Play with the Royal Family and Sneeze the Dragon:

Family Card Games for Building Young Children's Math Skills

For Older Preschool Through Early Elementary Grades

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Acknowledgements

The Boston College Lynch School of Education Team designing this book consisted of: Beth Casey, Eric Dearing, Martha Bronson, Lindsey Caola, Dianne Escalante, Elizabeth Pezaris, Alana Foley, Alden Burnham, Amanda Stroiman, and Megan Kern

Along with Kaitlin Young from Tandem, Partners in Early Learning

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Part 1: Introduction

Families are very important for helping young children learn about numbers, counting, and math. Card games are a great way to have fun doing this.

In this packet, we show you how to play family card games that are fun and teach math. **All you need is a deck of cards!**

WHAT'S SPECIAL ABOUT THE DESIGN OF THESE CARD GAMES?

These card games were created by child development experts to teach math skills at a level that is right for your child. The games are ordered from easier to more advanced. You can pick a game that challenges your child, but isn't too hard. The goal is to help your child learn and have a good time. To help you pick the best game to start with, use the chart on the next page.

PICKING A CARD GAME FOR THE CHILD'S MATH LEVEL

We've provided a chart on the next page to help families find the best card game for their child's math learning. There is also a video link below which will show you how to use the chart.

Here's how to use the chart:

- Find a deck of regular playing cards. You can buy them in many stores.
- Begin with the simplest early math skill in the first left-hand column in the chart.
- Pull out the number cards you need for the questions. For example, for the first set of questions in the left-hand column, you need cards with the numbers: 3, 4, 6, 7, and 9.
- Start by asking the questions in the first column of the chart. If the child is unsure or needs help in answering any of the questions, stop there. The card game at the bottom of that column is the right game for your child.
- If they can answer all the questions without any help from you, then go to the next column and ask the questions there.
- Keep asking the questions in the chart columns until you have the right card game for the child. Then, go to the bottom of that column. **Choose the card game you want to play, and have fun!**

Picking a Card Game

VIDEO LINK: https://bit.ly/2ZrSfXg

START HERE

The goal is to help your child learn and have fun. You will want to pick a game that challenges your child but isn't so challenging that they get frustrated and give up. The games in this packet are ordered from basic math skills to more advanced. Below we have a simple tool to help you and your child decide which game to start with. **Note: To use the chart, first take out all the numbered cards from the deck that you will need to ask your child the questions.**

MATH SKILL:
Compares Larger and Smaller Numbers

Ask Your Child:

1. **"Can you tell me which number is larger?"** *(Hold up cards 3 and 9)*
2. (If right) try it with cards *4 and 7.*
3. (If right) try it with cards *9 and 7.*

Child answers all questions easily without help →

MATH SKILL:
Orders Numbers 1-10 From Small to Large

Ask Your Child:

1. **"Can you put these numbers in order from the smallest to the largest?"** *(Put down cards in the order 3, 2, 1, 4)*
2. (If right) put down cards in the order 6, 9, 8, 5, 7 and try again with these cards.

Child answers all questions easily without help →

MATH SKILL:
Adds Numbers

Ask Your Child:

1. **"How much is 3 + 5?"**
2. **"How much is 5 + 6?"**

**Note: Go to Easy Counting Game if your child mainly counts with fingers.*

Child answers all questions easily without help →

MATH SKILL:
More Advanced Arithmetic

Ask Your Child:

1. **"What do you need to add to 8 to get 10?"** (8 + ? = 10)
2. (If right) **"What do you need to add to 4 to get 9?"** (4 + ? = 9)

Still Learning?

Play
Count Jack is Highest

Still Learning?

Play
Line Them Up!
Then
Sneeze Orders the Cards
Then
Number Neighbors

Still Learning?

Play
Easy Counting
Then
The Queen of 10s
Then
The King Pops Up

Still Learning?

Play
Jack Subtracts
Then
What's the Secret Number
Then
Hidden 10s

WHAT MATH SKILLS DO THESE CARD GAMES TEACH?

There are ten card games in this packet. The games help children learn and practice many math skills:

Finding which number is larger or smaller

"Can you tell me which number is larger?"
This game helps children to think about the meaning of numbers, instead of just seeing numbers as symbols. This helps them later, when they learn to add and subtract.

Ordering numbers

"Can you put these numbers in order from smallest to largest?"
These games help children think about how numbers are related to each other. Children will start by counting, but with practice, they will learn the order and will know which numbers are smaller or larger without counting.

Adding numbers

"How much is 3 + 5?"
These games help children understand the ways to combine numbers. They include suggestions to help children develop better ways to add so they can add larger numbers when they get older.

Missing numbers and teen numbers

"What do you need to add to 8 to get to 10?"
These games help children learn about the parts of numbers and how adding is related to subtracting. They also help children learn to add larger numbers by breaking the problem down into math facts that they already know.

DIRECTIONS

These games work best when the adult knows how to play before playing with their child, so make sure to read the directions for any card game you want to play. A **set of directions** is included for evey card game! There is also a video link for each card game, which will show you exactly how to play.

Some of the games are for 2 people only, and some can be played with more. If you are playing with young children, it's best to play with just 2 or 3 people.

Make sure to shuffle the cards before playing the card games! Some games don't use the face cards, so remove them when the instructions say so.

HINTS

Each card game has **specific hints** that help only with that card game. Below are some **general hints** that can be helpful for all of the games:

1. Playing math games should be fun. Children learn better when they are having a good time and when they are not worried about making mistakes. If your child makes a mistake, ask questions like:
   - "How did you get that answer?"
   - "Is there another way you can figure that out?"
   - "Do you want to try again?"

   Helping your child try to figure out the answer is more helpful than telling them they were wrong.
2. Give your child time to think before they answer. If your child is having a hard time answering and you've given them some time to think, here are some things you can say to help:
   - "How can we figure this out together?"
   - "Have you done something like this before?"
   - "Let's see. How could we start?"
3. If your child needs more help, try the **specific hints** given in each card game.

