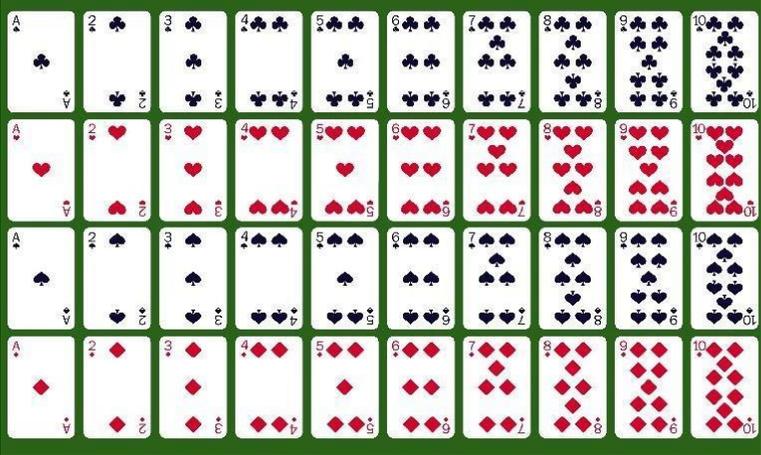


24 Game

Level	2 (Age group 8-10)
Resources Required	Playing cards (Only the number cards from 2-10) Paper Pencils
Alternate Options for the Resources	Students, with the help of a teacher or an adult, make a deck of playing cards by following the steps below: <ol style="list-style-type: none"> 1. Take a piece of card or paper and cut a rectangle the length of your finger 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. Once you have completed this, you should have 4 sets of 2-10 (36 cards in total) with each set having a different symbol.
Strand Covered	Numbers and Operations
Targeted Skills	All math operations
Inspired by	Third Space Learning – Emma Johnson
Time Required	15 minutes (if you already have cards) 25 minutes (including time to make the cards)
Previous Learning Required	Solve problems involving the four basic operations of addition, subtraction, multiplication and division. Knowledge of counting from 1-24 Knowledge of multiplication, addition, subtraction and division from 2-10
Support Required	High support

Rules of the Game:

Goal	Manipulate the cards to get an answer of 24. The first to 24 wins, if no one gets to 24 then the closest to 24 wins.
Rules	Once the player picks 4 random cards from the pile, they are not able to switch it out or substitute it for another card or cards.
Steps	<p>Step 1: Shuffle the deck and place the pile of 36 cards in a pile, face down</p> <p>Step 2: Each player draws 4 cards from the pile, keeping the cards face down.</p> <p>Step 3: Once every player has drawn their 4 cards, the players turn the cards face up</p> <p>Step 4: Each player then begins to find a way to use their 4 cards to get an end result of 24. For example, if the 4 cards drawn are 3, 4, 4, 3, then the operation could be $(4 \times 3) + (4 \times 3) = 24$</p> <p>Step 5: Shuffle the deck again, and play for another 3 rounds.</p>
Images or Illustrations	Cards (you will only need the number cards for this):

	
Variations of the Game	The player is only allowed to perform at least 2 operations per turn to get a result of 24. For example, if the cards, 2, 2, 6, 8 are drawn, $(8-2) \times (6-2) = 24$
Enrichment	Concatenation i.e. combining two single digit numbers into a 2-digit number (e.g. if you get the cards 2, 4, 6, 6, you could do $24 / 6 * 6$)
Simplification	If the player is unable to manipulate the first 4 cards drawn to result in 24, then they are able to swap out a card from the face-down pile