

Tableforge — Activity Book

A Spark & Anvil activity book — puzzles, questions, and fun from Tableforge.

Write in the book, circle your answers, and check the Answer Key at the back.

1. Dice Probability

Circle the correct answer

1. When you roll a standard 6-sided die once, how many possible outcomes are there?
(A) 1 (B) 6 (C) 36 (D) 12
2. What is the probability of rolling a 4 on a fair 6-sided die?
(A) 1 out of 4 (B) 4 out of 6 (C) 1 out of 6 (D) 1 out of 12
3. Which sum is MOST likely when rolling two 6-sided dice?
(A) 6 (B) 2 (C) 12 (D) 7
4. How many total outcomes are possible when rolling two 6-sided dice?
(A) 72 (B) 12 (C) 6 (D) 36
5. If your game piece moves the number rolled on a single die, what is the average (expected) number of spaces per turn?
(A) 3 (B) 6 (C) 4 (D) 3.5
6. Why do board games often use TWO dice instead of one?
(A) Two dice are always more fair than one die (B) Two dice are required by official game rules (C) Two dice create a bell-curve distribution that makes mid-range numbers more common (D) Two dice produce results faster than one die

Write the answer

7. Which probability is IMPOSSIBLE for a single roll of a standard die?
Answer: _____
8. What does 'expected value' mean in a dice game?
Answer: _____
9. Probability is usually expressed as a number between which two values?
Answer: _____

10. If a game says 'roll 2 dice and add them', which sum is LEAST likely?

Answer: _____

Match each question to its answer

1. What is the probability of rolling an EVEN number on a standard die? →
2. A 'fair' die means: →
3. If a player rolls a 20-sided die (d20), what is the probability of rolling exactly 15? →
4. Why might a game designer choose to use a 'd4' (4-sided die) instead of a 'd6'? →
5. If you roll a die 60 times, about how many times would you expect to roll a 3? →

- (A) Every face has an equal chance of landing up
 - (B) To narrow the range of outcomes and reduce variance
 - (C) About 10 times
 - (D) 3 out of 6 (or $1/2$)
 - (E) 1 out of 20
-

2. Card Math

Circle the correct answer

11. How many cards are in a standard playing card deck?
(A) 54 (B) 52 (C) 60 (D) 48
12. What is the probability of drawing a heart from a standard 52-card deck?
(A) 1 out of 2 (B) 1 out of 4 (or $13/52$) (C) 1 out of 52 (D) 1 out of 13
13. Why do board games SHUFFLE the deck between rounds?
(A) To make the deck thicker (B) Because game rules require shuffling sounds (C) To randomize card order so future draws are unpredictable (D) To make the cards last longer
14. If you have a deck of 20 cards (10 red, 10 blue), what is the probability of drawing a RED card?
(A) 1 out of 10 (B) 1 out of 4 (C) 1 out of 20 (D) 1 out of 2 (or 50%)
15. In a card game, what is the DRAW PILE?
(A) The cards used for scoring only (B) The cards held in hand (C) The cards already played (D) The face-down stack players take new cards from

16. What is the DISCARD PILE?

(A) The face-up stack of cards that have already been played or thrown away (B) The cards a player will draw next (C) The cards used to start the game (D) The cards still in the deck

Write the answer

17. If a deck has 30 cards and 6 are 'special action' cards, what's the probability of drawing a special card?

Answer: _____

18. Why is it important that every player STARTS with the same number of cards in hand?

Answer: _____

19. A card game has 40 cards: 20 attack, 15 defense, 5 special. Which type is MOST common?

Answer: _____

20. What does 'draw 2 cards' mean in a card game?

Answer: _____

Match each question to its answer

1. If a player draws a card and DOESN'T put it back, what changes for the next draw?

→

2. What is the probability of drawing the ACE OF SPADES from a fresh 52-card deck? →

3. Why is a 'riffle shuffle' done MULTIPLE TIMES (about 7 for a 52-card deck)? →

4. What is a 'HAND' in a card game? →

5. A custom deck has 24 cards. If 4 players each draw a 5-card hand, how many cards remain in the deck? →

(A) 4 cards

(B) The deck has one fewer card, changing probabilities

(C) Multiple shuffles ensure the deck is sufficiently randomized

(D) 1 out of 52

(E) The set of cards a player currently holds

3. Board Layouts

Circle the correct answer

21. What is a GRID board?

(A) A board only used for card games (B) A circular board with no edges (C) A board divided into equal squares arranged in rows and columns (D) A board with no defined spaces

22. A PATH board is best described as:

(A) A board where spaces form a track that players follow in sequence (B) A board where players can move anywhere (C) A board with no spaces at all (D) A board with only diagonal moves

23. What is a HEX board's main advantage over a square grid?

(A) Hex boards are easier to draw (B) Each space has 6 equidistant neighbors instead of 4, allowing more natural diagonal movement (C) Hex boards have no neighbors (D) Hex boards are always smaller

24. How many neighboring squares does a non-edge square on a chess grid have?

(A) 4 (B) 8 (including diagonals) (C) 12 (D) 6

25. A FREEFORM board allows:

(A) Cards instead of spaces (B) Players to skip turns whenever they want (C) Spaces and connections arranged without a regular pattern (D) Only single-player play

26. Why might a designer choose a HEX board for a tactical war game?

(A) Equal distances in 6 directions make tactical positioning feel fair (B) Hexes are only used for racing games (C) Hexes are required for war games by law (D) Hexes prevent any kind of strategy

Write the answer

27. A racing board game would most likely use which layout?

Answer: _____

28. If a path board has 40 spaces and a player starts at space 1, how many spaces are between them and the finish?

Answer: _____

29. On a 5x5 grid board, how many total squares are there?

Answer: _____

30. Which board layout makes COLLISION between players MOST likely?

Answer: _____

Match each question to its answer

1. What is a 'NODE' in a freeform board? →
 2. An 'EDGE' in a board design connects: →
 3. A board has 20 spaces and a 'shortcut' that skips 5 spaces. How long is the shortcut path versus the regular path between the same two points? →
 4. Why do designers add SHORTCUTS to path boards? →
 5. On a hex board with 19 hexes in a flower pattern (Catan-style), the center hex has how many neighbors? →
- (A) A specific location/space where pieces can rest
 - (B) Two nodes or spaces, defining a possible move
 - (C) 6 neighbors
 - (D) 5 spaces shorter than the regular path
 - (E) Shortcuts add strategic decisions about risk versus reward
-