VARIATIONS

A list of **variations** are given at the end of each card game to help you to:

1. **Make it easier** if your child is finding it too difficult
2. **Make it harder** if your child finds the game too easy
3. **Make it more interesting** if your chid is tired of this version

You can also try your own variations, and those your child comes up with. Inventing new games is a great way to have a good time and learn more math!

PLAYING CARDS

Types of cards

- **Number cards:** Most cards in a deck are number cards. The number in the corner matches the number of large shapes on the card. For example, a card with the number 10 in the corner will have 10 large shapes in the center.
- **Picture cards:** Some cards have a K, Q, or J in the corner. These are for the King, Queen, and Jack. These are also called "face cards."
- **Ace cards:** The Ace card has an A in the corner. Ace cards are worth 1.
  - **Math tip!** You can ask your child what they think an Ace card is worth after explaining that the number in the corner matches the number of shapes on the card. There is only one shape on the Ace cards, which is why they are worth 1.

Card game language

Here is some of the language used in the directions for the card games. Make sure you and your child are familiar with any language you need to play the games that you want to.

- A **deck** of cards refers to the whole pile of cards needed for the game.
- When you **shuffle** cards, you change the order of the cards by thoroughly mixing them up.
- When you **deal** cards, you pass them out to each player the way the rules of the game you're playing tell you to.
- A **hand** is the set of cards that each player has when playing a particular game.
- The **center pile** is the stack of cards in the middle. Each player picks up cards from the center pile.
- The **discard pile** is the stack of cards where players get rid of cards.
- The **saved pile** is the group of cards that a player wins. This pile is saved and counted at the end of the game.

THE STORIES

Children love stories! Here is a simple story about a **Royal Family** and their pet dragon **Sneeze** in the **Land of Numbers**. Read this story to your child before playing any of the card games. Every card game also comes with its own mini story that adds onto this one. Before you play each game, you can read the game's story to your child to make it more interesting!

The Royal Family and Sneeze the Dragon

In a place, far, far away, called the Land of Numbers, live the King of Math and the Queen of Tens, along with their son Count Jack. The family has a pet dragon named Sneeze. Sneeze is very special to the Royal Family because she is in charge of all the card games in the land. Everyone loves to play cards in the Land of Numbers.

Sneeze is a friendly dragon. But sometimes when she sneezes, a little flame of fire pops out of her mouth. To be safe, Sneeze always carries a little pink bucket of water next to her when she is playing cards with her friends.

Whenever Sneeze feels a sneeze coming on she will say:

Beware, beware, my nose has a tickle

If I sneeze, we'll be in a pickle.

When the King or Queen or Count Jack hear that, they scatter far and wide, and Sneeze swings her pink bucket under her nose and says, "ACHOO!" Then the little flame sizzles harmlessly into her bucket. A big puff of smoke rises out, and that is that. Then Sneeze calls out:

Achoo, achoo,

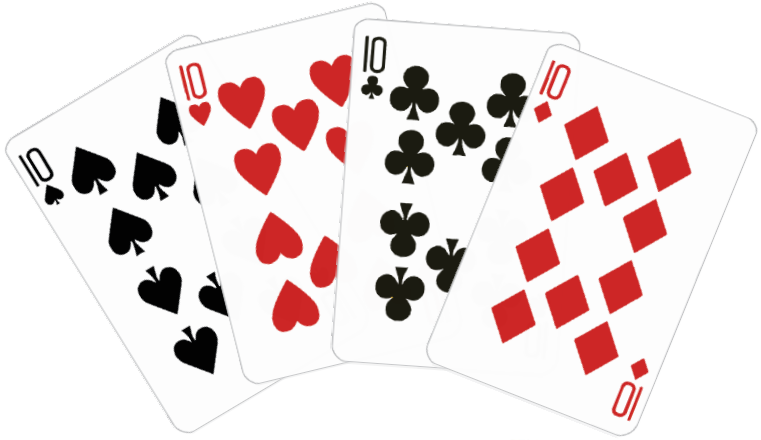
My sneeze is through

I'm ready for a card game

How about you?

Sometimes Sneeze and the members of the Royal Family will want to join in your card game. You never know when they will want to jump in play!

Here are all the card games that are played in the Land of Numbers. You and your family can play these card games any time you want.



Part 2: Card Games

Count Jack is Highest

STORY

*Count Jack loves to compare which numbers are **higher** and which are **lower.***

But sometimes he loves to just sneak in and win when he can.

You will see how he does this when you play this card game with him.

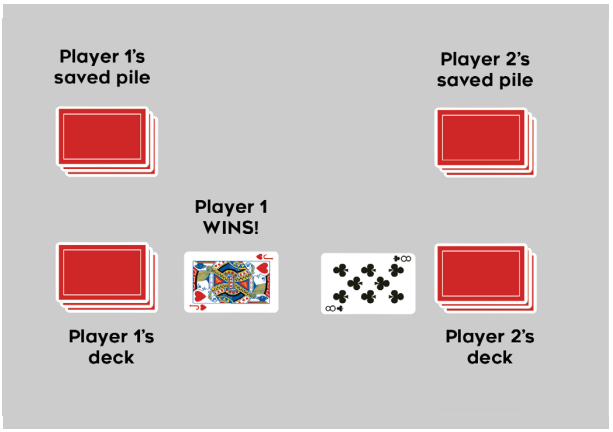
GOALS

MATH GOAL: INCREASE UNDERSTANDING OF LARGER AND SMALLER NUMBERS BY PRACTICING COMPARING NUMBERS WITHOUT COUNTING.

GAME GOAL: THE PLAYER WITH THE HIGHEST CARD NUMBER WINS EACH HAND, AND THE PLAYER WHO HAS THE MOST CARDS AT THE END, WINS THE GAME.

SETUP

- Take out all face cards except the Jacks. Aces count as 1.
- Be sure to shuffle the cards.
- Pass out all the cards in deck so that each player has an equal number.



HOW TO PLAY

HOW A TURN BEGINS. Players say "1,2,3 Jacks" and then turn over one card from their pile. Each player wants to have the highest numbered card or a Jack.

HOW A TURN ENDS. The player with the highest card wins all the cards, and puts the cards in their own saved pile of cards. **If a player gets a Jack, that player wins no matter what number the other players have.** If two players have the same card, they play another round. The person who wins gets all the cards.

