## 4-group Playing Cards

Open the box of 4-group Playing Cards. Remove the instruction sheet, read and store it in a safe place. It is hard to get back in the box! Read the red backed cards and store them with the instruction sheet or toss them. Remove the perforated notches from the odd numbered cards. DO NOT throw away the four blank cards. They are the zeros!


Your child can practice many math skills through enjoyable card games. However, the number patterns found on traditional playing cards are visually difficult. Look at the 3, the 2, and the 5 playing cards. (Figure 1) Notice how the 3 and the 2 cards cannot be combined into the 5 -pattern without rearranging the hearts.

The number patterns on 4-group Playing Cards help children see how numbers relate to each other. Each number pattern fits together with all the others to form the pattern for their sum (to 10 ). For many young children this additional visual cue is a critical bridge to the difficult task of memorizing math facts. Look at the cards for 3, 2, and 5. (Figure 2) Notice how the 3 and the 2 cards can be combined to form a 5 -pattern without rearranging the shapes.


Children learn to recognize the patterns on 4-group Playing Cards by looking for the groups of four in each pattern. (Figure 3)

Odd numbered cards are notched to allow two odd numbers to nest and form an even number. (Figure 4)


The unique 4-group Playing Cards use four shapes to represent each number pattern; squares, circles, pluses, and hexagons; making the cards useful for sorting and matching by shape or by number.

## Card Games to Practice Recognizing the 4-group Number Patterns

Adjust the difficulty of the games by varying the cards. Start with the cards 0 to 5 . When your child is comfortable with $0-5$, play with the cards 0 to 6 . When your child is comfortable with $0-6$, play with the cards 0 to 7 .
Add a number each time until you are playing with 0 to 10.

## More, Less, Same 2 players

Place the cards face down in a pile. Each player in turn picks up the top card, places it face up on the table, and says the number. (Your child may count at first, but will soon recognize at a glance how many.)
The player who has the highest number, says, "I have more." The player with the smaller number, says, "I have less." If both numbers are the same, both players say, "We have the same!" It is important for the child to say the number and not just look at who has more.
Each player then places his card in the discard pile. When all cards have been played, play again!

## Go Fish Matching 2-4 players

Place all the cards face down on the table and spread them out in a "pond." Players take 3 cards to form a hand. (For hands too small to hold the cards use a barrier between the players and put the hand face up on the table.) Player One asks, "Does anyone have a $\qquad$ (number in his hand)?"
Any player who has a matching number card may give it to Player One.
Player One places the two matching cards in his "bucket" on the table in front of him.
If no one has a matching card, they all say, "No. Go fish!"
Player One draws a card from the "pond" and it is the next player's turn.
If a player runs out of cards, he draws three more cards from the "pond." Play until the "pond" is empty.

## Card Games to Practice Addition - Basic Sums (4-10)

Make__ (a Sum 4-10) 2 players
Choose a number for your sum. Set aside all cards higher than this number, i.e. if you want to play Make Seven remove the eights, nines and tens.
Lay out four rows of four cards face-up. (Figure 1)
Place the rest of the cards face-down for the draw pile.
Players take turns making the sum, using combinations of two of the face-up cards. Lay the chosen cards face-up on the table to form the number pattern for the sum.
After each player's turn, take cards from the draw pile and replace the used cards with new ones face-up.


Play until no more combinations for the sum can be made.
For fun, read your "equations" for the ways you made the sum. For example, if you have a 5 and a 2 together on the table, point to each card and say, "Five plus two equals seven," and, "Two plus five equals seven."

## Target Number to

$\qquad$ (a Sum 4-10) 2 players
Choose a number for your sum. Set aside all cards higher than this number: if you want to play Target Number to Seven remove the eights, nines and tens. Place one card of your Target Number face up on the
 table. Lay four cards face up in a row. Place the rest of the cards face-down to form the draw pile. (Figure 2) Player One tries to combine two of the four cards to equal the Target Number.
If he is successful, he takes the cards and lays them down to form the Target number pattern.
He then replaces the cards he took from the row with new cards from the draw pile.
If he cannot make the Target Number, he takes a card from the draw pile and places it face-up at the end of the row. It is now Player Two's turn.
Play ends when no more combinations will make the Target Number. The player with the most Target Number combinations wins.
For fun, read your "equations" for the ways you made the sum. For example, if you have a 5 and a 2 together on the table, point to each card and say, "Five plus two equals seven," and, "Two plus five equals seven."

## Go Fish to <br> $\qquad$ (a sum 4-10) 2-4 players

Choose a number for your sum. Set aside all cards higher than this number: if you want to play Go Fish to Seven remove the eights, nines and tens. Place the cards face-down on the table and spread them out in a "pond." Players take 3 cards to form a hand.
Player One asks, "Does anyone have a $\qquad$ (card that makes the sum when added to a card in her hand)?"
For example, if the sum is 7 and she has a 5 , she would ask for a 2 .
Any player who has the requested card may give it to Player One.
She then lays down the two cards face-up to form the number pattern for the sum.
If no one has a matching card, they all say, "No. Go fish!"
Player One draws a card from the "pond" and it is the next player's turn. Play until the "pond" is empty.
For fun, read your "equations" for the ways you made the sum. For example, if you have a 5 and a 2 together on the table, point to each card and say, "Five plus two equals seven," and, "Two plus five equals seven."

## Card Games to Practice Addition with Regrouping

More, Less, Same - advanced 2 players
Place all the cards face down in a pile. Each player in turn picks up the top two cards, adds them together by placing them in the pattern for their sum, and says the equation. The player who has the highest number, says, "I have more." The player who has the lowest number, says, "I have less."
If the cards are the same number the players say in unison, "We have the same!"
Each player then places his cards in the discard pile. When all cards have been played, play again!
For a competitive game, the highest number takes the cards. Player with the most cards at the end wins!


Target Number with a Ten
Remove one 10 from the deck and place it face-up on the table. Lay four cards in a row face-up on the table. Place the rest of the cards stacked face-down to form a draw pile.
Turn over the top card of the draw pile and place it to the right of the


10 already on the table. This makes a Target Number between 10 and 20. (See Figure 3)
Player One tries to add any combination of the four cards to equal the Target Number.
If he is successful, he takes the cards and replaces them with new cards from the draw pile.
If he cannot make the Target Number, he takes a card from the draw pile and places it face-up at the end of the row. It is now Player Two's turn.
Play ends when no more combinations will make the Target Number. The player with the most cards wins.
In the example in Figure 3, Player One might say, "I know that 7 and 3 make 10. If I use 3 from the 5, I will have 2 left. Those 2 can go with the 6 to make 8, so I will have a 10 and an 8 which equals the Target Number 18.
So, $7+5+6=18$." Player One then takes the cards 7,5 and 6 and replaces them with new cards from the draw pile.

