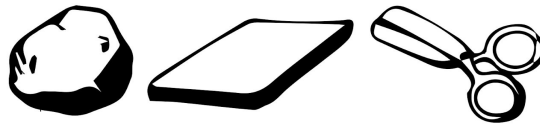


Rock-Paper-Scissors Modification: RPS Redeux



RPS Redeux - Abstract:

The game of “Rock-Paper-Scissors” (abbreviated to “RPS” in later mentions throughout this paper) is beloved and well-known across cultures and the world at large - and for good reason. The game requires no equipment (save for a hand), very few critical thinking skills (unless, of course, a player is enrolled in a high-stakes RPS tournament), and only two players. Even better, the game is designed to be “fair” to each player - each “tool” (rock, paper, or scissors) is weighted equally, having one weakness and one strength each, and both players have the freedom of choice to choose whichever tool they desire in each given round. The rules and the procedure for the game are so simple, as well, that children and adults alike can play the game (and enjoy it).

As stated previously, the simplicity of RPS’ design allows for the game to be enjoyed by an incredible range of players across the globe; however, the game’s simplicity is also its downfall, giving rise to issues of: 1) fair play, in which some players with higher hand-throwing reaction times lose the game to another player with tactful, almost unnoticeably-slower reaction times, thus able to change their hand gesture to beat their opponent’s in that miniscule time difference; 2) lack of inclusivity - given that the game is very often favored by children yet almost impossible to play with more than 2 individuals at a time, it would be *helpful* if the game could lend itself better to a larger group; and 3) the lack of virtually *any* strategy- specifically, opportunities to make strategic decisions- for players.

Thus, with modifications designed to address these three fundamental issues, I propose a new take on this classic favorite: *RPS Redeux*.

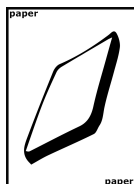
Note: RPS Redeux is broken into **two** game components: the first **Primary Game** and the subsequent (optional) **Risk Rounds**.

RPS Redeux: Primary Game- Rules of Play

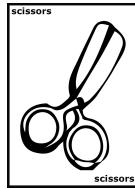
- **Requirements:** 2-8 players
 - Note: Game *must* be played in even numbers (pairs of 2).
 - If an odd number of players is present, players may take turns per game, playing in pairs of 2.
 - If 4, 6, or 8 players are present, pairs of 2 should be formed, with separate, simultaneous games occurring between each pair of 2 players.
- **Approximated Play Time:** 90 seconds per 3-round game (speeds may vary)
- **Age:** 7+
- **Objective:** Defeat your opponent by winning the *greatest total of points* in the 3-round game.
- **Components (TOTAL, in BOX):**
 - Deck of 72 cards: 24 Rock cards, 24 Paper cards, 24 Scissors cards.
 - Scorecards: 8 score cards, 1 per player.
 - Pencils: 8 pencils, 1 per player.
- **Components (PER GAME, 2 players each):**
 - Deck of 18 cards: 6 Rock cards, 6 Paper Cards, 6 Scissors cards.
 - Scorecards: 2 score cards, 1 per player.
 - Pencils: 2 pencils, 1 per player.
- **Card description:**
 - **Rock card:** defeats the Scissors card.



- **Paper card:** defeats the Rock card.



- **Scissors card:** defeats the Paper card.



- **Setup:**

- *Both players should take a scorecard and a pencil before beginning the game.*
- Lay out the deck of cards in three distinct piles: Rock cards, Paper cards, and Scissors cards.
- From each pile, both players should take 3 cards to form their hand of 9 cards. Their hand should be comprised of 3 Rock cards, 3 Paper cards, and 3 Scissor cards - 9 cards in total.
- Once each of the players have their 9 cards, they must then turn away from their opponent and shuffle their cards.
- Once the shuffling is complete, the players turn to face each other once more.
- *The game begins.*

- **How to Play:**

- Each player selects a set of 9 cards at the start of each *Primary* game: 3 Rock cards, 3 Paper cards, and 3 Scissors cards. Each *Primary* game is comprised of 3 rounds.
 - Once the players' cards have been shuffled and are ready to begin gameplay, players turn to face each other and begin the game.
 - Within each round, both players will choose a card from their hands. Once they select their card, they place it face down in front of them, and set their deck face down next to it. This signifies that the player is done selecting their card and are ready to reveal their move.
 - Once both players have placed their cards down, the players state the phrase: "Rock, paper, scissors, shoot."
 - Players flip over the card that they selected earlier. The winner of that round is determined by the following:
 - Rock cards win against Scissors cards.
 - Scissors cards win against Paper cards.
 - Paper cards win against Rock cards.