HOW THE GAME ENDS. Play until the players have no cards left. The winner is the one with the most cards in their own saved pile.

For video card game instructions, please visit:

https://bit.ly/2SWKOF4

STORY ENDING: *Count Jack thanks you for playing the card game with him.*

HINTS FOR HELPING

- Your child may not be sure which number is higher. Then suggest counting from 1 to 10. Point out which number comes later. This shows that the later number when counting from 1 to 10 is also the higher number.

- To figure out which card is higher, you can also suggest looking at which card has more shapes.

VARIATIONS

MAKE IT EASIER

- Remove the Jacks from the deck and just use the number cards.

- Remove some of the higher numbers from the deck. You can play the game using only the numbers 1 through 5 or 1 through 7. When the child knows the lower numbers well you can begin to put one or more of the higher numbers back in the deck for the games.

MIX THINGS UP!

- Make the player with the lowest total on the cards (instead of the higher), the winner.

MAKE IT HARDER

- Each player puts out 2 cards, and the player with the highest number out of the 4, wins all 4 cards.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.

- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.

- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

Line Them Up

STORY

The King likes to line up the numbers from the lowest to the highest.

Do you want to see if you can do it as well?

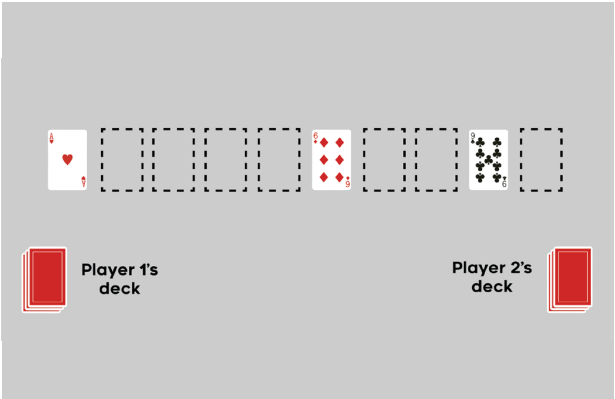
GOALS

MATH GOAL: PUTTING NUMBERS 1 TO 10 IN THE CORRECT ORDER.

GAME GOAL: TWO PLAYERS MAKE A NUMBER LINE TOGETHER.

SET UP

- Take out all face cards. Aces count as 1.
- Be sure to shuffle the cards.
- Pass out all the cards in deck so that each player has an equal number.
- Two players sit side by side so the number line they make together faces the same way for both players.



HOW TO PLAY

HOW A TURN BEGINS. Players take turns. On each turn, they take a card from the top of their own deck and put it where it would belong on a number line that goes from 1 to 10. The cards go in order with the lowest number (1) on the left and the highest number (10) on the right.

HOW A TURN ENDS. Each player in turn places their card in the correct spot on the same number line. If they draw a card that is already in the line-up, they place it on top of the card that is already in the correct spot.

HOW THE GAME ENDS. The game is over when the number line from 1 to 10 is completed. The person who puts down the final card to finish the number line wins.

For video card game instructions, please visit:

https://bit.ly/2ZmHyoU

STORY ENDING: ***The King*** *thanks you for playing the card game with him.*

HINTS FOR HELPING

- Suggest counting from 1 to 10 when your child is stuck. This will help them to remember the order of the numbers.
- Ask whether one card number is larger or smaller than another card number.
- Ask what numbers they are looking for. This helps them find the gaps in the order.
- Ask what number comes before another number, or what comes after.
- You can also ask, "Are there any numbers missing?" or suggest "We already have that card in the number line. What are we missing?"
- Model for your child how you figured out where to place the number in the correct order.

VARIATIONS

MAKE IT EASIER

- Make a short number line using only numbers 1 to 5, and remove the higher numbers from the deck.

MAKE IT HARDER

- If this game is too easy, you may want to go to the harder ordering game called **Sneeze Orders the Cards.**

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

Sneeze Orders the Cards

STORY

Sneeze is a friendly dragon who loves to play cards. But sometimes when she sneezes a little flame pops out of her mouth. So, to be safe she always carries a little pink bucket of water with her when she is playing cards with her friends.

She has lots of fun ordering the cards and putting them in the correct order from 1 to 10. You can do it too by joining her in this card game.

Sneeze (and family) say:
Achoo, achoo
My sneeze is through
I'm ready for a card game
How about you?

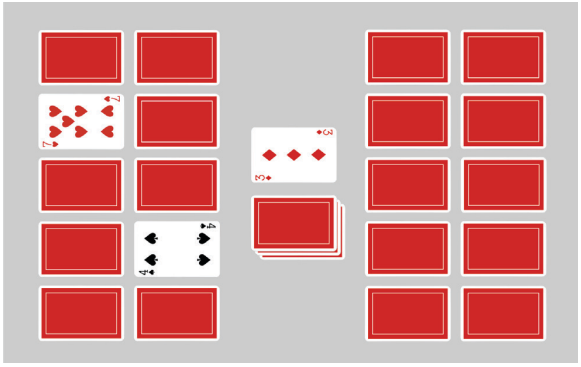
GOALS

MATH GOAL: PUTTING NUMBERS 1 TO 10 IN THE CORRECT ORDER.

GAME GOAL: TO REPLACE EACH FACE-DOWN CARD WITH THE CORRECT NUMBER CARD SO THE TOP ROW HAS ACE,2,3,4,5, AND THE BOTTOM ROW HAS 6,7,8,9,10.

SETUP

- Take out all face cards. Aces count as 1.
- Be sure to shuffle the cards.
- Players get 10 cards.
- Players put the cards face-down in 2 rows with 5 cards in each row.
- The rest of the deck is put in a pile in the center.
- Turn over 1 card and put it in a discard pile next to the center pile.



Example of the card layout for the Sneeze card game with the 7 and the 4 cards placed in the correct location in order from 1 to 5 and 6 to 10.

