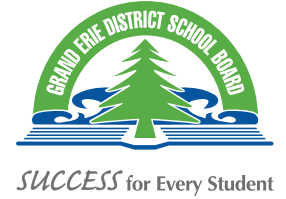


# Card Games for Kindergarten and Primary Students



## Quantity Match

**Skill: Counting and Number Recognition**

**Players: Two**

### Equipment

- Standard deck of cards with all face cards removed. Ace = 1.
- Items to be used as counters: cereal, beans, small toys.

### Rules

- All cards are placed face down in a draw pile in the middle.
- Player 1 chooses the top card and counts out the number of counters needed to match the quantity shown on the card. They place their card under the counted items.
- Player 2 chooses the top card. If the amount shown on the card is a quantity that has already been counted, they place their card under that quantity. If the amount has not already been counted, they count out the number of counters needed to match the quantity shown on their card. Place their card below their items.
- Players continue to take turns until they have selected cards and counted out counters to represent the numbers 1 to 10.
- Players work together to put their piles of counters in order from 1 to 10.

### Variations

- If students are not ready to work to 10, try using only Ace – 5 to start.
- If students are able to work beyond 10, add the face cards – Jack = 11, Queen = 12, King = 13

## Sum 20

**Skill: Mental math – addition, making 10**

**Players: Two to three**

### Equipment

- Deck of cards — face removed. Aces = 1.

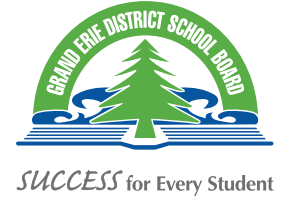
### Rules

- Each player is dealt 6 cards. Remaining cards are placed in the draw pile in the middle.
- The first player goes by trying to find a combination of cards in their hand that add to 20. When they have a sum of 20, they show their opponent how they made 20. They set the used cards aside in a pile, their bank and then draw enough cards to replace the cards played from the draw pile.
- Players take turns trying to make a sum of 20 with the cards in their hand.
- If a player is unable to make 20, then they must draw a card and their turn ends.
- Play continues until all the cards have been drawn and no one can make 20.
- At the end of play, the players count the number of cards they have in their pile. The player with the most cards wins.

### Variations

- For early primary students, you may want to play Sum 10.
- Intermediate students can play Sum Zero, assigning the red cards negative values and keeping the black positive.

# Card Games for Kindergarten and Primary Students



## Traditional War\*

**Skill: Determining more or less**

**Players: Two**

### Equipment

- A standard deck of cards with face cards removed. Ace = 1.

### Rules

- Shuffle the cards. Divide them into two piles, with the same number of cards in each pile. Place one pile, face down, in front of each player.
- Both players turn over a card.
- Players determine who has the greater card. The player with the greater card keeps both cards and places both cards in their bank, a separate pile off to the side.
- If the cards are the same, each player places the three cards from the top of their pile face down. At the same time each player flips over the fourth card in their pile. The player who plays the greater card keeps all of the cards played that round.
- Play continues until all of the cards have been played or one player is out of cards.
- The player with the most cards in their bank wins.

## Piggy Bank War\*

**Skill: Counting, Adding, Subtracting**

**Players: Two**

### Equipment

- A standard deck of cards with the face cards removed (aces are used as ones), counters, a small piggy bank or plastic cup for each player

### Rules

- In Piggy Bank War, the players work together to determine the difference between the two cards. The player with the greater card then takes a number of counters equal to this difference, and puts them in his or her piggy bank.
- Shuffle the cards. Divide them into two piles, with the same number of cards in each pile. Place one pile, face down, in front of each player.
- Both players turn over a card. The players work together to determine the difference between the two cards. If the numbers on the cards are equal, the cards are discarded.
- The player with the greater card takes a number of counters equal to this difference, then places them in his or her piggy bank. The cards are placed in a discard pile.
- The game ends when there are no cards left to turn over. The player with the most counters in their bank wins.

\*Courtesy of What to Look For by Alex Lawson

# Card Games for Kindergarten and Primary Students



## Addition War\*

**Skill: Mental Math (adding), More or Less**

**Players: Two**

### Equipment

- A standard deck of playing cards with the face cards removed (aces are used as ones)

### Rules

- In Addition War, each player turns over two cards, and together they work to determine whose cards have the greater sum.
- Shuffle the cards. Divide them into two piles, with the same number of cards in each pile. Place one pile, face down, in front of each player. Each player turns over the top 2 cards in his or her pile.
- Players work together to determine who has the cards with the greater sum.
- The player whose cards have the greater sum wins the 4 cards and places them in a pile. If the cards have the same sum, players play another round. The player with the greater sum in this round wins all 8 cards.
- The game ends when all the cards in the original piles have been used. The player with more cards wins.

## Tens and Ones War\*

**Skill: Place Value, More or Less**

**Players: Two**

### Equipment

- A standard deck of cards with the face cards removed (aces are used as ones)

### Rules

- In Tens and Ones War, each player turns over two cards. The first card represents the number of tens, and the second card represents the number of ones the player has. Players compare to determine who has the greater number.
- Shuffle the cards. Divide them into two piles, with the same number of cards in each pile. Place one pile, face down, in front of each player.
- Each player turns over the top 2 cards in his or her pile. The first card represents the number of tens and the second card represents the number of ones he or she has. Each player calculates his or her sum aloud. For example, a player who turns over an 8, then a 4, would say: "I have 8 tens and 4 ones. Altogether, I have 84."
- Players determine who has the greater number. The player with the greater number wins all 4 cards and places them in a pile. If the cards have the same sum, the 4 cards are put in a discard pile.
- When no cards are left to be turned over, the discard pile is shuffled, then divided into two equal piles, one for each player. The game ends when these cards have all been used. The player with more cards wins.