4. Components

Circle the correct answer

31. What is a 'TOKEN' in a board game?
(A) A small movable piece that represents a player or game object (B) The rulebook section (C) The score area only (D) A type of dice
32. What is the PURPOSE of distinct player colors in a game?
(A) To make the game more expensive (B) To reduce the number of pieces needed (C) To match the box art (D) To let players quickly identify which pieces are theirs
33. If a game has 4 players and each player gets 5 tokens, how many tokens total are needed?
(A) 9 (B) 25 (C) 20 (D) 16
34. Why do some games use CUSTOM card backs (with art) instead of plain ones?
(A) To prevent shuffling (B) To make the game more complex (C) To make cards heavier (D) Custom backs help players identify card types in a face-down deck
35. A 'MEEPLE' is:
(A) A scoring marker only (B) A card back (C) A type of dice (D) A wooden person-shaped player token
36. Which is the MOST important consideration when sizing tokens for a board game?
(A) Tokens must match the box dimensions (B) Tokens must weigh exactly 10 grams (C) Tokens must be the same color as the board (D) Tokens must fit comfortably on board spaces without overlapping

Write the answer

37. A game uses score tokens worth 1, 5, and 10 points. To make 27 points using the FEWEST tokens, you'd use:

Answer: _____

38. Why are POINT VALUES on cards often shown with both a NUMBER and an ICON?

Answer: _____

39. What is a 'STANDEE'?

Answer: _____

40. If your game needs 60 cards in a deck and you print 4 unique designs equally, how many of each design?

Answer: _____

Match each question to its answer

1. Why are CARD SLEEVES used by serious gamers? →

2. A game has 80 components total: 40 cards, 30 tokens, and some dice. How many dice? →

3. Why should COLORBLIND PLAYERS be considered when choosing token colors? →

4. A 'PLAYER BOARD' is: →

5. What is the MAIN reason designers playtest with PROTOTYPE components (paper, sketches) before manufacturing? →

(A) Prototypes are cheap to change, while manufactured components are not

(B) 10 dice

(C) Red-green colorblindness is common; using shape or icons in addition to color helps

(D) A small personal board each player uses to track their own resources and state

(E) To protect cards from wear, bending, and stains over many plays

5. Game Balance

Circle the correct answer

41. What does 'GAME BALANCE' mean?

(A) The board is physically level (B) Every game ends in a tie (C) All players have a fair chance to win regardless of starting position or choices (D) All players take the same number of turns

42. What is 'FIRST-PLAYER ADVANTAGE'?

(A) Going first means losing first (B) The benefit one player gets simply by going first (C) First player skips a turn (D) First player has fewer pieces

43. Which of these is a way designers COUNTERACT first-player advantage?

(A) Give later players bonus starting resources (B) Increase the board size (C) Have only one player (D) Add more dice

44. If a game's win rate by seat position is: Seat 1 = 35%, Seat 2 = 28%, Seat 3 = 22%, Seat 4 = 15%, what does this suggest?

(A) The game is perfectly balanced (B) Strong first-player advantage that needs balancing (C) Position doesn't matter (D) Seat 4 has the advantage

45. What is a 'DOMINANT STRATEGY'?

(A) A strategy that is always better than other strategies, ruining game choices (B) A strategy that never works (C) The strategy used by the loudest player (D) A backup plan

46. In a 100-game playtest, Character A wins 65 times. What does this suggest?

(A) Character A is too weak (B) Playtests don't reveal balance (C) Character A may be overpowered and need a nerf (D) Character A is correctly balanced

Write the answer

47. 'NERFING' a game element means:

Answer: _____

48. 'BUFFING' a game element means:

Answer: _____

49. Why is it BAD if a game's win rate depends mostly on TURN ORDER?

Answer: _____

50. The MEDIAN game length across 50 playtests is 42 minutes. What does this mean?

Answer: _____

Match each question to its answer

1. If a game has 4 strategies with win rates 30%, 26%, 24%, 20%, which is the MOST balanced? →

2. In a 2-player abstract game like Hex, what does the 'PIE RULE' do? →

3. Why is 'KING-MAKING' considered a BALANCE PROBLEM in multiplayer games? →

4. In a game with 4 starting characters, you find one has a 50% win rate. What balance action should you take? →

5. 'RUBBER-BANDING' in game design is: →

- (A) A losing player can decide who wins, robbing the leader and runner-up of agency
 - (B) This IS reasonably balanced — all strategies are competitive
 - (C) Mechanisms that help losing players catch up, keeping games competitive
 - (D) Player 2 can choose to swap sides after seeing Player 1's first move, neutralizing first-player advantage
 - (E) Nerf the 50% character or buff the others
-

6. Simulation

Circle the correct answer

51. What is a 'PROBABILITY SIMULATION'?

- (A) A single test play (B) Reading the rulebook (C) Pretending to play a game (D) Running a game scenario many times to estimate likely outcomes

52. 'MONTE CARLO' methods are named after:

- (A) A mathematician named Monte (B) A board game (C) A casino — because they rely on random sampling (D) A city in Italy

53. If you simulate rolling 2 dice 10,000 times, you should see the sum of 7 appear about how often?

- (A) About 1,000 times (B) About 5,000 times (C) About 1,667 times (1/6 of 10,000) (D) About 100 times

54. Why is a LARGER number of simulation trials usually BETTER?

- (A) More trials always change the result (B) More trials are cheaper (C) More trials use less time (D) More trials reduce random variation and give more accurate estimates

55. A game designer simulates 1000 games where Player A wins 350 times. The estimated win rate is:

- (A) 35% (B) 3.5% (C) 50% (D) 65%

56. Why might a designer use a COMPUTER SIMULATION instead of physical playtests?

- (A) Computer simulations replace humans entirely (B) Computers are always more accurate than humans (C) Computers can run millions of trials in minutes, while physical playtesting takes weeks (D) Physical playtesting is illegal

Write the answer

57. What is 'RANDOM SAMPLING' in a probability simulation?

Answer: _____

58. A simulation shows Card A is drawn in 80% of games. What does this tell the designer?

Answer: _____

59. What's the difference between THEORETICAL and EXPERIMENTAL probability?

Answer: _____

60. If theoretical probability of an event is 0.25 and your simulation shows 0.30 after 100 trials, what should you do?

Answer: _____

Match each question to its answer

1. A simulation runs 5000 trials. Outcome X happens 1250 times. What's the experimental probability? →

2. Why is the LAW OF LARGE NUMBERS important for game simulation? →

3. A designer wants to know 'how often does the game last over 60 minutes?'. Best approach? →

4. If a SIMULATION shows 'all 4 strategies win between 23-27% of games', the designer should conclude: →

5. Which is NOT a use of probability simulation in game design? →

(A) The game is well balanced

(B) Deciding what art style to use

(C) It guarantees experimental probability converges to theoretical as trials increase

