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# HL Paper 3

- (a) (i) Explain the dependence of the dissociation of diatomic oxygen,  $O_2$ , and ozone,  $O_3$ , on the wavelength of light.
- (ii) State the equations for the formation and depletion of ozone in the stratosphere by natural processes.

Formation of ozone:

Depletion of ozone:

- (b) (i) State the equations for the depletion of ozone by the CFC, dichlorodifluoromethane,  $CCl_2F_2$ .
- (ii) Use your answer to part (b) (i) to explain why CFCs are so effective at ozone depletion.
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