HOW TO PLAY

HOW A TURN BEGINS. Players can pick a card either from the center pile OR from the discard pile. The player puts this card, number-side-up, in the correct spot. Place the cards as if they were ordered from 1 (Ace) to 10. For example, if the player picks up a 6, the player puts that card in the 6-spot. Next, the face-down card already in the 6-spot is flipped over. Then move that card to the spot where it belongs.

HOW A TURN ENDS. A turn ends when a player flips over a card that is already in the correct spot. They should discard that card. For example, a player turns over a 2. But there is already a 2 in the 2 space. They then discard the 2, and their turn ends.

HOW THE GAME ENDS. The first person to make a number line from 1 to 10 wins.

For video card game instructions, please visit:

https://bit.ly/2YFHNy0

STORY ENDING: *Sneeze thanks you for playing the card game with her.*

HINTS FOR HELPING

- Suggest counting from 1 to 10 when your child is stuck. This will help them to remember the order of the numbers. This will also help the child practice and learn the order.
- If the child puts the number in the wrong spot, suggest that they point to each card as they say the numbers in counting order.
- Ask what numbers they are looking for. This helps them find the gaps in the order.
- Ask the child what number comes before a number, or what comes after.

VARIATIONS

MAKE IT EASIER

- Remove the cards from 6 to 10 from the deck. Then it will be changed to a 1-5 ordering game.
- You can also go to the easier ordering game called ***Line Them Up.***

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Hints to help your child try out new ways to solve the math.

GOALS

MATH GOAL: IDENTIFYING NUMBERS THAT ARE 1 MORE OR 1 LESS THAN ANOTHER NUMBER.

GAME GOAL: TO FIND A CARD WITH 1 MORE OR 1 LESS THAN THE NUMBER ON THE CARD IN THE CENTER PILE.

SET UP

- Take out all face cards. Aces count as 1.
- Be sure to shuffle the cards.
- Players get 4 cards each.
- Players put their cards in a row with numbers showing.
- The rest of the deck is put in a pile in the center.
- Players turn over the top card from the center pile and put it, number side up, in the **comparison pile**, next to the center pile. The cards in this pile are called **comparison cards**.

HOW TO PLAY

HOW A TURN BEGINS. A player chooses 1 card in their row that is either 1 higher or 1 lower than the number on top of the comparison pile. If they find it, they say "**1 MORE**" or "**1 LESS**" and put the card in their own saved pile. If they cannot find a card that is 1 more or 1 less than the comparison card they say "**PASS**" and their turn is over.

HOW A TURN ENDS. A turn ends by players filling in the empty space in their row with a card from the center pile or saying "**PASS**."
Note: the next turn starts by the player taking a card from the center pile and putting it number-side up in the comparison pile. They then look for a card in their row that is 1 more or 1 less than the comparison card at the top of the pile.

HOW THE GAME ENDS. The game continues until the center pile is out of cards or no more plays can be made. The player with more saved cards wins.

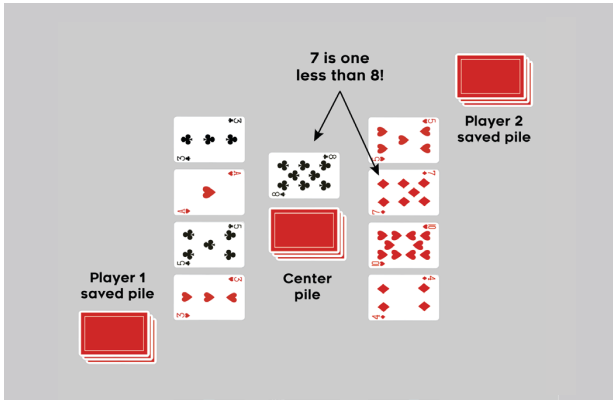
Number Neighbors

STORY

The Queen is always curious to find out which numbers are neighbors.

Number neighbors are numbers that are only 1 more or 1 less than the number she has chosen.

Can you help her find lots and lots of number neighbors?



For video card game instructions, please visit:

https://bit.ly/2K9tyJK

STORY ENDING: *The Queen thanks you for playing the card game with her.*

HINTS FOR HELPING

- Suggest counting from 1 to 10 when your child is stuck. This may help them to find whether they have a card that is 1 more or 1 less.
- Suggest using pennies or other objects to show how to find 1 more or 1 less.

VARIATIONS

MAKE IT EASIER

- Remove the cards from 6 to 10 from the deck. Then it will be changed to a 1-5 card game.

MAKE IT HARDER

- On each turn, players can put more than 1 card in their saved pile. Any card in the row that is 1 more or 1 less than the comparison card can go in the saved pile.
- Each player can have more than 4 cards in their row.
- Players can look for cards that are 2 or 3 numbers more or less than the comparison card.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

Easy Counting

STORY

The King likes to be lazy, so he finds a fast way to add up the numbers on the cards.

First, he finds the highest number card and moves it aside without counting on his fingers. Then he can use all of his fingers to count the second number. That way he saves a lot of time counting.

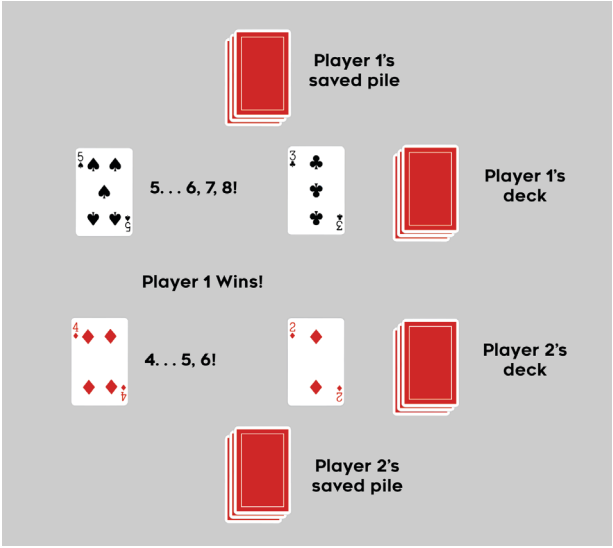
GOALS

MATH GOAL: PRACTICE ADDING 2 NUMBERS BY COUNTING-ON FROM THE HIGHER OF THE 2 NUMBERS.