(D) Simulate 10,000 game lengths and count how many exceed 60 minutes

(E) 0.25 (or 25%)

7. Rulebooks

Circle the correct answer

61. What is the PRIMARY GOAL of a board game rulebook?

(A) To make the box heavier (B) To advertise the game (C) To let players learn and play the game without outside help (D) To list the designer's biography

62. Why should rulebooks use 'NUMBERED STEPS' for setup?

(A) Numbers are required by law (B) Numbers replace the rules (C) Numbered steps prevent missed actions and make order clear (D) Numbers make the book longer

63. Which sentence is BEST for a rulebook?

(A) 'You might draw a few cards if you want.' (B) 'Each turn, the active player draws 2 cards.' (C) 'Drawing cards happens occasionally.' (D) 'It is usual to draw some cards on a turn.'

64. A 'GLOSSARY' in a rulebook is BEST defined as:

(A) A list of game pieces only (B) An alphabetical list defining game-specific terms (C) The credits page (D) A table of contents

65. Why does a rulebook often include EXAMPLES with illustrations?

(A) Examples show how rules apply in practice, clarifying abstract instructions (B) Examples replace rules (C) Examples are decorative (D) Examples are required by Apple

66. Which rulebook structure is BEST for learning a new game?

(A) End Conditions -> Setup -> Overview (B) All rules in one giant paragraph (C) Overview -> Setup -> Turn Flow -> Special Rules -> End Conditions (D) Random order with rules scattered

Write the answer

67. What is 'RULES CREEP'?

Answer: _____

68. Which sentence has POOR rulebook style?

Answer: _____

69. Why are 'PLAYER AID CARDS' helpful in addition to the rulebook?

Answer: _____

70. What does 'CONSISTENT TERMINOLOGY' mean in a rulebook?

Answer: _____

Match each question to its answer

1. A 'FAQ' section in a rulebook addresses: →

2. Why use ACTIVE VOICE in rulebooks ('Player draws a card') instead of PASSIVE ('A card is drawn by the player')? →

3. Which is the BEST rule for handling EDGE CASES (rare or unusual situations)? →

4. A rulebook says 'Draw cards equal to your score'. A playtester scores 0 and asks 'Do I draw 0 cards?'. The rulebook should: →

5. The 'WIN CONDITION' section should be: →

- (A) Prominent and unambiguous so players always know how to win
 - (B) List them clearly in a 'Special Cases' section near the relevant rules
 - (C) Explicitly state how to handle 0 (e.g., 'Draw 0 cards if your score is 0')
 - (D) Common questions and edge cases that confused playtesters
 - (E) Active voice is clearer and more direct, telling players exactly what to do
-

8. Playtesting

Circle the correct answer

71. What is PLAYTESTING?

- (A) Designing the box art (B) Selling the finished game (C) Playing your game with people to gather feedback and find problems (D) Reading the rulebook silently

72. What is 'ITERATIVE DESIGN'?

- (A) Random changes without testing (B) Repeatedly testing, learning, and improving the design in cycles (C) Designing once and never changing (D) Designing for a single iteration

73. What is an 'ALPHA PROTOTYPE'?

- (A) A digital adaptation (B) A finished art prototype (C) An early, rough version made to test core mechanics (D) The final published game

74. What is a 'BETA PROTOTYPE'?

- (A) A purely digital file (B) Same as alpha (C) A more polished prototype with refined rules and art for broader testing (D) The retail version

75. Which feedback type is MOST useful from a playtest?

- (A) 'I was confused on turn 3 when I drew an event card' (B) 'I had fun' (C) 'It was good' (D) 'The game was okay'

76. Why should designers PLAYTEST WITH STRANGERS, not just friends?

- (A) Strangers are required by law (B) Strangers play better than friends (C) Friends may sugarcoat feedback; strangers give honest reactions (D) Friends always know the game already

Write the answer

77. What is 'OBSERVER MODE' playtesting?

Answer: _____

78. Why is RECORDING (notes or video) important during playtesting?

Answer: _____

79. A playtest finds the game takes 90 minutes when targeting 30 minutes. The designer should:

Answer: _____

80. What does 'AHA MOMENT' mean in playtesting?

Answer: _____

Match each question to its answer

1. If 5 of 10 playtesters say a specific card is overpowered, the designer should: →
2. Why are 'BLIND PLAYTESTS' (designer absent) essential before publishing? →
3. Which playtest metric is MOST useful for measuring 'fun'? →
4. In 10 playtests, the game lasted (in minutes): 25, 30, 28, 31, 27, 29, 95, 30, 26, 28. The 95 is an OUTLIER. What's the MEDIAN length WITHOUT the outlier? →
5. Why do designers test EARLY and OFTEN rather than waiting until the design feels 'done'? →

- (A) They reveal rulebook problems hidden when the designer can verbally clarify
 - (B) Investigate the card seriously — consistent feedback signals a real issue
 - (C) 'Would you play this again?'
 - (D) Problems are easier to fix early; major issues found late require huge rework
 - (E) 28.5 minutes
-

9. Kingmaker Problem Player Elimination

Circle the correct answer

81. If a game has 4 players and each player gets 5 tokens, how many tokens total are needed?

- (A) 16 (B) 20 (C) 25 (D) 9

82. 'BUFFING' a game element means:

- (A) Making it cost more (B) Polishing the physical piece (C) Strengthening it to make it more competitive (D) Removing it from the game

83. A designer simulates 'rolling 3 dice and counting how often the sum is over 12'. What's the next step after coding the simulation?