- The *winner* of each round receives a total of **5 points**. Points should be tallied on the corresponding scorecards.
- In the event of a tie:
 - Neither player is awarded points.
 - Players pick their cards up and add them back into their hand.
 - Players turn away from each other and shuffle their hands (if desired).
 - Re-do the round. Repeat this process until a tie is no longer drawn.
- After each completed round, the winning player takes both cards from the round (their own and their opponent's) and discards the cards into their match pile.
 - Both players, upon winning a round, will create their own match pile and add 5 points to their scorecard.
- The player with the most points on their score card (and the most cards in their match pile) at the end of three rounds is the winner.

Note: The following component of RPS Redoux is **optional**. Players can choose to end the game before moving onto the **Risk Rounds**.

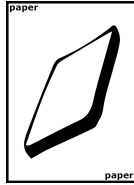
Once players have completed the *Primary Game*, they may choose to continue playing in the *Risk Rounds*, in which players bet against their opponent in increments of 5 points per round to reach an end total of the winning 100 points.

RPS Redoux: Risk Rounds- Rules of Play

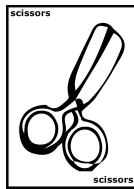
- *Requirements:* 2 players
- *Approximated Play Time:* varies greatly by speed of players and number of rounds necessary to reach 100 points.
- *Age:* 7+
- *Objective:* Defeat your opponent by reaching a total of **100 points** by placing bets on the likelihood of winning each round.
- *Components:*
 - Listed above in *RPS Redoux: Primary Game- Rules of Play* section.
- *Card description:*
 - **Rock card:** defeats the Scissors card.



- **Paper card:** defeats the Rock card.



- **Scissors card:** defeats the Paper card.



- **Setup:**

- Players start the *Risk Rounds* with the scorecards and number of points received in the *Primary Game*.
- Collect each of the 18 cards (6 Rock, 6 Paper, and 6 Scissors cards) used in the *Primary Game* and lay out the deck of cards in three distinct piles: Rock cards, Paper cards, and Scissors cards.
- From each pile, both players take 3 cards to form their *initial* hand of 9 cards.
 - Their hand should be comprised of 3 Rock cards, 3 Paper cards, and 3 Scissor cards - 9 cards in total.
- Remove the **remaining cards** (54 cards) from game box. Shuffle and place face down between both players.
 - ***This is the Risk Rounds deck.***
- Once each of the players have their initial 9 cards and the *Risk Rounds* deck has been put in place, the players turn away from their opponent and shuffle their cards.
- Once the shuffling is complete, the players turn to face each other once more.
- *The Risk Rounds begin.*

- **How to Play:**

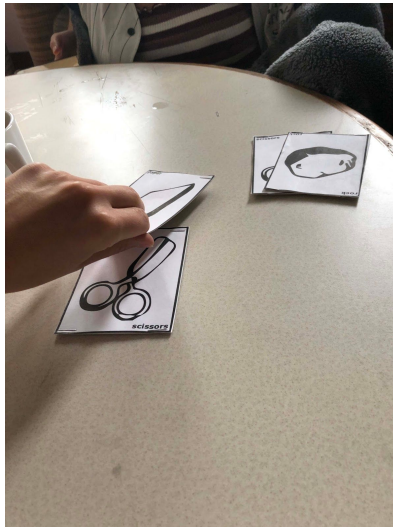
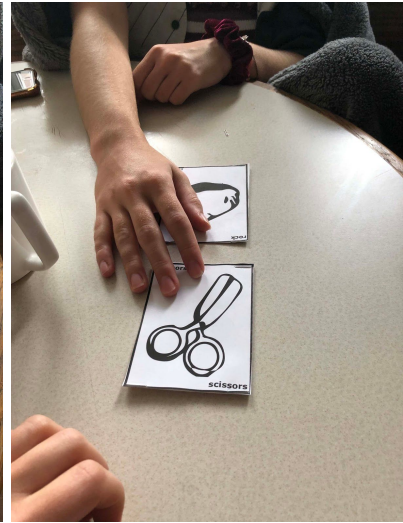
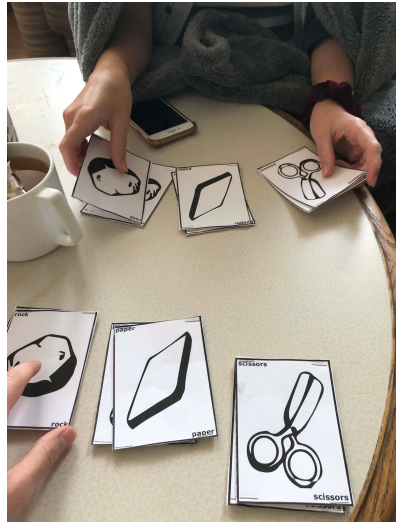
- Each player selects a set of 9 cards at the start of the *Risk Rounds*: 3 Rock cards, 3 Paper cards, and 3 Scissors cards. After each consecutive round, both players retrieve a new

card from the *Risk Rounds* deck, maintaining a **constant hand of 9 cards** until the end of the game.

