Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. (Year 5)

1. Mrs Jones is baking cupcakes; she has a recipe that make 48 cupcakes. To make just 12 cupcakes, Mrs Jones that she needs to find a quarter of the original recipe. What are the new amounts that she needs?

- 480 g plain flour
- 4 eggs
- 300 g sugar
- 20 ml vanilla flavouring
- 5 ml red food colouring
- 10g baking powder

What is she wanted to make 96 cupcakes? What would be the new measurements?
2. An electronics shop is having a sale where products have been reduced to give them a new price. What are their new prices?

- TV - $£ 360$ reduced by $10 \%$
- Apple iPad - £560 reduced by $1 / 5$
- Xbox One - £250 reduced by $25 \%$
- PS4 - £350 reduced by 5\%
- Laptop $£ 400$ reduced by $15 \%$
- Digital camera - £90 reduced by 2/10

If I bought an iPad and an Xbox in the sale, how much change would I have from $£ 1000$ ? Would I be able to afford anything else?
4. Before I went on holiday, I went to the bank to change my money from pounds ( $£$ ) into Euros
( $€$ ). I was told that there was a $2 \%$ increase, if I was to exchange the following amounts of money from Pounds into Euros, how much would I receive back?

- $£ 1=$
- $£ 2=$
- $£ 5=$
- $£ 10=$
- $£ 50=$
- $£ 100=$
- $£ 200=$

5. A theme park has discounted prices for different days and people. Use the information in the table to answer the questions:

| Day | $\underline{\text { Adult }}$ | $\underline{\text { Child }}$ | Elderly | Family |
| :--- | :--- | :--- | :--- | :--- |
| Mon-Fri | $£ 10$ | $£ 5$ | $£ 6$ | $£ 25$ |
| Sat-Sun | $£ 15$ | $£ 7.50$ | $£ 8$ | $£ 35$ |

- Buy tickets online to receive $10 \%$ off the price!
- A family want to visit on Saturday and book online, how much do they pay?
- 3 adults and a child visit on Friday and they do not book online but they have a 'children go 1/2 price' voucher, how much do they pay?
- 4 adults, 5 children and an elderly person visit on Sunday, how much do they pay?