- (A) Stop and assume the answer (B) Run only one trial (C) Run many trials (e.g., 100,000) and tally the results (D) Change the rules to avoid the question

84. A game has 20 attack tokens and 15 defense tokens. What's the RATIO of attack to defense tokens?

- (A) 1 to 1 (B) 20 to 15 (C) 4 to 3 (D) 3 to 4

85. Why do board games often use TWO dice instead of one?

(A) Two dice produce results faster than one die (B) Two dice create a bell-curve distribution that makes mid-range numbers more common (C) Two dice are required by official game rules (D) Two dice are always more fair than one die

86. What is the probability of drawing the ACE OF SPADES from a fresh 52-card deck?

(A) 4 out of 52 (B) 1 out of 52 (C) 1 out of 13 (D) 1 out of 4

Write the answer

87. A simulation runs 5000 trials. Outcome X happens 1250 times. What's the experimental probability?

Answer: _____

88. What does 'SCOPE CREEP' mean in game design?

Answer: _____

89. Why are CARD SLEEVES used by serious gamers?

Answer: _____

90. A 'TABLE OF CONTENTS' helps rulebook readers by:

Answer: _____

Match each question to its answer

1. On a 5x5 grid board, how many total squares are there? →

2. What is the probability of rolling an EVEN number on a standard die? →

3. A racing board game would most likely use which layout? →

4. If your game needs 60 cards in a deck and you print 4 unique designs equally, how many of each design? →

5. A board has 20 spaces and a 'shortcut' that skips 5 spaces. How long is the shortcut path versus the regular path between the same two points? →

(A) 3 out of 6 (or 1/2)

(B) 25

(C) 15 of each design

(D) Path layout

(E) 5 spaces shorter than the regular path

10. Victory Condition Design

Circle the correct answer

91. If your game needs 60 cards in a deck and you print 4 unique designs equally, how many of each design?

(A) 10 of each design (B) 20 of each design (C) 60 of each design (D) 15 of each design

92. Why are RULEBOOKS often printed in MULTIPLE LANGUAGES for international games?

(A) It is just for variety (B) Foreign languages aren't actually read (C) To make the game accessible to players in different countries without translation costs (D) Languages affect game balance

93. Which sentence is MOST AMBIGUOUS?

(A) 'When you score, place a token on the score track.' (B) 'On your turn, you must draw exactly 2 cards.' (C) 'During step 3, each player plays one card from their hand.' (D) 'Players may use cards when it's appropriate.'

94. A rulebook says 'Draw cards equal to your score'. A playtester scores 0 and asks 'Do I draw 0 cards?'. The rulebook should:

(A) Assume players will figure it out (B) Make up a new rule on the spot (C) Tell players to skip turns (D) Explicitly state how to handle 0 (e.g., 'Draw 0 cards if your score is 0')

95. A custom deck has 24 cards. If 4 players each draw a 5-card hand, how many cards remain in the deck?

(A) 8 cards (B) 0 cards (C) 20 cards (D) 4 cards

96. In 10 playtests, the game lasted (in minutes): 25, 30, 28, 31, 27, 29, 95, 30, 26, 28. The 95 is an OUTLIER. What's the MEDIAN length WITHOUT the outlier?

(A) 95 minutes (B) 30 minutes (C) 28.5 minutes (D) 29 minutes

Write the answer

97. Which sum is MOST likely when rolling two 6-sided dice?

Answer: _____

98. Why might a designer use a 'CUSTOM DIE' (with symbols instead of numbers)?

Answer: _____

99. If a game uses 'COINS' worth 1, 3, and 10, and a player has 1 of each, what total can they NOT make?

Answer: _____

100. 'CATCH-UP MECHANICS' that are TOO STRONG cause what problem?

Answer: _____

Match each question to its answer

1. A racing board game would most likely use which layout? →
2. Why are 'BLIND PLAYTESTS' (designer absent) essential before publishing? →
3. If a rule has MULTIPLE INTERPRETATIONS, the designer should: →
4. Why are POINT VALUES on cards often shown with both a NUMBER and an ICON? →
5. Why would a designer use a FREEFORM map (like Risk) instead of a regular grid? →

- (A) Path layout
 - (B) To support players who learn visually or struggle with reading
 - (C) Rewrite the rule to remove ambiguity
 - (D) Freeform maps create thematic regions and unique strategic geography
 - (E) They reveal rulebook problems hidden when the designer can verbally clarify
-

11. Game Theory Basics

Circle the correct answer

- 101.** What's the BEST way to verify your game is balanced after design changes?
(A) Ask one friend to play once (B) Run multiple playtests with different players and track outcomes (C) Re-read the rulebook (D) Check the box art
- 102.** A designer simulates 'rolling 3 dice and counting how often the sum is over 12'. What's the next step after coding the simulation?
(A) Run only one trial (B) Run many trials (e.g., 100,000) and tally the results (C) Stop and assume the answer (D) Change the rules to avoid the question
- 103.** A 'STARTING HAND' of 5 cards is dealt from a 40-card deck. How many cards remain in the deck for ONE player?
(A) 40 cards (B) 5 cards (C) 45 cards (D) 35 cards
- 104.** Which playtest metric is MOST useful for measuring 'fun'?
(A) Box weight (B) Game duration only (C) 'Would you play this again?' (D) Number of players
- 105.** Why is it BAD if a game's win rate depends mostly on TURN ORDER?
(A) Players prefer luck over skill (B) Players feel the game is decided by luck of the draw rather than skill (C) The game would end faster (D) Turn order doesn't actually matter
- 106.** Why are POINT VALUES on cards often shown with both a NUMBER and an ICON?
(A) To take up extra space (B) Because it is required by law (C) To support players who learn visually or struggle with reading (D) To make the cards more colorful only

Write the answer

107. Which sentence is BEST for a rulebook?

Answer: _____

108. A rulebook says 'Draw cards equal to your score'. A playtester scores 0 and asks 'Do I draw 0 cards?'. The rulebook should:

Answer: _____

109. Why do most card games have HIDDEN HANDS instead of face-up hands?

Answer: _____

110. Why should designers PLAYTEST WITH STRANGERS, not just friends?

Answer: _____

Match each question to its answer

1. A deck of 25 cards has 5 'win' cards. After drawing a win card without replacement, what's the probability the NEXT draw is also a win? →

2. Why are RULEBOOKS often printed in MULTIPLE LANGUAGES for international games? →

3. Why is 'KING-MAKING' considered a BALANCE PROBLEM in multiplayer games? →

4. A card game has 40 cards: 20 attack, 15 defense, 5 special. Which type is MOST common? →

5. If a game ASSUMED a strategy wins 50% but simulation shows 70%, what should the designer DO? →

(A) To make the game accessible to players in different countries without translation costs

(B) 4 out of 24

(C) Attack (20 cards)

(D) A losing player can decide who wins, robbing the leader and runner-up of agency

(E) Investigate why the simulation differs and likely adjust the strategy's cost or power

12. Production And Manufacturing

Circle the correct answer

111. A card game has 40 cards: 20 attack, 15 defense, 5 special. Which type is MOST common?

(A) Defense (15 cards) (B) Special (5 cards) (C) Attack (20 cards) (D) All are equally common

112. What is the MAIN reason designers playtest with PROTOTYPE components (paper, sketches) before manufacturing?

(A) Real components are too small (B) It is required by law (C) Prototypes are cheap to change, while manufactured components are not (D) Prototypes are more fun than real components

113. Which board layout is BEST for a game with 'territory control' as the main mechanic?

(A) Small 2x2 grid (B) Freeform or hex (defined regions) (C) Single linear path (D) Single-space board

114. A board has 100 spaces. If you roll a single d6 each turn, what's the FEWEST turns needed to traverse the board (always rolling 6)?

