

Max the Monkey's Algebra Adventure

Learning objective: To use simple algebraic expressions to find missing values and solve number puzzles.

Help Max the Monkey solve his fruit-themed puzzles! Remember: if a symbol stands for a number, you need to find the value that makes the equation true. Colour the fruit in the scene once you have solved the maths.

Max the Monkey loves to organise his fruit shop! He uses shapes to represent different amounts of fruit. He knows that if a bunch of bananas is worth £3, then two bunches (2b) must be worth £6. Max uses equations to make sure his shop stays balanced. Today, he has a special puzzle: A pineapple (p) plus £2 equals £7. Can you help Max find the value of the pineapple?

Word bank: expression · variable · equation · balance · value · unknown

1. Max has an equation: $p + £2 = £7$. What is the value of one pineapple (p)? (2 marks)

2. If a bag of apples (a) is worth £4, what is the value of 3 bags of apples (3a)? (2 marks)

3. Max finds a mystery box (m). He knows that $m - £3 = £5$. What is the value of the mystery box? (2 marks)

4. If 2 mangoes = £6, what is the value of just one mango? (2 marks)

5. Max puts a pear and a banana on a scale. If the total is £9 and the pear is £5, write an equation to find the value of the banana (b). (2 marks)

Draw: Draw a large, friendly monkey named Max sitting behind a wooden market stall. On his stall, draw three piles of fruit: one pile of pineapples, one pile of apples, and one pile of mangoes. Beside each pile, draw a small sign with an algebraic expression on it (e.g., ' $p + 2$ ', ' $3a$ ', ' $2m$ '). Leave the fruit uncoloured so the children can colour them in after solving the problems.



Extension challenge: Max has a challenge for you! If 4 cherries (c) = £8, and a peach (p) is worth half of one cherry, what is the value of one peach? Show your working out!