2. A spinner is divided into 4 equal regions colored red, green, blue, and yellow. What is the probability it lands on green?

3. Roll a fair six-sided die once. What is the probability of rolling a 4?

4. You pick a number at random from the integers 1 to 8. What is the probability the number is greater than 6?

5. A bag contains 3 red marbles and 2 blue marbles. If you draw one marble at random, what is the probability it is blue?

6. From a standard 52-card deck, what is the probability you draw an ace?

7. A wheel has 5 equal sections: 3 red and 2 white. If spun once, what is the probability it lands on red?

8. Roll a fair six-sided die. What is the probability of getting an odd number?

9. You flip two fair coins. What is the probability both land tails?

10. Tokens numbered 1 through 10 are in a hat. You draw one token at random. What is the probability it is a 3 or a 7?

Simple probability: yellow marble

11. A bag has 5 yellow marbles and 3 red marbles. If you draw one at random, what is the probability it is yellow?

12. A jar contains 4 yellow, 6 blue, and 2 green marbles. What is the probability of drawing a yellow marble?

13. A bag has 7 yellow marbles and 1 black marble. If you draw one marble, what is the probability it is yellow?

14. A candy bag has 10 yellow, 15 red, and 5 blue candies (30 candies total). What is the probability of picking a yellow candy?

15. A box contains 12 marbles, 2 of which are yellow. If you draw one, what is the probability it is yellow?

16. A bag has 3 yellow and 2 blue marbles. If you draw two marbles without replacement, what is the probability both are yellow?

17. A spinner has 8 equal sections; 3 are yellow. If spun once, what is the probability it lands on yellow?

18. A jar has 18 marbles, 6 of them yellow. If you draw two marbles with replacement, what is the probability both draws are yellow?

19. A bag contains 25 marbles, 10 of which are yellow. If you draw one, what is the probability it is yellow?

20. A container holds 5 yellow, 5 green, and 5 blue marbles. If you draw one, what is the probability it is yellow?

Simple probability: non-blue marble

21. A bag has 4 blue and 6 red marbles. If you draw one, what is the probability it is not blue?

22. A jar contains 2 blue, 3 yellow, and 5 green marbles. What is the probability of drawing a non-blue marble?

23. A box has 7 blue and 3 black marbles. If you draw one, what is the probability it is non-blue?

24. A container has 5 blue, 5 red, and 5 yellow marbles. If you draw one, what is the probability it is not blue?

25. There is 1 blue marble and 9 striped marbles in a bag. What is the probability of picking a non-blue marble?

26. A bag contains 2 blue, 4 red, and 4 yellow marbles (10 total). If you draw two marbles without replacement, what is the probability both are non-blue?

27. A spinner has 12 equal sections; 3 are blue. What is the probability the spinner lands on a non-blue section?

28. A box has 20 marbles; 8 are blue and the rest are other colors. If you draw one, what is the probability it is non-blue?

29. A bowl has 4 blue and 6 green marbles. If you draw one non-blue marble first and then (without replacing it) draw one more, what is the probability the second marble is blue?

30. A jar contains 3 blue, 3 red, and 4 yellow marbles. If you draw one, what is the probability it is not blue?

Experimental probability

31. You flip a coin 50 times and get heads 28 times. Based on this experiment, what is the experimental probability of heads?

32. A spinner was spun 40 times and landed on green 12 times. What is the experimental probability of green?

33. Students rolled a die 90 times and got a 6 eighteen times. What is the experimental probability of rolling a 6?

34. In 30 trials of drawing a marble (with replacement), yellow came up 9 times. What is the experimental probability of drawing yellow?

35. A coin was tossed 100 times and landed heads 47 times. What is the experimental probability of heads?

36. A spinner was spun 60 times and blue appeared 15 times. What is the experimental probability of blue?

37. Event A occurred 56 times in 80 trials. What is the experimental probability of event A?

38. A school survey of 120 students found 30 prefer chocolate ice cream. If a student is chosen at random, what is the experimental probability they prefer chocolate?

39. A die was rolled 36 times and the number 3 appeared 6 times. What is the experimental probability of rolling a 3?

40. A spinner was spun 45 times and red appeared 20 times. What is the experimental probability of red?

Intuitive sense of probabilities

41. Which is more likely on a fair six-sided die: rolling a number less than 3 or rolling a number greater than 4?

42. Pick a day at random. Is it more likely to be a weekday or a weekend day?

43. You have a bag with only red and yellow marbles. Is drawing a purple marble possible, impossible, or certain?

44. Which is more likely: drawing a heart from a standard deck of cards, or rolling an even number on a fair six-sided die?

45. If you flip a fair coin once, is getting heads certain, impossible, or equally likely as tails?

46. A spinner has four equal colors. Is the probability of landing on blue greater than 50

47. Which is more likely: picking a vowel from the English alphabet (26 letters) or picking an odd number from the set 1,2,3,4,5,6,7,8,9?

48. An event has probability 0.01. Would you call this event likely, unlikely, or nearly impossible? Explain briefly.

49. Jar A has 1 red and 1 blue marble. Jar B has 10 red and 10 blue marbles. If you choose a jar and then pick a marble at random, which jar gives a higher probability of getting red?

50. On a normal six-sided die, is rolling a number less than 7 certain, impossible, or something else?