(A) 10 turns (B) 20 turns (C) 100 turns (D) 17 turns (since 16 turns of 6 = 96, need 1 more)

115. If a game says 'roll 2 dice and add them', which sum is LEAST likely?

(A) 7 (B) 8 (C) 2 (or 12) (D) 6

116. Why do MODERN board games like 'Pandemic' or 'Wingspan' rely on simulation for design?

(A) Simulation is required by law (B) Simulation always picks the winner (C) Designers can't play their own games (D) Their complex systems have too many variables to balance by intuition alone

Write the answer

117. Which event is MORE LIKELY when rolling a single die?

Answer: _____

118. Why are 'BLIND PLAYTESTS' (designer absent) essential before publishing?

Answer: _____

119. Why should COLORBLIND PLAYERS be considered when choosing token colors?

Answer: _____

120. Which rulebook structure is BEST for learning a new game?

Answer: _____

Match each question to its answer

1. Why test a rulebook by 'BLIND PLAYTESTING' (without the designer present)? →
 2. Why is a 'riffle shuffle' done MULTIPLE TIMES (about 7 for a 52-card deck)? →
 3. In a 2-player abstract game like Hex, what does the 'PIE RULE' do? →
 4. If a card costs 3 mana and deals 3 damage, it's 'on curve'. What's a card that costs 1 mana for 5 damage? →
 5. A game gives bonus coins when you roll doubles (both dice the same). What's the probability of rolling doubles with 2 dice? →
 - (A) 6 out of 36 (or 1/6)
 - (B) Overpowered — too much value for the cost
 - (C) Multiple shuffles ensure the deck is sufficiently randomized
 - (D) Player 2 can choose to swap sides after seeing Player 1's first move, neutralizing first-player advantage
 - (E) The designer can't subconsciously fill in missing information
-

13. Cross Topic Connections

Circle the correct answer

121. A rulebook is 30 pages with 10 pages of examples and 5 of glossary. About what fraction is core rules?
(A) 1/3 (B) 1/4 (C) 1/2 (15 of 30 pages) (D) 2/3
122. Why do designers add SHORTCUTS to path boards?
(A) Shortcuts make the game shorter only (B) Shortcuts are required by all rulebooks (C) Shortcuts cannot affect strategy (D) Shortcuts add strategic decisions about risk versus reward
123. Why are GAME PIECES often made of WOOD or PLASTIC instead of paper?
(A) Paper is illegal in games (B) Tradition only (C) Wood and plastic are always cheaper (D) Durability — wood and plastic survive many plays without damage
124. Why does a rulebook often include EXAMPLES with illustrations?
(A) Examples are required by Apple (B) Examples show how rules apply in practice, clarifying abstract instructions (C) Examples replace rules (D) Examples are decorative
125. Why might a path board LOOP (form a circle) instead of having a clear start and end?
(A) Loops cannot be played strategically (B) Looping paths are required for all games (C) Loops always make games shorter (D) Looping paths let players keep playing through multiple rounds without resetting

126. In a Monte Carlo simulation of dice combat, the attacker wins 60%. With 4 attackers and 3 defenders, this means:

(A) It is a perfectly fair fight (B) 60% is impossible (C) Defenders win usually (D) Attackers usually win these fights — a built-in attacker advantage

Write the answer

127. Why is a 'QUICK START GUIDE' valuable alongside a full rulebook?

Answer: _____

128. Which feedback type is MOST useful from a playtest?

Answer: _____

129. A game balance EXPRESSION: if Strategy A wins 60% and Strategy B wins 40%, what's the difference?

Answer: _____

130. Which board layout is BEST for a game with 'territory control' as the main mechanic?

Answer: _____

Match each question to its answer

1. If a hex board is built from 7 hexes (1 center + 6 around), how many EDGES (shared sides) connect adjacent hexes? →

2. A board has 20 spaces and a 'shortcut' that skips 5 spaces. How long is the shortcut path versus the regular path between the same two points? →

3. If you have a deck of 20 cards (10 red, 10 blue), what is the probability of drawing a RED card? →

4. A player must roll a 5 or higher to succeed on an attack. What is the probability of success on one d6 roll? →

5. A balanced 5-player game should have each player winning approximately what fraction of games? →

(A) 1/5 (20%)

(B) 5 spaces shorter than the regular path

(C) 6

(D) 2 out of 6 (or 1/3)

(E) 1 out of 2 (or 50%)

14. Real World Board Game Careers

Circle the correct answer

131. A designer wants to know 'how often does the game last over 60 minutes?'. Best approach?

(A) Ask players to guess (B) Simulate 10,000 game lengths and count how many exceed 60 minutes (C) Read the rulebook (D) Play one game and measure

132. Why is it BAD if a game's win rate depends mostly on TURN ORDER?

(A) Players prefer luck over skill (B) The game would end faster (C) Turn order doesn't actually matter (D) Players feel the game is decided by luck of the draw rather than skill

133. Which sum is MOST likely when rolling two 6-sided dice?

(A) 6 (B) 2 (C) 7 (D) 12

134. Why do designers test EARLY and OFTEN rather than waiting until the design feels 'done'?

(A) Early testing is required by law (B) Designs don't change (C) Late testing is impossible (D) Problems are easier to fix early; major issues found late require huge rework

135. A playtest finds the game takes 90 minutes when targeting 30 minutes. The designer should:

(A) Re-label the box as 90-minute (B) Ignore the finding (C) Identify what slows the game and trim or simplify it (D) Add more rules

136. Why might a game designer choose to use a 'd4' (4-sided die) instead of a 'd6'?

(A) To narrow the range of outcomes and reduce variance (B) Because d4s are easier to find in stores (C) Because d4s are required for math games (D) Because d4s always roll higher than d6s

