

PLACING EVENTS ON THE PROBABILITY SCALE

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

MAIN QUESTIONS

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| 1. | Place 'rolling a 6 on a fair six-sided die' on the probability scale. | | $1/6$ | 2. | Place 'flipping heads on a fair coin' on the probability scale. | | $1/2$ |
| 3. | Place 'drawing a red card from a standard deck' on the probability scale. | | $1/2$ | 4. | Place 'drawing a heart from a standard deck' on the probability scale. | | $1/4$ |
| 5. | Place 'rolling an even number on a fair six-sided die' on the probability scale. | | $1/2$ | 6. | Place 'rolling a prime number on a fair six-sided die' on the probability scale. | | $1/2$ |
| 7. | Place 'drawing a king from a standard deck' on the probability scale. | | $1/13$ | 8. | Place 'drawing a black ace from a standard deck' on the probability scale. | | $1/26$ |
| 9. | Place 'rolling a number greater than 4 on a fair six-sided die' on the probability scale. | | $1/3$ | 10. | Place 'drawing a face card from a standard deck' on the probability scale. | | $3/13$ |

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| 11. | Place 'rolling a multiple of 3 on a fair six-sided die' on the probability scale. | $\frac{1}{3}$ | 12. | Place 'drawing a diamond or a heart from a standard deck' on the probability scale. | $\frac{1}{2}$ |
| 13. | Place 'rolling a number less than 3 on a fair six-sided die' on the probability scale. | $\frac{1}{3}$ | 14. | Place 'drawing a card that is not a spade from a standard deck' on the probability scale. | $\frac{3}{4}$ |
| 15. | Place 'rolling a 7 on a fair six-sided die' on the probability scale. | 0 | 16. | Place 'drawing a red or black card from a standard deck' on the probability scale. | 1 |
| 17. | Place 'rolling a number between 1 and 6 on a fair six-sided die' on the probability scale. | 1 | 18. | Place 'drawing a joker from a standard deck' on the probability scale. | 0 |
| 19. | Place 'rolling a number divisible by 5 on a fair six-sided die' on the probability scale. | $\frac{1}{6}$ | 20. | Place 'drawing a card that is neither red nor black from a standard deck' on the probability scale. | 0 |

MASTER QUESTIONS



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| M1. | A bag contains 4 red, 5 blue, and 6 green marbles. Place 'drawing a red marble' on the probability scale. | $\frac{4}{15}$ |
| M2. | A spinner has 8 equal sections, 3 red, 2 blue, and 3 green. Place 'landing on blue' on the probability scale. | $\frac{1}{4}$ |
| M3. | A box contains 10 chocolates, 4 are dark and 6 are milk. Place 'randomly picking a dark chocolate' on the probability scale. | $\frac{2}{5}$ |

- M4.** A class has 12 boys and 18 girls. Place 'randomly selecting a girl' on the probability scale. | $3/5$
- M5.** A lottery has 1000 tickets, and 10 are winners. Place 'drawing a winning ticket' on the probability scale. | $1/100$
- M6.** A jar has 20 sweets, 8 are lemon and 12 are strawberry. Place 'randomly picking a lemon sweet' on the probability scale. | $2/5$
- M7.** A fair eight-sided die is rolled. Place 'rolling a number greater than 5' on the probability scale. | $3/8$
- M8.** A bag has 5 white, 7 black, and 3 yellow balls. Place 'drawing a yellow ball' on the probability scale. | $1/5$
- 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. | 0
- 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. | 0.7