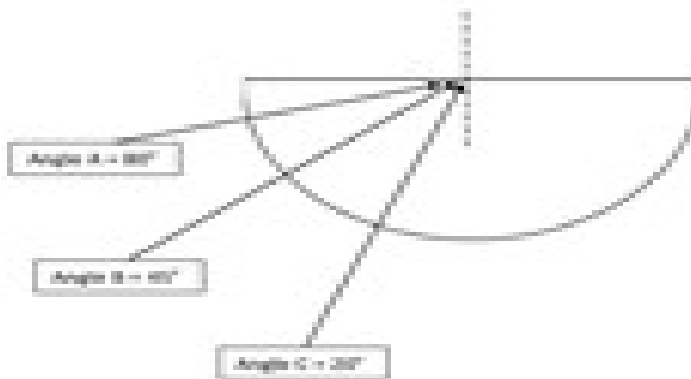


Total Internal Reflection

- The critical angle for the glass/block shown below is 42° . Complete the diagram to show what will happen to each ray of light.



- Complete the sentences below using the words provided.

Total, Refract, Reflect, Boundary, Critical, Water.

Light can refract or reflect when it hits the _____ between air and a material that light can pass through. E.g. glass, perspex or _____. These objects all have a _____ angle. When light hits this material at an angle that is lower than the critical angle then it will _____ (change direction). If light hits at an angle above the critical angle then it will _____ internally. This is called _____ internal reflection.

- Light or infra red waves can be transmitted through fibre optic cables. They can transmit small amounts of information with very little energy loss. Complete the diagram to show the path taken by the ray as it enters the fibre optic cable.