GAME GOAL: THE PLAYER WITH THE HIGHEST TOTAL WINS EACH HAND. THE PLAYER WITH THE MOST TOTAL CARDS WINS.

SET UP

- Take out all face cards in the deck. Aces count as 1.
- Be sure to shuffle the cards.
- Play with 2 players.
- Pass out all the cards in the deck so that each player has an equal number of cards.



HOW TO PLAY

HOW A TURN BEGINS. Players take 2 cards from their pile and put them in a row number-side up. First, they should move the higher number card to the side without counting it. Then, they can save all their fingers for the lower number card. They say the higher number and count-on from there. For example, with 5+3, they can say "5" then add the 3 more ("6,7,8") by counting on their fingers to keep track. Players can say "I start with 5 so three more fingers are: 6,7,8. So, the total of 5+3 is 8."

HOW A TURN ENDS. The player with the highest total wins both hands and puts all 4 cards (2 from each player) in a personal saved pile to count at the end of the game. If players get doubles, count-on from either card. If there is a tie, play another round (2 more cards for each player) and the person who wins that round gets all 8 cards.

HOW THE GAME ENDS. Play until the players have no cards left. The winner is the one with the most cards in their own saved pile at the end.

For video card game instructions, please visit:

https://bit.ly/2GBzoSb

STORY ENDING: ***The King thanks you for playing the card game with him.***

HINTS FOR HELPING

- It will be helpful to start off by modeling for your child how to do the easier counting. Show them with your own cards how to say the first number and move that card aside. Then start counting from that number to add the numbers on the second card.
- Encouraging children to use this count-on approach helps them to be more accurate when counting because it is easier, but many children don't discover it on their own.
- When you move on to the other adding games, continue to encourage the count-on strategy rather than having the children count using their fingers or dots for both numbers.

VARIATIONS

MAKE IT EASIER

- Take some of the higher numbers (6,7,8,9,10) out of the deck.

MIX THINGS UP

- Make the player with the lowest total on the cards (instead of the highest) in each hand be the winner.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

Queen of 10's

STORY

__10__ is such a beautiful number.
The Queen loves __10__.

She is always thinking of different ways to make __10__ from smaller numbers.

When she can't think of a way she sometimes pretends to be a certain number just so she can make __10__.

You'll see when you play this game.

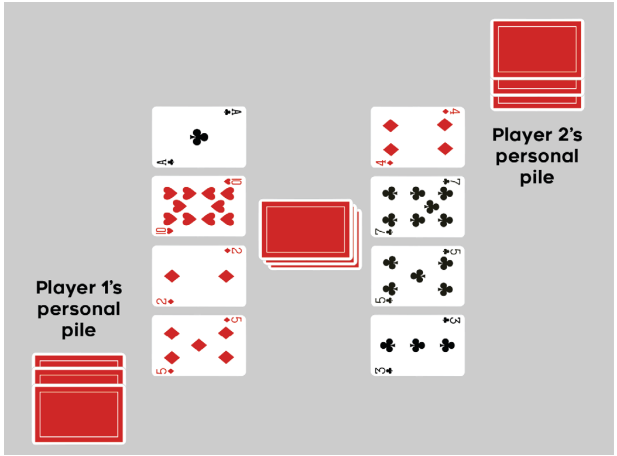
GOALS

MATH GOAL: PRACTICE FINDING PAIRS OF NUMBERS THAT ADD UP TO 10.

GAME GOAL: WHOEVER FINDS THE MOST CARDS ADDING UP TO 10, WINS THE GAME.

SET UP

- Take out all face cards except the Queens. Aces count as 1.
- Be sure to shuffle the cards.
- Give 4 cards to each player.
- The 4 cards are put in a row with numbers showing.
- The rest of the cards are put in a pile in the center.



HOW TO PLAY

HOW A TURN BEGINS. A player finds 2 cards in their row that add up to 10, or they can choose a 10 card. **The Queen of 10 card** is special because it can be used as any number from 1 to 10. So, the Queen can be combined with any other card to add up to 10. BUT you have to say out loud what number the Queen is pretending to be.

HOW A TURN ENDS. After choosing the cards, the players put them in their own pile of saved cards. When the player does not have any way of making 10, the player discards one card from their row of 4, and puts it at bottom of the center pile of cards. At the end of each turn, the player fills in any empty spaces in their row of 4 cards by taking cards from the top of the center pile.

HOW THE GAME ENDS. The game ends when the center pile of cards is gone or when there are no more ways to make 10 for any of the players. At the end of the game, each player counts their own pile of saved cards. The player with the most saved cards wins.

For video card game instructions, please visit:

https://bit.ly/2KbPGTK

STORY ENDING: ***The Queen thanks you for playing the card game with her.***

HINTS FOR HELPING

- You could show your child how to look for numbers that add up to 10. For example, select a number card in the child's row and say: "You have a 6 here. How many more do you need to add up to 10?"
- You can show your child a way to count more successfully by counting up from the highest number card, rather than counting all the numbers on both cards.
- For example, with 5+3, the child can say "5." Then they put the 5 card to the side. Next, they count up from 5 by using their fingers, saying, "I start with 5, so three more fingers are: 6,7,8. So the total of 5+3 is 8." **See the *Easy Counting* game to practice counting on.**
- You could try reminding the child of a related **math fact** that you think the child knows. For example, your child might have selected 5 + 5 to make 10 on the last turn. Then, you could say, "You know that 5 + 5 = 10. So, what number needs to be added to 6 to make 10? **See the *Hidden 10's* game to practice math facts.**
- Sometimes your child will find more than one way of adding numbers to make 10 in a turn. Your child might use three or more number cards on a turn to make 10. This shows the child is thinking hard about numbers. So, your child may be ready to try more than one way of making 10.

VARIATIONS

MAKE IT EASIER

- Take all the Queens out of the deck.

MAKE IT HARDER

- Have players add more cards in their row.
- Look for many different ways of making 10 on each turn.
- Look for cards that add up to totals other than 10, such as different ways of making 7, or 12, or 20.
- Try subtraction. For example, look for numbers that differ by 3 (4-1, 5-2, 6-3 etc.).

