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 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]