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GAME 601 - Fall 2021

ABSTRACT

25 is a dice game of wits and strategy in which players compete to be the first to score exactly 25 points. Armed with a pair of six-sided dice, players choose two numbers in secret and then reveal them simultaneously. Players earn points by choosing numbers that do not match numbers chosen by their opponent.

MATERIALS

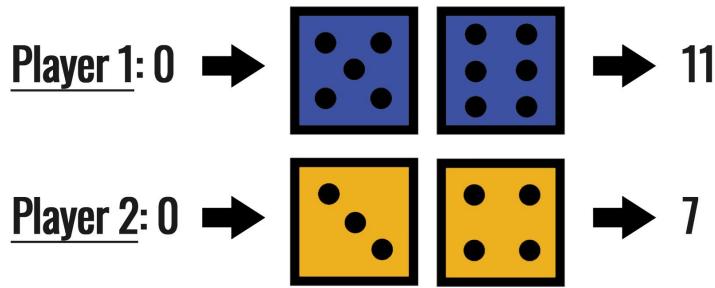
- 6-sided dice – two per player
- Pen/pencil & paper

RULES

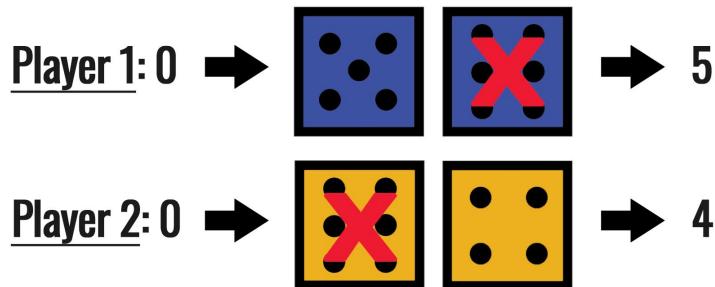
25 is a two-player game.

Each player chooses two numbers in secret using two six-sided dice. Players then reveal their dice simultaneously.

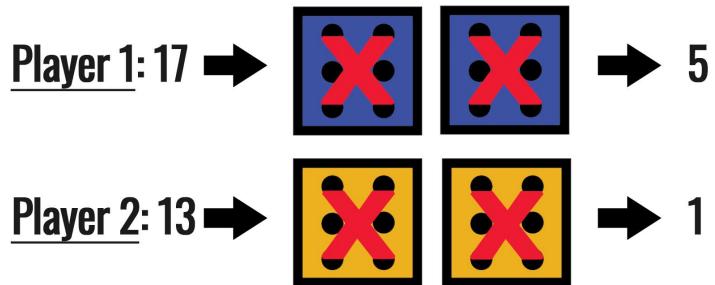
- 1) If the players have no numbers in common, they each add the sum of the dice to their score. *For example:*



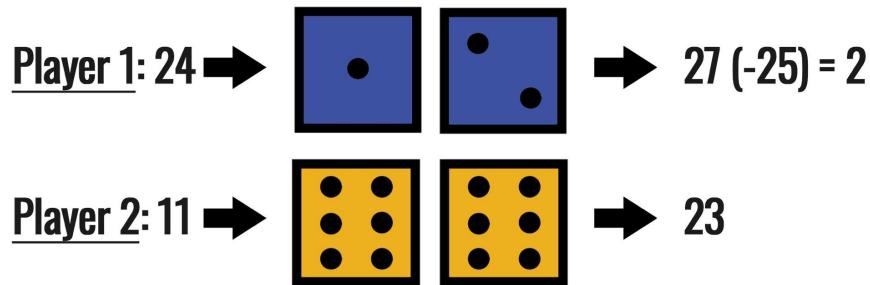
- 2) If players have one number in common, the matching dice cancel out and each player adds the non-matching dice to their total score. *For example:*



- 3) If players match both dice, they each lose points equal to the sum of their dice. *For example:*



- 4) The first player to score exactly 25 points wins. If a player's score exceeds 25, they subtract 25 from their point total. ***For example:***



If players tie by scoring 25 on the same turn, they continue playing to 50, following the same rules. For each overtime, the score needed to win is increased by an additional 25 points (i.e. after 50 comes 75, then 100, then 125, etc.).

