

## PROBABILITY

EQUALLY LIKELY OUTCOMES

A1 An ordinary coin is tossed.
What is the probability that the coin lands on heads?

B1 A class consists of 18 girls and 15 boys. One of the students is selected at random. Calculate the probability that the student selected is a boy.

C1 A bag contains 3 red counters and 2 blue counters.
One of the counters is selected at random.
Find the probability that the counter selected is blue.

D1 A letter is selected at random from the set

$$
\{\mathrm{M}, \mathrm{~A}, \mathrm{~T}, \mathrm{H}, \mathrm{E}, \mathrm{M}, \mathrm{~A}, \mathrm{~T}, \mathrm{I}, \mathrm{C}, \mathrm{~S}\}
$$

Find the probability that the letter ' M ' is selected.

A2 An ordinary dice is thrown.
What is the probability that the dice lands on a prime number?

B2 A fish tank contains 8 guppies, 5 platies and 7 mollies.
One of the fish is selected at random.
Calculate the probability that the fish selected is a guppy.

## C2 A bag contains 2 red counters, 5 green

 counters and 4 blue countersOne of the counters is selected at random.
Find the probability that the counter selected is either red or blue.

D2 A letter is selected at random from the set

$$
\{\mathrm{P}, \mathrm{R}, \mathrm{O}, \mathrm{~B}, \mathrm{~A}, \mathrm{~B}, \mathrm{I}, \mathrm{~L}, \mathrm{I}, \mathrm{~T}, \mathrm{Y}\}
$$

Find the probability that a vowel is selected.

A4 Amita picks a card from an ordinary pack of 52 playing cards.
What is the probability that she picks a King?

B4 Jack has cans of soup which don't have labels.

He knows that 3 cans are tomato, 4 cans are mushroom and 7 cans are chicken flavour.
If he picks a can at random, what is the probability that the can chosen is not tomato?

C4 A bag contains 4 red counters, 7 blue counters and 5 green counters.
One of the counters is selected at random.
Find the probability that the counter selected is not blue.

D4 Each month of the year is written on a card and placed in a bag.
One of the cards is selected at random. Calculate the probability that the month written on the card has 30 days.

FlRST


## PROBABILITY

## EQUALLY LIKELY OUTCOMES

## NO CALCULATOR

A1 An ordinary coin is tossed.
What is the probability that the coin lands on heads?

$$
\frac{1}{2}
$$

B1 A class consists of 18 girls and 15 boys. One of the students is selected at random. Calculate the probability that the student selected is a boy.

$$
\frac{15}{33}=\frac{5}{11}
$$

C1 A bag contains 3 red counters and 2 blue counters.
One of the counters is selected at random.
Find the probability that the counter selected is blue.

$$
\frac{2}{5}
$$

D1 A letter is selected at random from the set

$$
\text { MA }, \mathrm{T}, \mathrm{H}, \mathrm{E}, \mathrm{M}, \mathrm{~A}, \mathrm{~T}, \mathrm{I}, \mathrm{C}, \mathrm{~S}\}
$$

Find the probability that the letter ' $M$ ' is selected.

$$
\frac{2}{11}
$$

A2 An ordinary dice is thrown.
What is the probability that the dice lands on a prime number?

$$
\begin{aligned}
& \text { (The Prime scores } \\
& \text { are } 2,3 \text { and } 5 \text { ) }
\end{aligned} \quad \frac{3}{6}=\frac{1}{2}
$$

B2 A fish tank contains 8 guppies, 5 platies and 7 mollies.
One of the fish is selected at random.
Calculate the probability that the fish selected is a guppy.

$$
\frac{8}{20}=\frac{2}{5}
$$

C2 A bag contains 2 red counters, 5 green counters and 4 blue counters
One of the counters is selected at random.
Find the probability that the counter selected is either re or blue.

$$
\frac{2+4}{11}=\frac{6}{11}
$$

D2 A letter is selected at random from the set

$$
\{P, R \bigcirc B \cap B, I, L, T, T, Y\}
$$

Find the probability that a vowel is selected.

$$
\frac{4}{11}
$$

Ref: G512.
A4 Amita picks a card from an ordinary pack of 52 playing cards.
What is the probability that she picks a King?

$$
\frac{4}{52}=\frac{1}{13}
$$

B4 Jack has cans of soup which don't have labels.
He knows that 3 cans are tomato, 4 cans are mushroom and 7 cans are chicken flavour. If he picks a can at random, what is the probability that the can chosen i. not omato?

C4 A bag contains 4 red counters, 7 blue counters and 5 green counters.
One of the counters is selected at random.
Find the probability that the counter selected is not plue.

$$
\frac{9}{16}
$$

D4 Each month of the year is written on a card and placed in a bag.
One of the cards is selected at random.
Calculate the probability that the month written on the card has 30 days.

$$
\begin{array}{ll}
\text { 1 the card has } 30 \text { days. } & \frac{4}{12}=\frac{1}{3} \\
\text { (Apr, Jun, Sep, Nov) }
\end{array}
$$