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

The King Pops Up

STORY

In this game, the King likes to pop up when you don't expect it.

*You never know when he will be **hiding** among the cards.*

*And when he does, **he always wins.** You'll see when we play the card game.*

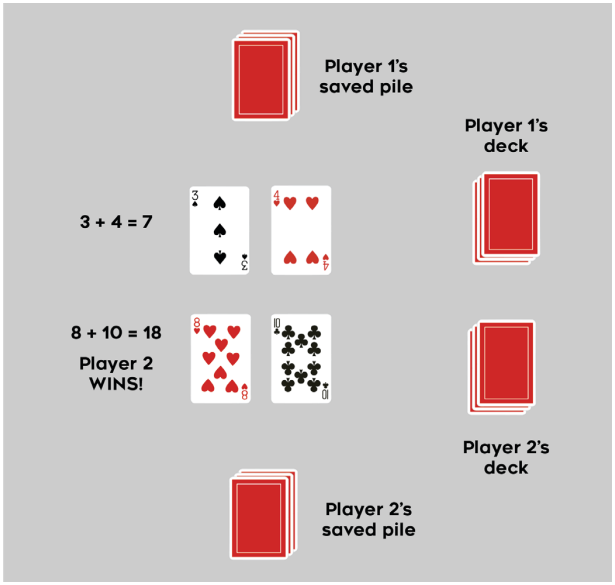
GOALS

MATH GOAL: PRACTICE ADDING 2 NUMBERS TO SUMS UP TO 20.

GAME GOAL: THE PLAYER WITH THE HIGHEST TOTALS WINS.

SET UP

- Take out all face cards except the Kings. Aces count as 1.
- Be sure to shuffle the cards.
- Pass out all the cards in the deck so that each player has an equal number.



HOW TO PLAY

HOW A TURN BEGINS. Players take 2 cards from their pile and put them in a row number side up. Each player adds their 2 cards together and then says the addition problem out loud. For example, "3+4=7 or 8+10=18."

HOW A TURN ENDS. The player with the highest total wins all the cards and puts these cards in their own pile of saved cards. If a player gets a King, that player wins no matter what the totals of the other players' cards are. If two players have the same total or both have Kings, play another round (2 more cards for each player). The person who wins that turn gets all the cards.

HOW THE GAME ENDS. Play until the players have no cards left. The winner is the one with the most cards in their own saved pile.

For video card game instructions, please visit:

https://bit.ly/2YiYVdR

STORY ENDING *The King thanks you for playing the card game with him.*

HINTS FOR HELPING

- If your child is having a hard time adding the numbers, you could suggest **counting with fingers or counting the shapes on the cards**.

- You can show your child a way to count more successfully by counting up from the highest number card, rather than counting all the numbers on both cards.

  For example, with 5+3, the child can say "5" then put the 5 card to the side. Next, they **count up** from five by using their fingers, saying "I start with 5, so three more fingers are: 6,7,8, so the total of 5+3 is 8." **See the *Easy Counting* game to practice counting-on.**

- Another way to help with adding 2 numbers is to suggest **math facts** to your child about the numbers on the cards. For, example, you could say, "Do you know the rule about adding 10 plus another number? Ten plus a number equals the number with a 1 in front of it. For example, 10+6=16."

- For children who know some math facts, you can try reminding the child of a **related math fact not on the cards** that you think the child knows. They can build on facts they do know.

  For example, children often know their **doubles** or **tens**. So, when trying to add 6+5 you could say, "What is 5+5?" After the child answers "10" say "You have a 6 which is 1 more than 5, so what is 6+5?" For 8+3, you could say, "what is 8+2? then what is 8+3?" **See the *Hidden 10's* game to practice math facts.**

VARIATIONS

MAKE IT EASIER

- Take all the Kings out of the deck.

MIX THINGS UP

- Make the player with the lowest total on the cards (instead of the highest), the winner.
- Have the King be a wild card and be any number the player wants.

MAKE IT HARDER

- Leave all the face cards in the deck (Kings, Queens, and Jacks) and have each of them count as 10 when adding the numbers on the 2 cards to find the total.
- Give each player 3 cards to be added up instead of 2 cards.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

Jack Subtracts

STORY

Count Jack is tricky! Sometimes when he plays card games, he likes to take numbers away.

Can you figure out what numbers he will get when he takes a small number away from a big number?

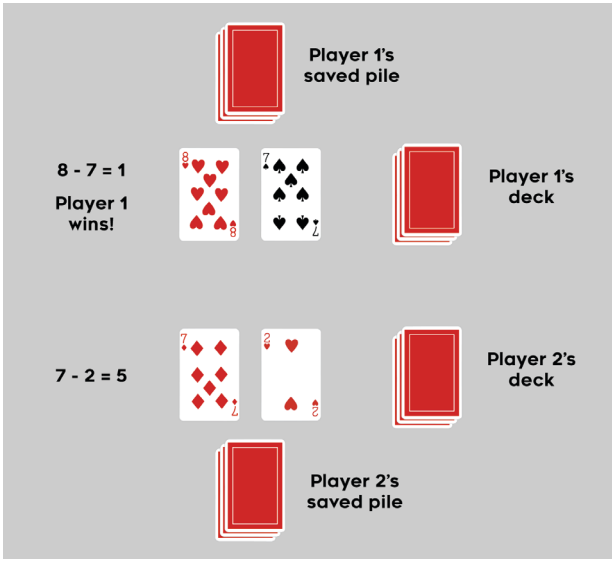
GOALS

MATH GOAL: PRACTICE SUBTRACTING A LOWER NUMBER AWAY FROM A HIGHER NUMBER.

GAME GOAL: THE PLAYER WITH THE SMALLEST DIFFERENCE WINS.

SETUP

- Take out all face cards. Aces count as 1.
- Be sure to shuffle the cards.
- Pass out all the cards in the deck so that each player has an equal number.
- Players take 2 cards from their pile and put them in a row, number side up.



HOW TO PLAY

HOW A TURN BEGINS. In order to subtract, each player takes away the lower number from the higher number. For example, "If you take 2 away from 7 you are left with 5. So, 7–2=5."