DESIGN PROCESS - Modified Dice Rolling Game

Game Modified: The Dice Game

Roll a die, add the number to your total, and pass it to your left – the first player to 20 points wins.

When thinking about how to modify *The Dice Game*, the first step taken was imagining who the ideal player for the game was. It's easy to envision a classroom of elementary school students taking turns rolling dice and keeping score as a way of practicing basic arithmetic. Perhaps these students are enjoying the game, laughing as they take turns leapfrogging one another's scores on the way to 20 points. *The Dice Game* already has some good components to work with: it has a clearly defined objective (players must score 20 points) and a sense of competition (players compete against opponents). While *The Dice Game* might work in an elementary school class, it's hard to imagine older audiences getting the same enjoyment for a number of game design shortcomings.

The first issue with *The Dice Game* is that players spend most of the game as passive participants merely watching their opponents roll. To increase the opportunities for players to interact with the game, two changes were implemented: (1) rather than taking turns, players would roll dice simultaneously; and (2) each player would roll two dice instead of one, in effect doubling the possible scoring outcomes thereby allowing for a more variability as players raced to 20 points.

Another issue with *The Dice Game* is that there is little to no player-to-player interaction. That is to say, player actions have no direct impact on their opponents. To create these interactions, a more dynamic scoring system was added. Instead of simply rolling dice and adding the sum to their total scores, players would be penalized for matching dice with their opponents. With this change to the scoring system, play had to be limited to smaller groups of players (ideally 1v1). The reason being that more players meant more opportunity for matches and, therefore, slower and potentially frustrating gameplay.

Through playtesting this first modified iteration of *The Dice Game*, it was clear that the new rule changes made for a richer gaming experience, particularly the rules implemented to increase player-to-player interactions. Mission accomplished, right? Not quite.

Despite this new version technically working, it brought forth another problem with the original game design (though certainly one that is a matter of personal preference). The game was completely based on chance, meaning players were still ultimately passive participants. The new rules provided the illusion of player influence on the game, but in reality players were still merely observing random outcomes until one happened to reach 20 points. In fact, the game could be played by a single player (and was for the purposes of additional playtesting). This led to the most significant game design departure from *The Dice Game*. Rather than rolling dice, players would choose their own numbers in secret and reveal them simultaneously, thereby adding an element of strategy to the game rather than just pure dumb luck.

Giving players control over choosing their own numbers came with the new problem of players simply attempting to maximize their score each turn. Some of this was already prevented by the

matching rules (for example, if both players kept playing two sixes, neither would ever score any points). To further prevent score maximizing, additional guardrails were added to stop particularly “aggressive” players: (1) since a player could easily win the game in two turns, the target score was raised from 20 to 25, one point greater than the maximum score through two turns; and (2) to win the game a player must score exactly 25 points. The reason 25 points was chosen is because a player who scores the maximum of 24 points through two turns must find a way to score one point to win - an impossible task unless they account for their opponents dice.

To help prolong gameplay, one final rule was implemented. If a player exceeds 25 points, they automatically subtract 25 points when calculating their new score. This rule also opened additional strategic possibilities, for example, allowing players to purposefully exceed 25 points to gain an advantage in the following round.

In the final round of playtesting, these additional changes to the game elevated *The Dice Game* beyond a relatively simple game of chance into a more nuanced strategic game. Players took advantage of the newly added control to test out creative approaches to winning the game. Additionally, raising the target score and making it exact served as effective deterrents to players simply playing high numbers.

The final change to the game was the inclusion of a tie breaker. While there was no instance of players tying during actual gameplay, upon further review of the game it became clear that it is possible for both players to reach 25 on the same turn.