Write the answer

137. On a 5x5 grid board, how many total squares are there?

Answer: _____

138. Which board layout BEST encourages players to spread out and explore?

Answer: _____

139. If 6 players need 8 cards each for setup, but the deck has 50 cards, what's the smallest deck size needed?

Answer: _____

140. Why does a rulebook often include EXAMPLES with illustrations?

Answer: _____

Match each question to its answer

1. Why do most card games have HIDDEN HANDS instead of face-up hands? →
 2. Why might a path board LOOP (form a circle) instead of having a clear start and end? →
 3. A player must roll a 5 or higher to succeed on an attack. What is the probability of success on one d6 roll? →
 4. If a player rolls a 20-sided die (d20), what is the probability of rolling exactly 15? →
 5. Which is NOT a use of probability simulation in game design? →
- (A) Deciding what art style to use
 - (B) 2 out of 6 (or 1/3)
 - (C) Hidden information creates strategy, bluffing, and uncertainty
 - (D) 1 out of 20
 - (E) Looping paths let players keep playing through multiple rounds without resetting
-

15. Misconceptions And Reasoning

Circle the correct answer

- 141.** Simulations use 'PSEUDORANDOM' numbers. Why?
(A) Computers generate numbers that LOOK random but follow a formula — good enough for simulations (B) Pseudorandom means biased (C) Pseudorandom numbers always repeat (D) Computers can't make random numbers at all
- 142.** Why is it BAD to change MANY things AT ONCE between playtests?
(A) You can't tell which change caused which effect (B) Many changes are required by law (C) Many changes save time (D) Players prefer chaos
- 143.** In a 100-game playtest, Character A wins 65 times. What does this suggest?
(A) Character A is too weak (B) Character A is correctly balanced (C) Character A may be overpowered and need a nerf (D) Playtests don't reveal balance
- 144.** Which is the MOST important consideration when sizing tokens for a board game?
(A) Tokens must be the same color as the board (B) Tokens must match the box dimensions (C) Tokens must weigh exactly 10 grams (D) Tokens must fit comfortably on board spaces without overlapping
- 145.** What is the PRIMARY GOAL of a board game rulebook?
(A) To let players learn and play the game without outside help (B) To make the box heavier (C) To list the designer's biography (D) To advertise the game

146. What is a HEX board's main advantage over a square grid?

(A) Each space has 6 equidistant neighbors instead of 4, allowing more natural diagonal movement (B) Hex boards have no neighbors (C) Hex boards are always smaller (D) Hex boards are easier to draw

Write the answer

147. Why should rulebooks use 'NUMBERED STEPS' for setup?

Answer: _____

148. What does 'CONSISTENT TERMINOLOGY' mean in a rulebook?

Answer: _____

149. If theoretical probability of an event is 0.25 and your simulation shows 0.30 after 100 trials, what should you do?

Answer: _____

150. What is the SUM of probabilities for all possible outcomes on a fair die?

Answer: _____

Match each question to its answer

1. If 5 of 10 playtesters say a specific card is overpowered, the designer should: →

2. Why do designers add SHORTCUTS to path boards? →

3. What is a 'DOMINANT STRATEGY'? →

4. Why might a game designer use a SMALLER deck (say 30 cards instead of 100)? →

5. In a 2-player abstract game like Hex, what does the 'PIE RULE' do? →

(A) Shortcuts add strategic decisions about risk versus reward

(B) Smaller decks make probability swings more impactful and games shorter

(C) A strategy that is always better than other strategies, ruining game choices

(D) Player 2 can choose to swap sides after seeing Player 1's first move, neutralizing first-player advantage

(E) Investigate the card seriously — consistent feedback signals a real issue

16. Advanced Synthesis

Circle the correct answer

151. Why might a designer choose a HEX board for a tactical war game?

(A) Hexes are only used for racing games (B) Hexes prevent any kind of strategy (C) Equal distances in 6 directions make tactical positioning feel fair (D) Hexes are required for war games by law

152. Why is it BAD if a game's win rate depends mostly on TURN ORDER?

(A) The game would end faster (B) Turn order doesn't actually matter (C) Players feel the game is decided by luck of the draw rather than skill (D) Players prefer luck over skill

153. Why do most card games have HIDDEN HANDS instead of face-up hands?

(A) Hidden information creates strategy, bluffing, and uncertainty (B) Hidden cards make games faster (C) Hidden cards are easier to print (D) Hidden cards prevent cheating only

154. On a 10x10 grid board, how many EDGE squares (along the border) are there?

(A) 16 (B) 36 (C) 40 (D) 100

155. Why are 'BLIND PLAYTESTS' (designer absent) essential before publishing?

(A) Designers can't be in two places (B) Blind tests use less time (C) Designers always confuse testers (D) They reveal rulebook problems hidden when the designer can verbally clarify

156. How does GOOD TYPOGRAPHY help a rulebook?

(A) It is decorative (B) Typography only looks pretty (C) Headings, bullet points, and bold key terms make scanning easy (D) It changes the rules

Write the answer

157. Which sentence has POOR rulebook style?

Answer: _____

158. If a game uses 'COINS' worth 1, 3, and 10, and a player has 1 of each, what total can they NOT make?

Answer: _____

159. Which board layout BEST encourages players to spread out and explore?

Answer: _____

160. Why do MODERN board games like 'Pandemic' or 'Wingspan' rely on simulation for design?

Answer: _____

Match each question to its answer

1. Why might a designer use a 'CUSTOM DIE' (with symbols instead of numbers)? →

2. In a 100-game playtest, Character A wins 65 times. What does this suggest? →

3. If a rule has MULTIPLE INTERPRETATIONS, the designer should: →

4. If a game says 'roll 2 dice and add them', which sum is LEAST likely? →

5. A simulation shows Card A is drawn in 80% of games. What does this tell the

designer? →

- (A) 2 (or 12)
 - (B) Card A appears too often and may dominate strategies
 - (C) Character A may be overpowered and need a nerf
 - (D) Rewrite the rule to remove ambiguity
 - (E) Symbols can directly show game outcomes (attack, defend, special) without translation
-

Riddle & Joke Break

Guess the answer, then check the key!

- 161.** I have six sides, equal chances on each face, and I get rolled all the time. What am I?
- 162.** You roll two six-sided dice and add them together. What sum is the most likely result?
- 163.** I'm a flat piece with art on top, I get drawn from a stack, and I usually have rules text. What am I?
- 164.** A deck has 40 cards: 10 red, 10 blue, 10 green, 10 yellow. What's the chance of drawing a red card on the first draw?
- 165.** I let players move in six directions instead of four. What kind of board grid am I?
- 166.** When the same player keeps winning every playtest, what should the designer do?
- 167.** A small wooden figure shaped like a person, used to represent a player on the board. What is it called?
- 168.** I'm a method where you run thousands of simulated games to find the average outcome. What technique am I?
- 169.** Why did the six-sided die go to school?
- 170.** Why did the meeple refuse to leave the board?
- 171.** Why did the card deck break up with the shuffler?
- 172.** What did the hex tile say to the square tile?
- 173.** Why was the rulebook so popular at parties?
- 174.** Why did the playtester bring a notebook to game night?