HOW A TURN ENDS. The player with the smallest difference between the 2 numbers wins all the cards and puts these cards in their own pile of saved cards. For example, the difference between 8-7=**1** is smaller than 7-2=**5**. A difference is the amount left after taking away a lower number from a higher number. If both players have the same difference, play another round, with 2 more cards for each player. The person who wins that turn gets all the cards.

HOW THE GAME ENDS. Play until the players have no cards left. The winner is the one with the most cards in their own saved pile.

For video card game instructions, please visit:

https://bit.ly/2GFX342

STORY ENDING: *Count Jack thanks you for playing the card game with him.*

HINTS FOR HELPING

- Suggest using fingers. Put up fingers to match the higher number. Then put down the number of fingers to match the lower number. For example, if a child has a 7 and a 2, put up 7 fingers, then put down 2 of them. Count the 5 fingers still held up.
- Use things you have at home. Get a small pile of pennies, spoons, or other small items. Show your child how to start with one number, and then take away some items.
- Count back. Start counting at the higher number, and count backward by one. For example, if a child has a 7 and a 2, say "7,6,5." See, you counted backward two times to match the 2. Children can use their fingers or the shapes on the cards to keep track of how many times they have counted back.
- Solve an easier problem. If your child is trying to figure out 7 minus 2, try 7 minus 1 first.
- Make up a visual story to go with the numbers. For example, if you have a 7 and a 5 you could say, "I have 7 cookies and I ate 2 of them. How many do I have left?"
- If your child turns over two of the same number, help them see that the difference between the two numbers is zero.

VARIATIONS

MAKE IT EASIER

- Remove the cards from 6 to 10 from the deck. Then it will be changed to a 1-5 game.

MIX THINGS UP!

- The player with the largest difference wins.
- Ask your child to estimate who will be the winner of each round before doing the subtraction. Ask how they figured it out.
- See if your child can see the relationship between addition and subtraction. For example, if the child knows 5+2=7, can they use that to figure out 7-2=5?

MAKE IT HARDER

- Leave all the face cards in the deck. Each face card can count as 10.
- Give each player 3 cards. Players should add the two highest cards and subtract the lowest card.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Variations to make the game harder. Use the Hints to help your child try out new ways to solve the math.

What's the Secret Number?

STORY

Sneeze is a friendly dragon who loves to play cards. But sometimes when she sneezes a little flame pops out of her mouth. So, to be safe she always carries a little pink bucket of water with her when she is playing cards with her friends.

Sneeze likes to figure out secret numbers. Can you help her? In this game, Sneeze will only see one number, and we'll have to help her figure out the other number. Ready?

Sneeze (and family) say:

Achoo, achoo
My sneeze is through
I'm ready for a card game
How about you?

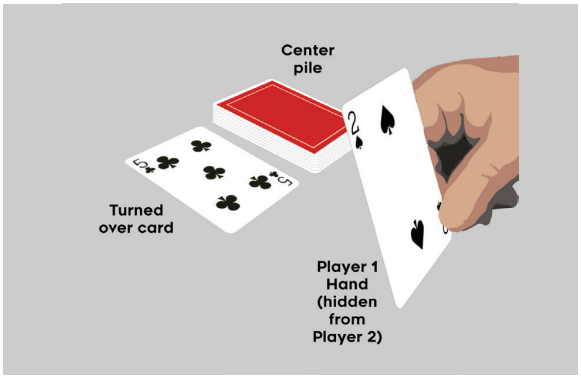
GOALS

MATH GOAL: PRACTICE FINDING OUT WHAT NUMBER NEEDS TO BE ADDED TO ANOTHER NUMBER TO GET A PARTICULAR TOTAL.

GAME GOAL: FIND THE SECRET NUMBER FOR EACH ROUND.

SET UP

- Take out all face cards and all cards 6 through 10. Aces count as 1.
- Be sure to shuffle the cards.
- Put all the remaining 1 through 5 cards in a pile in the center of the table number-side down.
- Model for the child how to play a round before playing.



HOW TO PLAY

HOW A TURN BEGINS. Player 1 takes a card from the center pile and puts it number-side up on the table. Player 1 takes a second card and holds it so the other players can't see it. Player 1 silently adds this secret number to the number on the table. Player 1 tells Player 2, "When I add this number (point to card on table) to my secret number, the total equals ___. So, what's my secret number?"

Player 2 must figure out what secret number Player 1 is holding. Player 1 is holding the secret number 2, and therefore says that the total is 7. Player 2 figures out what the missing number is, and says "Is your secret number a 2?" If the answer is not correct, Player 1 says "Try again."

HOW A TURN ENDS. At the end, player 1 shows the secret number. Players 1 and 2 double-check to make sure the answer is correct. Player 1 puts all the cards number-side down in the discard pile next to the center pile. Then it is player 2's turn.

HOW THE GAME ENDS. The players continue to take turns picking and figuring out the secret card until time is up or until they run out of cards.

For video card game instructions, please visit:

https://bit.ly/2Oz2MPq

STORY ENDING: *Sneeze thanks you for playing the card game with her.*

HINTS FOR HELPING

- If a child is finding it hard to figure out the missing number and is asked to "try again" several times, provide encouragement ("Is there another way you can figure it out?") or provide one of the hints below. Helping your child try to figure out the answer is better for learning than telling them they were wrong.
- You can show your child a way to find the missing number more successfully by counting up from the turned-up center card to the total given by the other player. Start with the number on the center card and count on using fingers until you get to the total. For example, if the center card is 5 and the total is 8, start with 5 and say: "I start with 5, so three more fingers are 6,7,8 and the secret number is 3." **See the *Easy Counting* game to practice counting-on.**
- If your child is having difficulty with the task, make up a story to go with the numbers. For example, if there is a 5 on the table, and you are holding a 2, you could say, "I have 5 cookies. I wish I had 7 cookies. How many more do I need?" This can be helpful for young children who are learning to solve problems.
- Ask your child "How do you know?" This question can be used at any time, whether your child is correct or incorrect. If they are correct, it will help them explain their strategy. If they are incorrect, they can figure this out on their own.
- Use answers from past turns as hints. For example, suggest "If we need 2 more to make 7, how many to we need to make 8?"

