| Repeated Percentage Change |  |  |
| :---: | :---: | :---: |
| (a) | (b) | (c) |
| Aliza's salary will rise by $3 \%$ every year for the next 5 years. Her starting salary is $£ 24500$. What will she earn in 5 years' time? | Hassan invests $£ 4000$ at a compound interest rate of $2.4 \%$ per year. How much money will he have after 3 years? | A colony of rabbits in growing at a rate of $35 \%$ per year. Initially the colony has 20 rabbits. How many rabbits will it have after 10 years? |
| (d) | (e) | (f) |
| Lucas invested $£ 650010$ years ago at an compound interest rate of $2.5 \%$ per year. He needs $£ 8500$ to buy a new Ford Fiesta. Will he have enough money in his account? | Bank A has an interest rate of $1.2 \%$ and Bank B has an interest rate of $1.3 \%$. If I invest $£ 5000$ in both banks, what is the difference between the two balances after 4 years? | When people have an overdraft at a bank they are charged interest. Sonny is $£ 45$ overdrawn. His bank charges $2 \%$ per month interest rate. How much will Sonny owe after 6 months, assuming he doesn't pay off any of his debt? |
| (g) | (h) | (i) |
| A credit card company charges interest at $3.2 \%$ per month on any outstanding balance. A balance of $£ 1500$ is left unpaid. What is the balance after 1 year? | The world population at the end of 2013 was 7.1 billion people. The current population growth rate is $1.1 \%$. Assuming this rate stays the same, what will the population be in 2050? | There are 10 bacteria in a petri dish at the start of the day. The number doubles every hour. How many bacteria will there be after 24 hours? |

