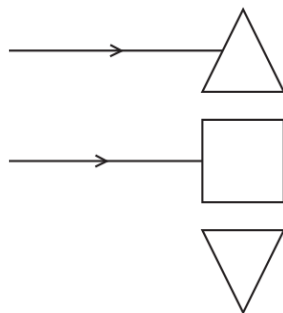


Fig. 18.2

[2]

- ii. Explain how a convex lens can correct long-sighted vision.

Use the model in **Fig. 18.2** to help you.

[2]

- 4(a).** A projector is used to create a larger image of an object.

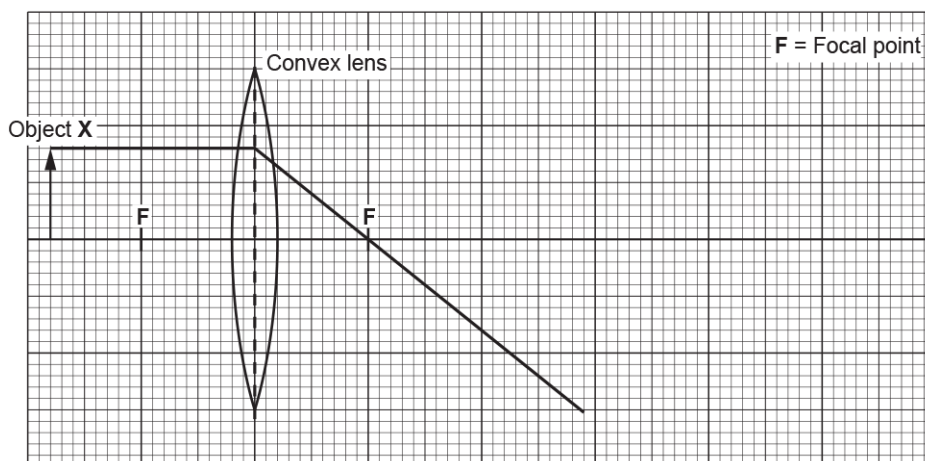
The projector contains a white light source.

Explain how this white light source can be used to get **red** light.

[2]

- (b).** The diagram shows one light ray as it passes through the convex lens.

Draw **one** more ray on the diagram to show where the image is formed. Label the image **Y**.



[2]

END OF QUESTION PAPER