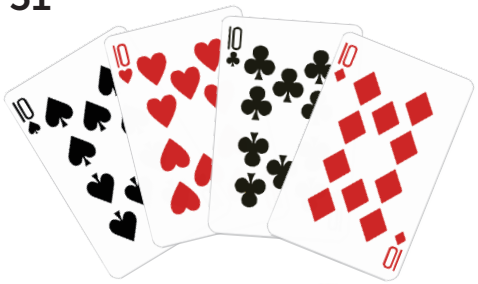
VARIATIONS

MAKE IT HARDER

- Add higher numbers to the deck of cards one at a time until you play with all 1 to 10 cards.

WHAT GAME TO PLAY NEXT

- When your child can play this game easily, you can go to the chart called **Picking a Card Game** in the booklet.
- Ask your child the next set of questions on the chart, and it will help you find the next card game to play.
- It takes many months for a child to learn a new math skill. So, if your child isn't ready, just have fun playing the games. Use the Hints to help your child try out new ways to solve the math.



Hidden 10's

STORY

10 is such a beautiful number. The whole Royal Family loves 10.

They think of 10 as part of the Royal Family because 10's help them solve difficult math problems.

See how getting to 10 can help you solve hard addition problems when you play this card game.

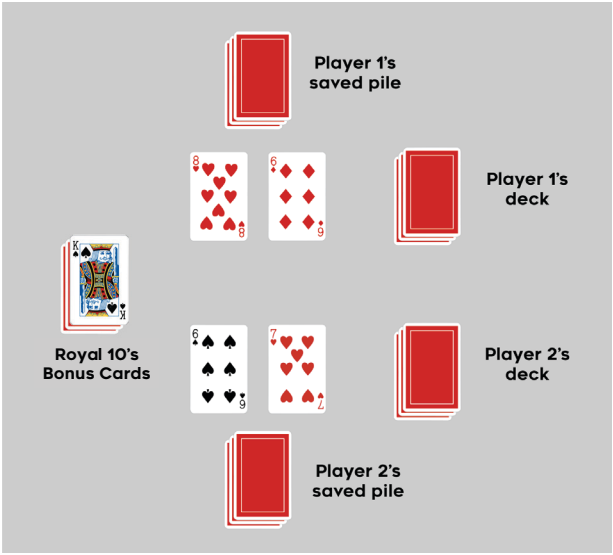
GOALS

MATH GOAL: FINDING WAYS OF USING 10'S TO SOLVE HARDER ADDITION PROBLEMS.

GAME GOAL: WHOEVER WINS THE MOST CARDS WINS THE GAME.

SET UP

- Be sure to shuffle and sort the cards before beginning.
- Place all ***Kings***, ***Queens***, ***Jacks***, and ***10's*** in a pile in the center. In this game, all these 10's and face cards are considered equal to 10 and are called the ***Royal 10's***.
- Remove all the ace, 2, 3, and 4 cards from the deck. Pass out all the remaining cards number side down (cards 5 through 9), so that each player has an equal number of cards.



HOW TO PLAY

HOW A TURN BEGINS. Player 1 turns over 2 cards and adds the 2 numbers to get the sum. If they add the 2 cards correctly, they put them in their saved pile. But if they can say how they ***got to 10*** to solve the addition more easily, they get to take an extra bonus card. They can take the bonus card from the pile of ***Royal 10*** cards and put it in their saved pile.

For example, if they are trying to solve 8+6, they can say, "I can break the 6 down into 2+4. I know 8+2=10. So, I take the 2 from the 6 and add it to the 8 to make 10. 10 plus the left-over 4 makes 14. So, 8+6=14." Or a player with a 7 and a 6 might say, I can break the 6 down into 3+3. So, I take a 3 from the 6 and add it to the 7 to make 10. So, 10 plus the left-over 3 is 13. So, 7+6=13." This approach is useful because it helps you solve harder addition problems when you don't know the answer.

HOW A TURN ENDS. When player 1 finds the sum of the two cards correctly, and states the way they got to the sum, it is the turn of player 2.

HOW THE GAME ENDS. The game ends when there are no more cards to play. At the end of the game, the players count their own pile of saved cards. The player with the most saved cards wins.

For video card game instructions, please visit:

https://bit.ly/2Yl21xX

STORY ENDING: ***The Royal 10's thank you for playing this card game with them.***

HINTS FOR HELPING

- First, show your child how you can solve the addition problem on your cards by **getting to 10**. Say aloud how you found the 10 and got to the correct answer. Then help the child solve their first hand.
- For children who are using counting, have them say the number on the first card. Then, suggest covering up the exact number of shapes on the 2nd card that would be needed to add to the first card to make 10. For example, for 7+6, they would add 3 to the 7-card to **get to 10**. So, they would cover 3 of the dots on the 6-card to get to 10. They would say, "7+3 makes 10." Then they would count the remaining 3 dots on the 6-card ("11,12,13"), and say 7+6=13.
- For children who know some math facts, you can help them use lots of the math facts they know to solve the more difficult problems. Try reminding the child of a related math fact not on the cards that you think the child knows. They can break down the hard math problem into easier problems by building on the facts they do know.

  For example, children often know their **doubles**. So, when trying to add 6+5 you could say, "What is 5+5?" After the child answers "10," say "You have a 6 which is 1 more than 5, so what is 6+5?"
- To solve by **getting to 10** for teen numbers, you could say, "Do you know the rule about adding 10 plus another number? Ten plus a number equals the number with a 1 in front of it. For example, 10+6=16."

VARIATIONS

MAKE IT EASIER

- Use **getting to doubles** instead of **getting to 10** to solve problems with sums less than 10.

MIX THINGS UP

- Have players figure out how to **get to 10** in different ways.

MAKE IT HARDER

- Use 3 cards rather than 2.
- Play with all the cards rather than just numbers 6 to 9. Have players figure out how to break down the addition problem into simpler problems, using **other math facts** to solve it in addition to **getting to 10**.

Congratulations, You Played the Last Card Game!

- Now you and your family can make up your own card games.