

SECTION B

Answer ALL questions in the spaces provided.

- 11** A rock falls from rest through a small distance s to the surface of Mars. The rock hits Mars with velocity v_M .

Another rock falls from rest through distance s to the surface of Earth and hits Earth with velocity v_E .

Calculate the ratio $\frac{v_M}{v_E}$.

acceleration due to gravity on Mars = $0.38g$

$$\frac{v_M}{v_E} = \dots\dots\dots$$

(Total for Question 11 = 3 marks)