

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

<p>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?</p> <ul style="list-style-type: none"> - 480g plain flour 120g - 4 eggs 1 egg - 300g sugar 75g - 20ml vanilla flavouring 5ml - 5ml red food colouring 1.25ml - 10g baking powder 2.5g <p>What is she wanted to make 96 cupcakes? What would be the new measurements?</p> <p>960g plain flour 8 eggs 600g sugar 40ml vanilla flavouring 10ml red food colouring 20g baking powder</p>	<p>2. An electronics shop is having a sale where products have been reduced to give them a new price. What are their new prices?</p> <ul style="list-style-type: none"> - TV - £360 reduced by 10% £324 - Apple iPad - £560 reduced by 1/5 £448 - Xbox One - £250 reduced by 25% £187.50 - PS4 - £350 reduced by 5% £332.50 - Laptop £400 reduced by 15% £340 - Digital camera - £90 reduced by 2/10 £72 <p>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?</p> <p>iPad = £448 Xbox = £187.50 Total = £635.50 Change from £1000 = £364.50 Yes, a camera/another Xbox/a TV/a laptop.</p>
<p>3. A family go on a picnic, at lunch time they unpack their food and share everything out equally between 5 of them. Work out how much food each person receives:</p> <ul style="list-style-type: none"> - 15 ham sandwiches 3 - 10 cheese sandwiches 2 - 5 tuna sandwiches 1 - A bunch of grapes 1/5 - A packet of 20 cocktail sausages 4 - 7 and a half satsumas 1 and 1/2 - 3 packets of crisps (vegetable, barbeque and cheese and onion) 60% 	<p>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?</p> <ul style="list-style-type: none"> 5. £1 = £1.02 6. £2 = £2.04 7. £5 = £5.10 8. £10 = £10.20 9. £50 = £51.00 10. £100 = £102.00 11. £200 = £204.00
<p>5</p> <p>A theme park has discounted prices for different days and people. Use the information in the table to answer the questions:</p>	

<u>Day</u>	<u>Adult</u>	<u>Child</u>	<u>Elderly</u>	<u>Family</u>
<u>Mon-Fri</u>	£10	£5	£6	£25
<u>Sat-Sun</u>	£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?

$$35 - 3.5 = \text{£}31.50$$

- 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?

$$\text{£}32.50 = (10 \times 3 = 30) + \text{£}2.50$$

- 4 adults, 5 children and an elderly person visit on Sunday and they book online, how much do they pay?

$$\text{£}15 \times 4 = \text{£}60$$

$$\text{£}7.50 \times 5 = \text{£}37.50$$

$$+ \text{£}8 = \text{£}105.50$$

$$10\% \text{ of } \text{£}105.50 = \text{£}10.55$$

$$\text{£}105.50 - \text{£}10.55 = \text{£}94.95$$