Fun Facts

- Did you know? The word "meeple" was coined in the year 2000 by Alison Hansel during a game of Carcassonne. She combined "my" and "people" -- and the term stuck for tiny wooden figures everywhere!
 - Did you know? Mathematician Persi Diaconis proved in 1992 that it takes exactly 7 riffle shuffles to truly randomize a standard 52-card deck. Fewer shuffles leave patterns from the original order!
 - Did you know? When you roll two six-sided dice, a sum of 7 is the most likely result with 6 out of 36 combinations. That's why Monopoly's most-landed-on spaces are 7 spaces from "Go to Jail"!
 - Did you know? Monte Carlo simulation got its name from the famous casino in Monaco. Mathematicians in the 1940s used random sampling to solve problems and named it after the gambling city!
 - Did you know? The oldest known board game, Senet, is about 5,000 years old. Ancient Egyptians played it on a 3x10 grid with throwing sticks instead of dice. Even pharaohs were buried with copies!
 - Did you know? A standard six-sided die has the numbers arranged so opposite faces always add to 7. So 1 is opposite 6, 2 is opposite 5, and 3 is opposite 4. Designers chose this for visual balance!
 - Did you know? The hex grid used in many strategy games has a mathematical advantage: every neighbor is the same distance away. On a square grid, diagonal neighbors are farther than orthogonal ones!
 - Did you know? "Eurogame" describes games like Settlers of Catan with peaceful resource management, while "Ameritrash" describes games like Risk with conflict and player elimination. Both styles have passionate fans!
-

Answer Key

1. B — 6
2. C — 1 out of 6
3. D — 7
4. D — 36
5. D — 3.5
6. C — Two dice create a bell-curve distribution that makes mid-range numbers

more common

7. Rolling a 7
8. The average outcome you would expect over many rolls
9. 0 and 1
10. 2 (or 12)
Matching (Dice Probability): $1 \rightarrow D$, $2 \rightarrow A$, $3 \rightarrow E$, $4 \rightarrow B$, $5 \rightarrow C$
11. B — 52
12. B — 1 out of 4 (or $13/52$)
13. C — To randomize card order so future draws are unpredictable
14. D — 1 out of 2 (or 50%)
15. D — The face-down stack players take new cards from
16. A — The face-up stack of cards that have already been played or thrown away
17. 1 out of 5 (or $6/30$)
18. Fairness — equal starting resources prevent unfair advantage
19. Attack (20 cards)
20. Take the top two cards from the draw pile
Matching (Card Math): $1 \rightarrow B$, $2 \rightarrow D$, $3 \rightarrow C$, $4 \rightarrow E$, $5 \rightarrow A$
21. C — A board divided into equal squares arranged in rows and columns
22. A — A board where spaces form a track that players follow in sequence
23. B — Each space has 6 equidistant neighbors instead of 4, allowing more natural diagonal movement
24. B — 8 (including diagonals)
25. C — Spaces and connections arranged without a regular pattern
26. A — Equal distances in 6 directions make tactical positioning feel fair
27. Path layout
28. 39 spaces
29. 25
30. Path with single-file movement

Matching (Board Layouts): 1→A, 2→B, 3→D, 4→E, 5→C

- 31. A — A small movable piece that represents a player or game object
- 32. D — To let players quickly identify which pieces are theirs
- 33. C — 20
- 34. D — Custom backs help players identify card types in a face-down deck
- 35. D — A wooden person-shaped player token
- 36. D — Tokens must fit comfortably on board spaces without overlapping
- 37. 2 ten-tokens + 1 five-token + 2 one-tokens = 5 tokens
- 38. To support players who learn visually or struggle with reading
- 39. A flat cardboard piece that stands upright in a plastic base
- 40. 15 of each design

Matching (Components): 1→E, 2→B, 3→C, 4→D, 5→A

- 41. C — All players have a fair chance to win regardless of starting position or choices
- 42. B — The benefit one player gets simply by going first
- 43. A — Give later players bonus starting resources
- 44. B — Strong first-player advantage that needs balancing
- 45. A — A strategy that is always better than other strategies, ruining game choices
- 46. C — Character A may be overpowered and need a nerf
- 47. Reducing its power to balance the game
- 48. Strengthening it to make it more competitive
- 49. Players feel the game is decided by luck of the draw rather than skill
- 50. Half the games finished in less than 42 minutes and half in more

Matching (Game Balance): 1→B, 2→D, 3→A, 4→E, 5→C

- 51. D — Running a game scenario many times to estimate likely outcomes
- 52. C — A casino — because they rely on random sampling
- 53. C — About 1,667 times (1/6 of 10,000)
- 54. D — More trials reduce random variation and give more accurate estimates

55. A — 35%
56. C — Computers can run millions of trials in minutes, while physical playtesting takes weeks
57. Generating random inputs (dice, card draws) for each trial to reflect real gameplay
58. Card A appears too often and may dominate strategies
59. Theoretical is calculated mathematically; experimental is measured from trials
60. Run more trials — 100 is too few to converge
Matching (Simulation): $1 \rightarrow E$, $2 \rightarrow C$, $3 \rightarrow D$, $4 \rightarrow A$, $5 \rightarrow B$
61. C — To let players learn and play the game without outside help
62. C — Numbered steps prevent missed actions and make order clear
63. B — 'Each turn, the active player draws 2 cards.'
64. B — An alphabetical list defining game-specific terms
65. A — Examples show how rules apply in practice, clarifying abstract instructions
66. C — Overview -> Setup -> Turn Flow -> Special Rules -> End Conditions
67. When special cases and exceptions accumulate, making the rulebook bloated and confusing
68. 'If you want, maybe you could draw some cards or not.'
69. Quick references summarize core actions without rereading the full rules
70. Using the same word for the same concept throughout — not switching between synonyms
Matching (Rulebooks): $1 \rightarrow D$, $2 \rightarrow E$, $3 \rightarrow B$, $4 \rightarrow C$, $5 \rightarrow A$
71. C — Playing your game with people to gather feedback and find problems
72. B — Repeatedly testing, learning, and improving the design in cycles
73. C — An early, rough version made to test core mechanics
74. C — A more polished prototype with refined rules and art for broader testing
75. A — 'I was confused on turn 3 when I drew an event card'
76. C — Friends may sugarcoat feedback; strangers give honest reactions
77. Watching players play without intervening, to see where the game itself struggles

