Compound Growth And Decay Mark Scheme		
1(a)	24000×1.07	[1]
1(b)	24000×1.07^5	[1]
1(c)	23500×1.06^9	[1]
2(a)	$£12000\ x\ 0.965$	[1] Correct method of calculating value
	$£9784.47$	[1] Correct value to 2 d.p.
2(b)	$£12000\ \div\ 0.96$	[1] Correct reverse percentage
	$£12{,}500$	[1] Correct value
3(a)	6.5%	[1]
3(b)	$1000\ \times 1.065^7$	[1] Forming equation
	$£1553.99$	[1] Correct value to 2 d.p.
3(c)	After 12 years is the first time the value exceeds £2000	[1] By trial and error or otherwise
4	Identifying 3 years	[1] Timeframe
	$10000\ \times r^3 = 150\ 000$	[1] Forming equation
	$r^3 = 15\ , r = \sqrt[3]{15} = 2.47$	[1] Correct value of r to 2 d.p.
	10000×2.47^5	[1] Correct calculation Accept answer with no rounding - 912330
	$= 919{,}358$	[1] Correct estimate of cars
5	$121500\ \div 500 = 243$	[1] Correct calculation
	$\sqrt[5]{243} = 3$	[1] Find relation
	$500\ \times 3^8\ = 3280500$	[1] Correct number of bacteria
6(a)	Underestimate	[1]
6(b)	$2\ \times 1.12^5$	[1] Forming equation
	$3.52\ \mathrm{m}$	[1] Correct value to 2 d.p.
7	$4000 \times \left(1\ + \frac{11}{100}\right)^5 = 6740.23262$	[1] Correct value after 5 years
	$\frac{6740.23262}{2}\ \ = 3370.11631$	[1] Calculation
	$3370.11631 \times \left(1 + \frac{11}{100}\right)^5$	[1] Correct calculation after 10 years
	$= £\ 5678.84$	[1] Amount left in fund after 10 years

END