

Max's Spooky Calculation Challenge

Learning objective: To apply Year 5 mathematical skills including multiplication, division, fractions, and perimeter calculations within a seasonal context.

Read each card carefully. Use your reasoning skills to solve the problems. Remember to show your working out for multi-step calculations.

Max is buying 12 spooky pumpkins for £3.45 each. How much will they cost in total? £41.40	A haunted house has a rectangular garden with a length of 15m and a width of 8m. What is the total perimeter of the garden? 46m
Zara has 144 spider-web decorations. If she shares them equally among 9 spooky zones, how many decorations go in each zone? 16	If $\frac{3}{4}$ of a jar of 40 jelly eyeballs have been eaten, how many eyeballs are left? 10
Kit has a bag of 60 treats. He gives $\frac{1}{5}$ to Pip and $\frac{1}{3}$ to Nova. How many treats does he have left for himself? 28	A box of bat-shaped biscuits costs £2.85. If Ellie buys 4 boxes and pays with a £20 note, how much change should she receive? £8.60
Explain why the perimeter of a square with sides of 9cm is the same as the perimeter of a rectangle with a length of 12cm and a width of 6cm. Both have a perimeter of 36cm ($9 \times 4 = 36$; $(12 + 6) \times 2 = 36$).	Compare and contrast the product of 12×8 and the product of 16×6. What do you notice about these numbers? Both products are 96. They are different factor pairs of the same number.
Justify your answer: If you have a bag of 50 sweets and share them between 7 friends, how many are left over? 1 is left over (50 divided by 7 is 7 remainder 1).	What might happen if you doubled the dimensions of a rectangular pumpkin patch measuring 4m by 6m? Calculate the new perimeter. The perimeter would double from 20m to 40m.
Max finds a pattern: 5, 10, 15, 20... If the pattern continues, what is the 12th term? 60	If a potion requires 250ml of liquid and you have 2 litres, how many full potions can you make? 8 potions