

Question Number	Answer	Mark
11	<p>Use of $s = u t + \frac{1}{2} a t^2$ with $u = 0$ and $a = g$ for flight time (1)</p> <p>Use of $s = u t + \frac{1}{2} a t^2$ with $a = 0$ for horizontal displacement of stone (1)</p> <p>Distance travelled = 5.9 m (1)</p> <p><u>Example of calculation</u></p> <p>$12 \text{ m} = 0.5 \times 9.81 \text{ m s}^{-2} \times t^2$</p> <p>$t = \sqrt{(12.0 \text{ m} \div 4.905 \text{ m s}^{-2})} = 1.56 \text{ s}$</p> <p>$s_{\text{stone}} = 3.8 \text{ m s}^{-1} \times 1.56 \text{ s} = 5.94 \text{ m}$</p>	3
	Total for question 11	3