Fairground problems

Solve multi-step problems involving number and money, including some multiplication and division, deciding which operations and methods to use and why
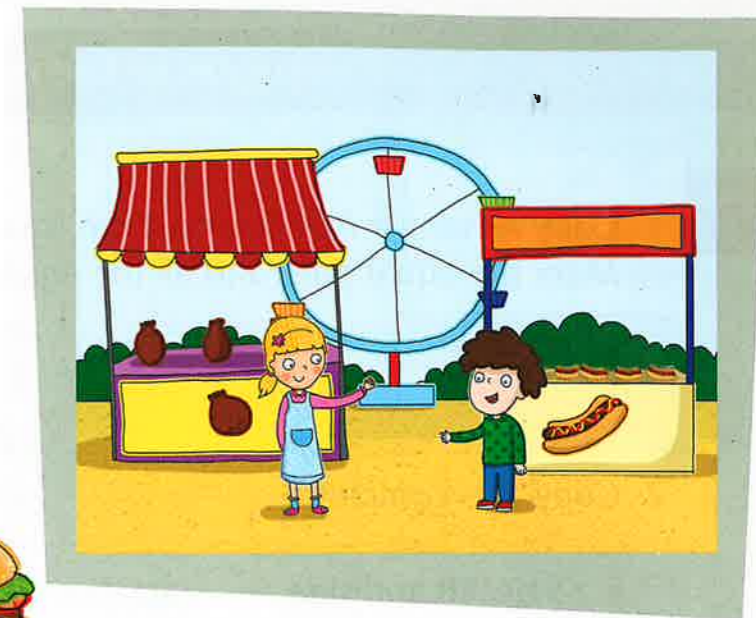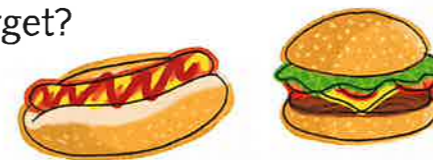
1 The candy floss stall and the popcorn stall took a total of £12 487 in a month. The candy floss stall took £7684 – how much did the popcorn stall take?

2 A total of 2595 coconuts were delivered to the coconut shy. They arrived in 3 enormous crates, each with the same number of coconuts inside. How many coconuts were in each crate?

3 Last October was a very rainy month and the fairground got flooded. Over 3 days the water level rose from 1·3 cm to 2·7 cm to 3·4 cm. How much did it rise by from day 1 to day 3?

4 £8572.62 and £13 472.29 are the amounts spent on the ghost train over the last 2 months. What was the total amount taken?

5 The fair travelled a lot around the country. The driver noticed his milometer said 135 700 miles. He had to take his lorry to the garage after another 73 000 miles. How many miles had it done then?

1 The most popular stall is the coconut shy and the least popular is the lucky dip. The difference in number of visitors they had was 17 428, although both had more than 20 000 visitors. What could the number of visitors for each stall have been? Give one possible answer.

2 Three brothers own three different rides. Last month the rides earned £3428.65, £2767.87 and £3596.15. The brothers put all their money together and then split it equally. How much does each brother receive?

3 The roller coaster owner is adding up his takings. In the last 3 years he has taken a total of £176 459. He knows he took £54 755 in the first year. How much could he have taken in each of the last 2 years? Give one possible answer.

4 The summer is the busiest time for the fair. In June there were 8367 visitors, 12 673 in July and double the July figure in August. How many visitors were there altogether in these three months?

5 The food stall took £2437 and the drinks stall took £3085 in a month. Their joint target was £6000. How much more did they need to take to meet their target?

Challenge 3

1 The helter-skelter owner always puts half of her monthly profit in the bank. With the other half she divides it 4 ways between herself and her 3 daughters. Each person received £2896 last month. What was the total monthly profit?

2 In the last month, 3862 teddy bears and 3702 dolls were chosen as prizes. A quarter of them were won on the lucky dip. The rest were used by the hook-a-duck stall, where each turn costs £3 and you win a prize every time. How much money did the hook-a-duck stall make?

3 The dodgems took £147 590 in a year. The owners had to pay out £38 400 in maintenance for the cars and £45 995 for travel expenses. The rest of the money they split between the 5 owners. How much did each owner receive?

4 The fair manager has worked at the fair for many years. If he divides the number of years by 4 there is 1 left over, if he divides it by 6 there are 3 left over, and if he divides it by 2 there is 1 left over. How many years has he worked at the fair?

5 On Saturday the roller coaster took a total of £1302. Each person who went on the ride paid £3.10. How many people went on the ride that day?