

Max's Market Probability Challenge

Learning objective: To understand and use the language of probability and calculate the likelihood of events occurring.

Max the monkey is helping at the local village market. He has a bag of colorful fruit and a jar of shiny marbles. Read the scenarios below and use the probability scale (Impossible, Unlikely, Even Chance, Likely, Certain) to describe the likelihood of each event. Write your reasoning for each answer.

Word bank: Impossible · Unlikely · Even Chance · Likely · Certain

1. Max has 5 red apples and 5 green apples in a bag. If he picks one without looking, what is the probability that he picks a red apple? (2 marks)

2. There are 10 marbles in a jar: 9 are blue and 1 is yellow. What is the probability that Max picks a yellow marble? (2 marks)

3. In a bag of 20 pieces of fruit, every single piece is a banana. What is the probability that Max picks a banana? (2 marks)

4. Max has a bag containing 15 oranges and 1 grape. What is the probability that he pulls out a satsuma? (2 marks)

5. If Max has 8 pears and 2 plums in a basket, is it 'Likely' or 'Unlikely' that he will pick a pear? (2 marks)

Draw: Draw a jar containing 10 items (marbles or fruit) that would make picking a specific color an 'Even Chance'. Label your drawing with the probability.



Extension challenge: Max sells a bag of mixed sweets for £2.50. If the bag contains 4 strawberry sweets, 3 lime sweets, and 3 lemon sweets, calculate the probability of picking a strawberry sweet as a fraction. If you bought two bags, how much would you spend in total?