

Question	Answer	Mark	Mark scheme	Additional guidance
11	125	P1	<p>for setting up an equation with a constant term, eg $T = \frac{k}{w}$ or $w = K\sqrt[3]{d}$</p> <p>P1 for a process to substitute values in one equation, eg $20 = \frac{k}{6}$ or $k = 120$ or $1 = K\sqrt[3]{8}$ or $K = \frac{1}{2}$ oe</p> <p>P1 (dep P2) for combining the two equations ft their values of k and K, eg $T = \frac{"120"}{\frac{1}{2}\sqrt[3]{d}}$ oe</p> <p>OR for a correct process to find the value of w when $T = 48$, eg $w = \frac{"120"}{48}$ (= 2.5 oe)</p> <p>P1 for substitution into their formula, eg $48 = \frac{"120"}{\frac{1}{2}\sqrt[3]{d}}$</p> <p>OR for substitution of found value of w in the equation for d, eg $"2.5" = \frac{1}{2}\sqrt[3]{d}$</p> <p>A1 cao</p>	<p>Condone the use of 'α' instead of '=' for the first two P marks Equation can be implied by correct substitution</p> $T = \frac{120}{w} \quad w = \frac{1}{2}\sqrt[3]{d}$