Question Number	Answer	Additional guidance	Mark
2(a)(i)	The only correct answer is D 1.6 x 10³ µm *B is incorrect because the diameter is 1.6 x 10³ µm* *C is incorrect because the diameter is 1.6 x 10³ µm* *D is incorrect because the diameter is 1.6 x 10³ µm*		**(1)**

Question Number	Answer	Additional guidance	Mark
2(a)(ii)	A calculation showing the following steps: • correct volume from frog egg cell (1) • correct calculation (1) • correct calculated answer to 2 significant figures (1)	Mark the answer on answer line first Example of calculation v of frog (=4/3 $\prod$ 800³) = 2.14 x 10⁹ (2.14 x 10⁹) ÷ 1.8 x 10⁶ = 1189 Allow ECF = 1200 times larger Correct answer (1200 or 1.2 x10³) to 2 sig figs with no working gains full marks	**(3)**

Question Number	Answer	Additional guidance	Mark
2(b)	An explanation that makes reference to four of the following: • egg cell contains {23 chromosomes/ half the genetic material of the skin cell} / egg cell is haploid (whereas skin cell is diploid) (1) • (therefore) fertilisation can occur to form a {diploid cell / zygote} (1) • (the egg cell genetic material is different from the skin cell) due to meiosis (1) • (the egg cell genetic material is different from the skin cell) due to crossing over (1) • (the egg cell genetic material is different from the skin cell) due to {random / independent} assortment (of homologous chromosomes) (1)	 Accept {full set / original number} of chromosomes formed after fertilisation Accept fusion of nuclei Accept egg cell is formed by meiosis	**(4)**