78. Memory fades; recordings preserve every issue and reaction for later analysis
79. Identify what slows the game and trim or simplify it
80. When a player suddenly understands the game's strategy or appeal
Matching (Playtesting): 1→B, 2→A, 3→C, 4→E, 5→D
81. B — 20
82. C — Strengthening it to make it more competitive
83. C — Run many trials (e.g., 100,000) and tally the results
84. C — 4 to 3
85. B — Two dice create a bell-curve distribution that makes mid-range numbers more common
86. B — 1 out of 52
87. 0.25 (or 25%)
88. Adding features and complexity beyond the original design goal
89. To protect cards from wear, bending, and stains over many plays
90. Letting them jump directly to relevant sections during play
Matching (Kingmaker Problem Player Elimination): 1→B, 2→A, 3→D, 4→C, 5→E
91. D — 15 of each design
92. C — To make the game accessible to players in different countries without translation costs
93. D — 'Players may use cards when it's appropriate.'
94. D — Explicitly state how to handle 0 (e.g., 'Draw 0 cards if your score is 0')
95. D — 4 cards
96. C — 28.5 minutes
97. 7
98. Symbols can directly show game outcomes (attack, defend, special) without translation
99. 5 (or 6, 7, 8, 9 — anything between 4 and 10)
100. Leading players feel punished for playing well — winning becomes pointless
Matching (Victory Condition Design): 1→A, 2→E, 3→C, 4→B, 5→D

101. B — Run multiple playtests with different players and track outcomes
102. B — Run many trials (e.g., 100,000) and tally the results
103. D — 35 cards
104. C — 'Would you play this again?'
105. B — Players feel the game is decided by luck of the draw rather than skill
106. C — To support players who learn visually or struggle with reading
107. 'Each turn, the active player draws 2 cards.'
108. Explicitly state how to handle 0 (e.g., 'Draw 0 cards if your score is 0')
109. Hidden information creates strategy, bluffing, and uncertainty
110. Friends may sugarcoat feedback; strangers give honest reactions
Matching (Game Theory Basics): 1→B, 2→A, 3→D, 4→C, 5→E
111. C — Attack (20 cards)
112. C — Prototypes are cheap to change, while manufactured components are not
113. B — Freeform or hex (defined regions)
114. D — 17 turns (since 16 turns of 6 = 96, need 1 more)
115. C — 2 (or 12)
116. D — Their complex systems have too many variables to balance by intuition alone
117. Rolling a number greater than 2
118. They reveal rulebook problems hidden when the designer can verbally clarify
119. Red-green colorblindness is common; using shape or icons in addition to color helps
120. Overview -> Setup -> Turn Flow -> Special Rules -> End Conditions
Matching (Production And Manufacturing): 1→E, 2→C, 3→D, 4→B, 5→A
121. C — 1/2 (15 of 30 pages)
122. D — Shortcuts add strategic decisions about risk versus reward
123. D — Durability — wood and plastic survive many plays without damage
124. B — Examples show how rules apply in practice, clarifying abstract instructions

125. D — Looping paths let players keep playing through multiple rounds without resetting
126. D — Attackers usually win these fights — a built-in attacker advantage
127. Players can learn the basics fast and reference the full rules later for details
128. 'I was confused on turn 3 when I drew an event card'
129. Strategy A wins 20 percentage points more than B
130. Freeform or hex (defined regions)
Matching (Cross Topic Connections): 1→C, 2→B, 3→E, 4→D, 5→A
131. B — Simulate 10,000 game lengths and count how many exceed 60 minutes
132. D — Players feel the game is decided by luck of the draw rather than skill
133. C — 7
134. D — Problems are easier to fix early; major issues found late require huge rework
135. C — Identify what slows the game and trim or simplify it
136. A — To narrow the range of outcomes and reduce variance
137. 25
138. Large hex or freeform board with multiple regions
139. 48 cards minimum
140. Examples show how rules apply in practice, clarifying abstract instructions
Matching (Real World Board Game Careers): 1→C, 2→E, 3→B, 4→D, 5→A
141. A — Computers generate numbers that LOOK random but follow a formula — good enough for simulations
142. A — You can't tell which change caused which effect
143. C — Character A may be overpowered and need a nerf
144. D — Tokens must fit comfortably on board spaces without overlapping
145. A — To let players learn and play the game without outside help
146. A — Each space has 6 equidistant neighbors instead of 4, allowing more natural diagonal movement
147. Numbered steps prevent missed actions and make order clear
148. Using the same word for the same concept throughout — not switching between

synonyms

149. Run more trials — 100 is too few to converge
150. 1 (or 100%)
Matching (Misconceptions And Reasoning): $1 \rightarrow E$, $2 \rightarrow A$, $3 \rightarrow C$, $4 \rightarrow B$, $5 \rightarrow D$
151. C — Equal distances in 6 directions make tactical positioning feel fair
152. C — Players feel the game is decided by luck of the draw rather than skill
153. A — Hidden information creates strategy, bluffing, and uncertainty
154. B — 36
155. D — They reveal rulebook problems hidden when the designer can verbally clarify
156. C — Headings, bullet points, and bold key terms make scanning easy
157. 'If you want, maybe you could draw some cards or not.'
158. 5 (or 6, 7, 8, 9 — anything between 4 and 10)
159. Large hex or freeform board with multiple regions
160. Their complex systems have too many variables to balance by intuition alone
Matching (Advanced Synthesis): $1 \rightarrow E$, $2 \rightarrow C$, $3 \rightarrow D$, $4 \rightarrow A$, $5 \rightarrow B$
161. A fair six-sided die! Each face has a $1/6$ chance of landing up.
162. Seven! There are six ways to roll a 7 ($1+6$, $2+5$, $3+4$, $4+3$, $5+2$, $6+1$), more than any other sum.
163. A card! Cards are one of the most flexible game components.
164. $1/4$, or 25%! There are 10 red cards out of 40 total.
165. A hex grid! Each hexagon has six neighbors, which is why strategy games like Catan use them.
166. Adjust the game's balance! That might mean weakening a strategy, strengthening other paths, or adding catch-up mechanisms.
167. A meeple! The word was coined by Alison Hansel in 2000, combining "my" and "people."
168. Monte Carlo simulation! Designers use it to check if a game is balanced before mass production.
169. It wanted to roll with a smarter crowd!

- 170. It said, "I've finally found my place!"
- 171. It said, "You keep mixing me up!"
- 172. "Stop being so cornered -- come hang out on six sides!"
- 173. Because it always knew how to clear things up!
- 174. Because every game deserves a second draft!

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