Question	Answer	Mark	Mark scheme	Additional guidance
15 (a)	$\frac{126}{216}$	P1	for process to use the ratio to find a correct probability, eg $(\text{P(blue)} =)\frac{5}{6}$ oe or $(\text{P(red)} =)\frac{1}{6}$ oe	Accept any equivalent fraction, decimal form, 0.16(6…) or 0.83(3…), or percentage form 16(.6…)% or 83(.3…)% rounded or truncated to at least 2 significant figures for P marks
		P1	for process to find the probability of three counters of the same colour, eg $\frac{5}{6}\times\frac{5}{6}\times\frac{5}{6}\left(=\frac{125}{216}\right)$ oe or $\frac{1}{6}\times\frac{1}{6}\times\frac{1}{6}\left(=\frac{1}{216}\right)$ oe or $[p]\times[p]\times[p]$	Where $[p]$ is clearly identified as P(blue) or P(red) and $0 < [p] < 1$
		A1	for $\frac{126}{216}$ oe, eg $\frac{7}{12}$	Accept any equivalent fraction inc $\frac{126x^3}{216x^3}$, decimal form, 0.583(3…) or percentage form 58.3(3…)% rounded or truncated to at least 3 significant figures. But allow 0.58(3…) or 58(.3…)% oe rounded or truncated to at least 2 significant figures from correct working.

Question	Answer	Mark	Mark scheme	Additional guidance
15 (b)	Yes, supported	C1	Yes with reason **Acceptable examples** the ratio of blue to red counters stays the same 10 : 2 is the same as 5: 1 there are still 5 times as many blue as red the probability / fraction of getting a blue or red counter stays the same $\frac{10}{12}\times\frac{10}{12}\times\frac{10}{12}+\frac{2}{12}\times\frac{2}{12}\times\frac{2}{12}$ = their answer to part (a) $\frac{10}{12}\times\frac{10}{12}\times\frac{10}{12}=\frac{125}{216}$ or $\frac{2}{12}\times\frac{2}{12}\times\frac{2}{12}=\frac{1}{216}$ **Not acceptable examples** the probability / probabilities stay the same the total will double and the probability stays the same the fraction(s) are equivalent we do the same multiplication there are still the same number and still more blue counters than red counters No, …	