# Proficient

**1.** Write the probability of rolling a factor of $12$ on a fair die in F/T form.

**2.** Write the probability of rolling a multiple of $2$ on a fair die in F/T form.

**3.** Write the probability of choosing a consonant from cards labelled $A, E, I, O, U, M, N, P$.

**4.** Write the probability of picking a prime number from a fair spinner labelled $1, 2, 3, 4, 5, 6$.

**5.** A bag has $5$ red, $3$ blue, and $4$ green counters. Write the probability of picking blue in F/T form.

**6.** A bag has $2$ yellow, $2$ black, and $6$ white counters. Write the probability of not picking white in F/T form.

**7.** A standard deck card is chosen. Write the probability of drawing a heart in F/T form.

**8.** A standard deck card is chosen. Write the probability of drawing a face card in F/T form.

**9.** Two coins are tossed. Write the probability of getting exactly one head in F/T form.

**10.** Two coins are tossed. Write the probability of getting two tails in F/T form.

**11.** A fair die is rolled. Write the probability of getting a number greater than $4$ in F/T form.

**12.** A fair die is rolled. Write the probability of not getting a multiple of $3$ in F/T form.

**13.** Fill in the blank: if an event has $3$ favourable outcomes out of $8$ total outcomes, then $P(\text{event}) = \frac{\square}{\square}$.

**14.** Fill in the blank: for a fair spinner with $10$ equal sectors, if $4$ sectors are shaded then $P(\text{shaded}) = \frac{\square}{10}$.

**15.** Which is greater: the probability of drawing a black card from a standard deck or the probability of rolling an odd number on a fair die?

**16.** Which is smaller: the probability of exactly one head in two coin tosses or the probability of drawing a king from a standard deck?

**17.** A student says $P(\text{prime on a fair die}) = \frac{4}{6}$.

Are they correct?

**18.** Explain in one short sentence what the $T$ stands for in F/T.