# Year 8 Probability – Developing

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Year 8 · Maths · Probability · Level 2 Developing · 10 questions

**Name** _____ **Date** _____

## A. Use probability

**1.** A fair coin is flipped and a fair ten-sided dice is rolled. What is the probability of getting tails or an even number? Give your answer as a fraction in its simplest form.

Answer _____

**2.** A fair coin is flipped and a fair four-sided dice is rolled. What is the probability of getting heads and an even number? Give your answer as a fraction in its simplest form.

Answer _____

**3.** A fair coin is flipped and a fair ten-sided dice is rolled. What is the probability of getting heads and a number less than three? Give your answer as a fraction in its simplest form.

Answer _____

**4.** A dice is rolled 60 times and lands on 6 6 times. Find the experimental probability of a 6. How many 6s would you expect from a fair dice? Is the dice likely to be biased?

Answer _____

**5.** A fair spinner has 4 equal sections, 1 of them red. It is spun 40 times and lands on red 13 times. Find the experimental and theoretical probabilities of red, and the expected number of reds.

Answer _____

**6.** A bag holds 10 counters, 5 of them green. A counter is taken and put back 100 times, and green comes out 47 times. Find the experimental and theoretical probabilities of green, and the expected number of greens.

Answer _____

**7.** Two fair four-sided dice are rolled. Use a sample space diagram to find the probability that the product is even. Give your answer as a fraction in its simplest form.

Answer _____

**8.** Two fair six-sided dice are rolled. Use a sample space diagram to find the probability that the total is more than 10. Give your answer as a fraction in its simplest form.

Answer _____

**9.** The probability that a team wins its next match is 2/5. What is the probability that the team does not win?

Answer _____

**10.** The probability that a train is late is 0.15. Amir says the probability that it is not late is 0.95. Explain the mistake and find the correct probability.

Answer _____