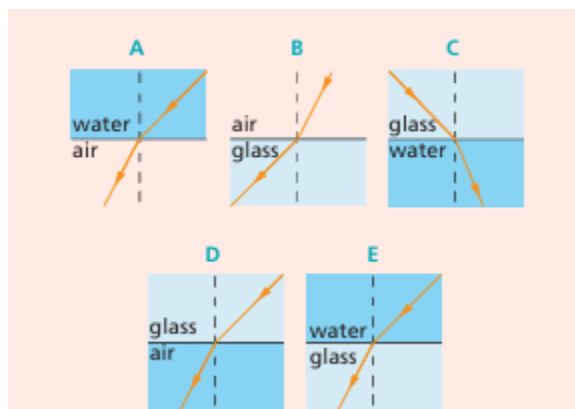
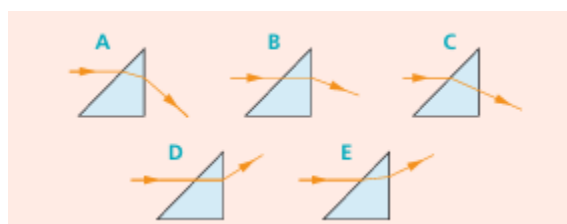


MYP – Refraction – Criteria A

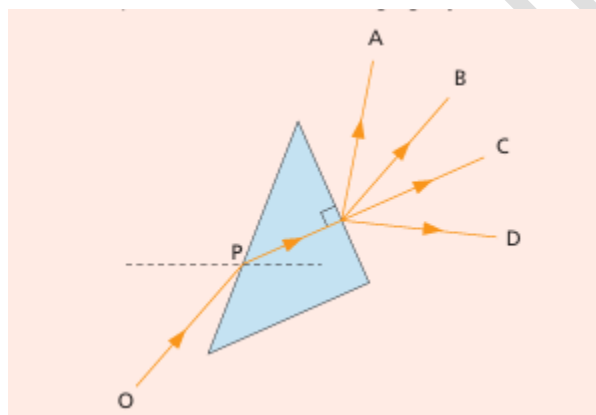
Which diagram shows the ray of light refracted correctly?



Which diagram shows the correct path of light through the prism?

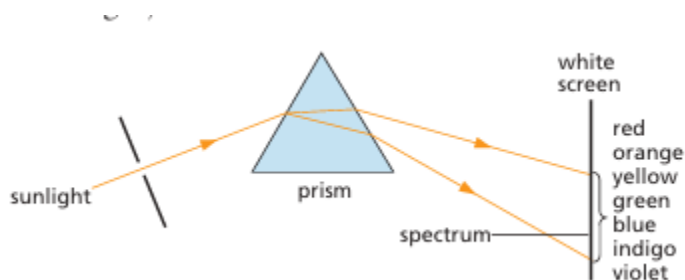


Which diagram correctly shows the emergent ray from a prism ?

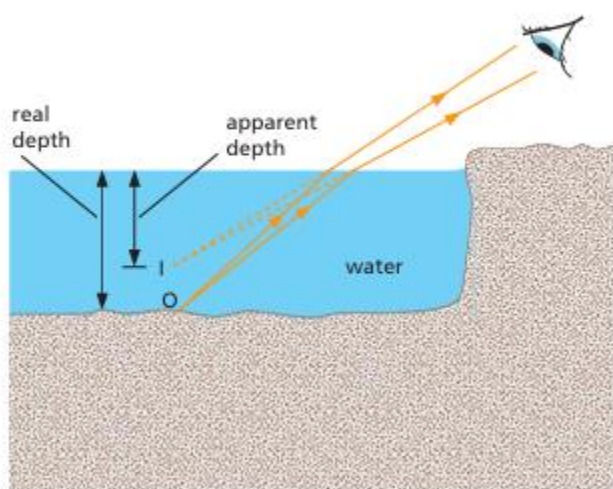


MYP – Refraction – Criteria A

Identify which color bends the most ? Explain scientifically the reason.



Explain why a pool of water appears shallower than what it is actually with reference to refraction of light



Answer

E
A
C

- Wavelength is the key factor determining the amount of bending. Violet light has the shortest wavelength of visible light, while red light has the longest. Hence speed is less and bending is more for violet light.
- ray from O when reaches the interface, as it is travelling from denser to rarer medium, it will bend away from the normal as it reaches the eye.
- If this ray is extended back, it will meet I (at a point above O) and not O.
- Hence the pool appears to be shallower than what it actually is.

Reference –
Physics IGCSE – Duncan