


# PROBABILITY

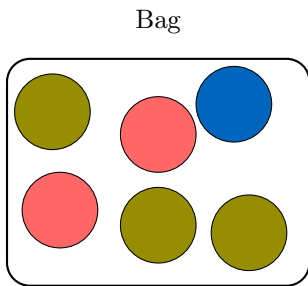
## A OUTCOME

### A.1 LISTING ALL POSSIBLE OUTCOMES

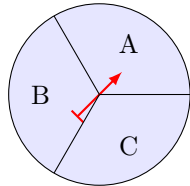
**MCQ 1:** Look at this die: . If you roll it, what are all the possible numbers you could get?

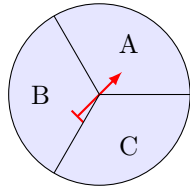
- 1, 2, 3, 4, 5
- 1, 2, 3, 4, 5, 6, 7
- 1, 2, 3, 4, 5, 6

**MCQ 2:** Imagine a bag with balls: 2 red, 1 blue, and 3 green. If you pick one ball without looking, what are all the possible colors you could get?



- Red, Blue, Green
- 2 Red, 1 Blue, 3 Green
- Red, Red, Blue, Green, Green, Green

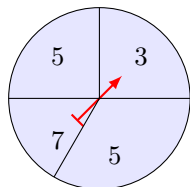


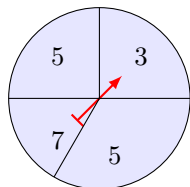
**MCQ 3:** Look at this spinner: . What are all the possible letters it could land on?

- A, B
- A, C
- A, B, C

**MCQ 4:** If you pick a letter from the word "PAPA," what are all the possible letters you could pick?

- P, A, P, A
- P, A, P
- P, A



**MCQ 5:** Look at this spinner: . What are all the possible numbers it could land on?

- 3, 5, 7, 7
- 3, 5, 5, 7
- 3, 5, 7

**MCQ 6:** A couple is expecting a baby. They don't know if it will be a boy or a girl. What are all the possible outcomes for the baby's gender?

- Boy
- Girl, Boy
- Girl

**MCQ 7:** If you pick a letter from the word "APPLE," what are all the possible letters you could pick?

- P, A, L, E
- P, P, A, L, E
- A, P, L
- A, L, E, P, P

**MCQ 8:** If you pick a letter from the word "BANANA," what are all the possible letters you could pick?

- B, N, A
- B, A, N, A, N, A
- A, B, N, A, B, N

## B EVENTS

### B.1 FINDING THE EVENTS

**MCQ 9:** You pick a letter from "ORANGE." Which letters are vowels?

- O, R, A, N, G, E
- O, A, E
- R, G, N
- A, G, E

**MCQ 10:** When you roll a die, which numbers are even?

- 1, 3, 5
- 2, 4, 6
- 1, 2, 3, 4, 5, 6
- 2, 3, 4, 5

**MCQ 11:** Look at these flags: France, Italy, Germany. Which



flags have blue in them? France Italy Germany

- France
- Italy, France
- Italy, France, Germany

**MCQ 12:** Look at these flags: France, Italy, Germany, Japan. Which flags have red in



them? France Italy Germany Japan

- France, Japan
- Italy, France
- Italy, France, Germany, Japan

**MCQ 13:** Look at these flags: France, Italy, Germany, Nigeria. Which flags have green in



them? France Italy Germany Nigeria

- France, Nigeria
- Italy, Nigeria
- Italy, France, Germany

## C USING WORDS TO DESCRIBE PROBABILITY

### C.1 DETERMINING THE PROBABILITY

**MCQ 14:** If you flip a coin, what's the chance it lands on heads?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 15:** The weather app says there's a 10% chance of rain tomorrow. What's the probability it rains?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 16:** In a class of 30 students, 5 wear glasses. If you pick one student at random, what's the chance they wear glasses?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 17:** What's the chance the sun rises in the west tomorrow?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 18:** What's the chance the next baby born at a hospital is a girl?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 19:** A bag has 5 red marbles and 1 blue marble. If you pick one, what's the chance it's blue?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 20:** A bag has 19 red marbles and 1 blue marble. If you pick one, what's the chance it's green?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

**MCQ 21:** A bag has 19 red marbles and 1 blue marble. If you pick one, what's the chance it's red?

- certain
- likely
- 50-50 chance
- unlikely
- impossible

## D USING NUMBERS TO QUANTIFY PROBABILITY

### D.1 DETERMINING THE PROBABILITY

**MCQ 22:** Keziah eats rice often. What's the probability he eats rice this week?

- 1%
- 50%
- 99%

**MCQ 23:** Emily drinks water every day. What's the probability she drinks water tomorrow?

- 50%
- 90%
- 100%

**MCQ 24:** It almost never snows in July in the Sahara Desert. What's the probability it snows this July?

- 0.01%
- 5%
- 99.9%

**MCQ 25:** Samuel loves playing basketball. What's the probability he plays this weekend?

- 5%
- 20%
- 90%

**MCQ 26:** Benjamin rolls a die. What's the probability he rolls a number bigger than 7?

- 0%
- 50%
- 100%

**Ex 29:** A six-sided die is rolled once. Determine the probability of obtaining an even number.

$$P(\text{"rolling an even number"}) = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

**MCQ 30:** A fruit is selected randomly from a basket containing 3 apples, 2 oranges, and 5 bananas.

Find the probability that the selected fruit is an orange (simplify the fraction).

$$P(\text{"selecting an orange"}) = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

## E CALCULATE PROBABILITIES

### E.1 DETERMINING THE PROBABILITY

**Ex 27:** A ball is chosen randomly from a bag containing 2 red balls, 3 blue balls.

Find the probability that we choose a red ball.

$$P(\text{"choosing a red ball"}) = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

**Ex 28:** A card is drawn at random from a standard deck of 52 playing cards. Determine the probability of drawing an Ace and express your answer as a simplified fraction.

$$P(\text{"drawing an Ace"}) = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$