

THE BIGGEST NUMBER

Level	3 (Age group 11 – 14)
Resources Required	Place value grid with ten thousands, thousands, hundreds, tens and ones Deck of playing cards Paper Pencil
Alternate Options for the Resources	<p>Make a place value grid following the steps below:</p> <ol style="list-style-type: none"> 1. On a piece of paper draw five widely spaced columns 2. Label the column on the left “Ten thousands” followed by “Thousands” “Hundreds”, “Tens” and then “Ones” on the furthest right <p>Players can use cards they have at home or make a deck of playing cards by following the steps below:</p> <ol style="list-style-type: none"> 1. Take a piece of card or paper and cut a rectangle the size of your palm 2. On one side of the card, write the number ‘2’ and draw 2 hearts 3. Repeat this for the numbers 2-10, each time drawing the same number of hearts as the number you wrote (the number 3 card has 3 hearts drawn etc) 4. When one set of 2-10 is complete, then repeat this for a set of diamonds, clubs and spades. 5. Then draw four sets of (A, K, Q, J) <p>Once you have completed this, you should have 4 sets of 2-10 and A-J (52 cards in total) with each set having a different symbol.</p>
Strand Covered	Number and Operations
Targeted Skills	Place value
Inspired by	Third Space Learning
Time Required	10 minutes (if resources already available) 12 minutes (if only place value grid needs to be made) 30 minutes (if cards and place value grid both need to be made)
Previous Learning Required	Numbers from 1-99,999
Support Required	Low support

Rules of the Game:

Goal	The player with the most points at the end of the game wins. To win a point, the player needs to have the biggest number at the end of each set.
Rules	Once a card is placed in a column, the player is not allowed to move it to another column later. Players cannot use face cards, aces or jokers. Each player must draw the top card from the deck in the middle
Steps	Step 1: Make sure each player (2-4 players) has a place value grid

Step 2: Shuffle the entire deck of cards and place it, face down, in the middle of the group

Step 3: Player one draws the top card from the pile and places it on their own place value grid (in any desired column). If the card drawn is a face card, ace or joker, the player cannot use it and must wait until it is his/her turn to draw again

Step 4: The player to player 1's left picks the next card and places it on their own grid.

Step 5: Set 1 continues for 3 rounds (until all the players have filled out their grid)

Step 6: Players write out the number they have formed using the cards. The player with the biggest number at the end of set 1 gets one point. The number of sets played is 1 more than the number of players. For example, if there are 3 players, the number of sets played is 4.)

Step 7: Once all the sets are complete the game ends

suggestion for level 3: step 8: players then express their final number as a decimal fraction. The denominator should have as many zeros as the number. For example, if a player gets the number 43229, he/she should express it as 43229/10000.

step 9: players form groups of 2 and divide the decimal fractions by each other

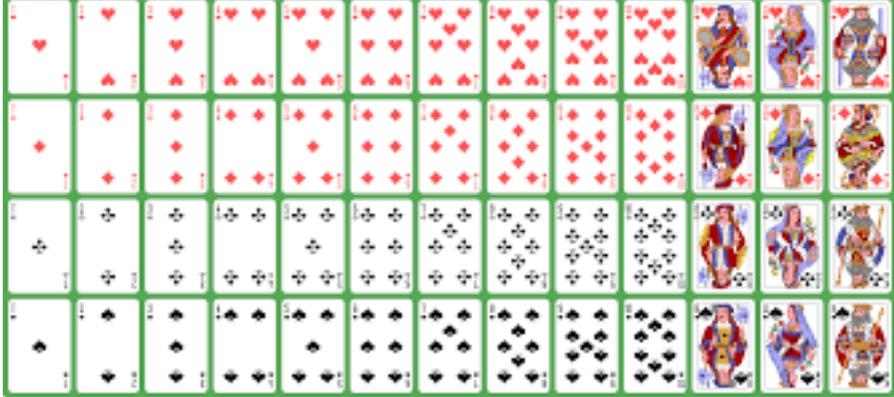
step 10: The group that gets the biggest number at the end wins

Images or Illustrations

Place value grid:

TTH	TH	H	T	U
Ten thousands	Thousands	Hundreds	Tens	Units

Deck of playing cards:

	
<p>Variations of the Game</p>	<ol style="list-style-type: none"> 1. This game can be played with the objective of getting the smallest number. So, the player with the smallest number at the end of a set, gets one point. 2. This game can be played by increasing the number of place values to hundred thousands
<p>Simplification</p>	<ol style="list-style-type: none"> 1. Instead of four place value columns, the game can be played with only 100s, 10s and 1s 2. Once a player places a card in a column, during their next turn, they are allowed to switch the order of one pair of cards