- Once the players' cards have been shuffled and are ready to begin gameplay, players turn to face each other and begin the game.
- Within each round, both players will choose a card from their hands. Once they select their card, they place it face down in front of them, and set their deck face down next to it. This signifies that the player is done selecting their card and are ready to reveal their move.
- Once both players have placed their cards and decks face-down, players may choose to place a bet on their likelihood of winning the round.
 - *Rules for Betting:*
 - Each player must have a **minimum** of 5 points to place a bet.
 - Players may only bet points that they have. *No player can have a negative score value.*
 - Bets may only be placed in increments of 5 points.
 - I.e. 5 points, 10 points, 15 points, etc.
 - Bets are **not** required. Players always have the option to **not** place a bet.
 - If no bets are placed, the winner of the round receives 5 points towards their score on their scorecard.
 - The loser receives 0 points.
 - If a player *places a bet and wins a round*, they receive **double** those points towards the score on their score card.
 - I.e., if the winning player places a *5 point bet and wins the round*, they receive *10 points* towards their total points on their scorecard.
 - If a player *places a bet and loses a round*, they lose the **same** amount of points that they bet.
 - I.e., if the losing player places a *5 point bet and loses the round*, they lose *5 points* from their total points on their scorecard.

- If a player does not place a bet and wins the round, they receive 5 points towards their total points on their scorecard.
 - If a player does not place a bet and loses the round, they do not lose any points.
- Once both players have placed their cards down and have made their bets, the players state the phrase: “Rock, paper, scissors, shoot.”
- Players flip over the card that they selected earlier. The winner of that round is determined by the following:
 - Rock cards win against Scissors cards.
 - Scissors cards win against Paper cards.
 - Paper cards win against Rock cards.
- The *winner* of each round receives a number of points based on their bets (procedure listed above).
 - Points should be tallied on the corresponding scorecards.
- After each round, players discard their used cards into a separate discard pile and take a new card from the *Risk Rounds* deck.
 - Players should always have a hand of 9 cards throughout the *Risk Rounds*.
- In the event of a tie:
 - Neither player is awarded points.
 - Players discard their used cards and take a new card from the *Risk Rounds* deck.
 - Re-do the round. Repeat this process until a tie is no longer drawn.
- **The player that reaches 100 points first is the winner of the game.**
 - In the event of a tie at 100 points, the winner of the next round wins the game. If that round is tied, the winner of the next round wins the game. Repeat this process until a tie is no longer drawn.

RPS Redeux - Gameplay in Action



RPS Redeux- Design Process (Adding Strategy)

Deciding on the type of strategy to employ in *RPS Redeux* was a tad difficult. Looking over the notes from class on the types of strategic skills commonly employed in games, it was clear that I had already designed decisions (and/or made use of the pre-existing decisions from the original Rock-Paper-Scissors game) that were “obvious”, “meaningless”, and “blind” - all relatively-unrewarding and unmotivating decisions for players to make. So, I wanted to think of a different type of decision or strategy that *rewarded* players with a gratifying experience. Given that my initial inkling for redesigning Rock-Paper-Scissors had been centered around betting during our in-class brainstorming session, I decided that adding a betting component could be a perfect way to enhance *RPS Redeux* and add a level of strategy in the form of a “risk versus reward” trade-off between players. Thus, I created the *Risk Rounds*.

The rules for placing bets in the *Risk Rounds* went through a plethora of iterations before I settled on the final version. I had played through one form, in which if both players placed a bet, the point values won - or lost - were doubled; but, I soon found that negative values eventually cause problems. Thus, I changed the rules to include doubling the winning points, but keeping the lost points at bet value. I also tried a version of the *Risk Rounds* in which players had the option to, before revealing their cards, remove their bets. This version was highly interesting and enjoyable to play through, but after several rounds, I soon found that the original issues of fair play came about - as the cards were in mid-flip state, a player would quickly rescind their bet. Though this is written down as being against the rules, it still created a great amount of tension and carelessness of betting by the players. Thus, in an effort to encourage a greater amount of strategic thinking (and ethical behavior) per round, I removed the option to rescind bets.

I chose to add an additional element of randomization to the *Risk Rounds*, in the form of drawing a card, each round, from a randomly-shuffled, *massive* deck, so that: 1) the issue of counting cards would be very unlikely to occur, and 2) due to the possibly-lengthy nature of the *Risk Rounds* (depending on the scale of each player’s bets and the speed at which they play), it added a small element of “intrigue” and “fun” to keep players from feeling bored or unchallenged.