\*Courtesy of What to Look For by Alex Lawson

# Card Games for Kindergarten and Primary Students



## Multiplication War\*

**Skill: Multiplication**

**Players: Two**

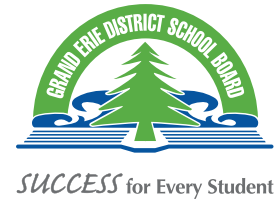
### Equipment

- A standard deck of playing cards with the face cards removed (aces are used as ones)

### Rules

- In Multiplication War, each player turns over two cards, and together they work to determine whose cards have the greater product.
- Shuffle the cards. Divide them into two piles, with the same number of cards in each pile. Place one pile, face down, in front of each player. Each player turns over the top 2 cards in his or her pile.
- Players work together to determine who has the cards with the greater product (the answer of multiplying the two cards together).
- The player whose cards have the greater product wins the 4 cards and places them in a pile. If the cards have the same product, players play another round. The player with the greater product in this round wins all 8 cards.
- The game ends when all the cards in the original piles have been used. The player with more cards wins.

# Card Games for Junior and Intermediate Students



## What's Your Number?\*

**Skill: 4-digit place value and decimal place value.**

**Players: Three or more**

### Equipment

- Playing cards Ace (=1) through 9, paper, pencil

### Goal

- Create the largest number possible.

### Rules

- Each player makes a chart to record their number (decimals optional):
- Place the deck of cards face down in the middle of the playing area.
- Player 1 draws a card from the deck and places it face up. All players must write this number down on their game board. Players may choose any place value position on their board.
- Players draw five or more cards, one at a time, and fill in their boards; they choose what they believe to be the best possible place-value position for each number. Once players write a number on their chart, that number cannot be erased.
- At the end of the round, the player with the largest number earns 10 points.

1000	100	10	1	0.1	0.01
				●	

### Example

- Player 1 uses the cards drawn to create the number 9,652.41
- Player 2 uses the cards drawn to create the number 9,564.21
- Player 1 has the larger number. She wins the round and earns 10 points.
- Play until one player achieves 100 points.

## Factor Dice\*\*

**Skill: Multiplication and factors**

**Players: Two or more**

### Equipment

- Dice, paper, pencil

### Rules

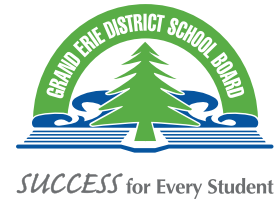
- Roll 2 (or more) dice and multiply to find the product.
- Decide whether the product is composite (has more than 2 factors) or prime (has exactly 2 factors, 1 and the number itself). If it's composite, find all the other factor pairs of the number.
- Record all the factor pairs for each roll, whichever player has the most factor pairs after 5 turns wins!

### Example

- Roll a 6 and 3: multiply  $6 \times 3 = 18$ . 18 is composite and its other factor pairs are  $18 \times 1$  and  $9 \times 2$ .

\* Boxcars and One-Eyed Jacks, by Jane Felling. \*\* Courtesy of Scholastic.com.

# Card Games for Junior and Intermediate Students



## T-Ball Multiplication\*

**Skill: Multiplying a two-digit number by a one-digit number**

**Players: Two**

### Equipment

- Playing cards Ace (=1) through 9. Paper and pencil

### Goal

- Make the largest possible product.

### Rules

- Each player draws three cards from the deck. Players arrange their cards to make a 2-digit number and a 1-digit number. They multiply the two numbers to reveal their product.

### Example

- Player 1 draws the cards 6, 8, and 2. She can create several math problems, including  $82 \times 6$  and  $62 \times 8$ . She chooses  $62 \times 8$  because those two numbers result in the largest product (496).
- Player 2 draws the cards 4, 7, and 5. She can create several math problems, including  $75 \times 4$  and  $74 \times 5$ . She chooses  $74 \times 5$  because those two numbers result in the largest product (370).
- Players write down their multiplication problems and compare answers. The player with the largest product scores 1 point.
- Players take three more cards each and continue playing until one player scores 15 points to win.

## Game of 9 Cards\*\*

**Skill: Mental math – addition**

**Players: Two or more**

### Equipment

- Nine cards – ace (1) to 9.

### Goal

- Be the first person to hold three cards that add up to 15.

### Rules

- To begin, lay out all nine cards, face up, so the numbers are showing. Players take turns selecting one card at a time until someone has a sum of 15 or all cards are taken.
- Note: You may end up with more than three cards in your hand, but you may only use three to make a combination sum of 15.

### Questions to consider after playing a few rounds

- Who is more likely to win, the first or second player? Why?
- Does someone always win?
- Are there ways to make sure that one does not lose?
- Why is a sum of 15 used?
- Is there a best card to use that give a player an advantage?

\* Boxcars and One-Eyed Jacks, by Jane Felling. \*\* Courtesy of NCTM.org.