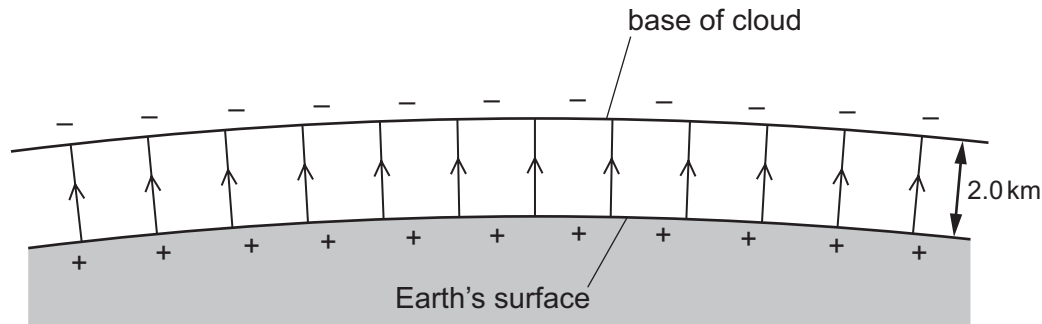


- 32** Lightning can occur between a charged cloud and the Earth's surface when the electric field strength in the intervening atmosphere reaches  $25 \text{ kN C}^{-1}$ . The diagram shows the electric field between the base of a cloud and the Earth's surface.



What is the minimum potential difference between the Earth and the base of a cloud, 2.0 km high, for lightning to occur?

- A** 12.5 MV      **B** 25 MV      **C** 50 MV      **D** 100 MV