Practice worksheet | Probability

Expected versus observed outcomes

Name: _____ Date: _____

6 questions | 12 marks

1. How many heads are expected in 20 tosses of a fair coin? [2 marks]

2. An event has probability $\frac{1}{5}$. How many successes are expected in 50 trials? [2 marks]

3. A fair coin gives 27 heads in 50 tosses. Find the observed percentage of heads. [2 marks]

4. Using the supplied spinner results, how many fewer reds occurred than expected? [2 marks]

Supplied practice results: 40 spins of a fair four-colour spinner

Colour	Observed frequency
Red	8
Blue	9
Green	14
Yellow	9

5. A student changes the observed green frequency from 14 to 10 because the spinner should be fair. Explain the problem. [2 marks]

6. A bag model gives a blue probability of 0.3. Predict blue counts in 100 trials, then explain whether 34 blue results proves the model wrong. [2 marks]