

# PLACING EVENTS ON THE PROBABILITY SCALE

Answer all of these questions. Remember to show your working out in all questions.

## MAIN QUESTIONS

---

- |  |   |
|--|---|
| 1. Place 'rolling a 6 on a fair six-sided die' on the probability scale.                     | 2. Place 'flipping heads on a fair coin' on the probability scale.                      |
| 3. Place 'drawing a red card from a standard deck' on the probability scale.                 | 4. Place 'drawing a heart from a standard deck' on the probability scale.               |
| 5. Place 'rolling an even number on a fair six-sided die' on the probability scale.          | 6. Place 'rolling a prime number on a fair six-sided die' on the probability scale.     |
| 7. Place 'drawing a king from a standard deck' on the probability scale.                     | 8. Place 'drawing a black ace from a standard deck' on the probability scale.           |
| 9. Place 'rolling a number greater than 4 on a fair six-sided die' on the probability scale. | 10. Place 'drawing a face card from a standard deck' on the probability scale.          |
| 11. Place 'rolling a multiple of 3 on a fair six-sided die' on the probability scale.        | 12. Place 'drawing a diamond or a heart from a standard deck' on the probability scale. |

- |   |   |
|---|---|
| <p><b>13.</b> Place 'rolling a number less than 3 on a fair six-sided die' on the probability scale.</p> <p><b>15.</b> Place 'rolling a 7 on a fair six-sided die' on the probability scale.</p> <p><b>17.</b> Place 'rolling a number between 1 and 6 on a fair six-sided die' on the probability scale.</p> <p><b>19.</b> Place 'rolling a number divisible by 5 on a fair six-sided die' on the probability scale.</p> | <p><b>14.</b> Place 'drawing a card that is not a spade from a standard deck' on the probability scale.</p> <p><b>16.</b> Place 'drawing a red or black card from a standard deck' on the probability scale.</p> <p><b>18.</b> Place 'drawing a joker from a standard deck' on the probability scale.</p> <p><b>20.</b> Place 'drawing a card that is neither red nor black from a standard deck' on the probability scale.</p> |
|---|---|

## MASTER QUESTIONS



- 
- M1.** A bag contains 4 red, 5 blue, and 6 green marbles. Place 'drawing a red marble' on the probability scale.
- M2.** A spinner has 8 equal sections, 3 red, 2 blue, and 3 green. Place 'landing on blue' on the probability scale.
- M3.** A box contains 10 chocolates, 4 are dark and 6 are milk. Place 'randomly picking a dark chocolate' on the probability scale.
- M4.** A class has 12 boys and 18 girls. Place 'randomly selecting a girl' on the probability scale.
- M5.** A lottery has 1000 tickets, and 10 are winners. Place 'drawing a winning ticket' on the probability scale.
- M6.** A jar has 20 sweets, 8 are lemon and 12 are strawberry. Place 'randomly picking a lemon sweet' on the probability scale.

- M7.** A fair eight-sided die is rolled. Place 'rolling a number greater than 5' on the probability scale.
- M8.** A bag has 5 white, 7 black, and 3 yellow balls. Place 'drawing a yellow ball' on the probability scale.
- M9.** A deck has 52 cards with 4 suits. If 13 cards are removed, all hearts, place 'drawing a heart from the remaining deck' on the probability scale.
- M10.** A biased six-sided die has probabilities:  $P(1)=0.1$ ,  $P(2)=0.2$ ,  $P(3)=0.1$ ,  $P(4)=0.2$ ,  $P(5)=0.1$ ,  $P(6)=0.3$ . Place 'rolling an even number' on the probability scale.