

Cognitive Cards Activities

1) *Targets: Selective attention, working memory*

Sort a full deck of cards into the following groups:

- Even-numbered red cards and odd-numbered black cards
- All face cards and all hearts
- All 2's and odd-numbered spades
- All 5's and all diamonds
- All 8's and black face cards
- Odd-numbered clubs and even-numbered hearts
- Odd-numbered spades and even-numbered diamonds
- Red Queens and odd-numbered black cards
- All Aces and even-numbered red cards
- All diamonds and spades between 2-8
- Odd-numbered diamonds and hearts between 3-9
- All Kings and clubs between 5-10
- Diamonds between 2-6 and spades between 7-10
- All hearts and even-numbered clubs
- All Jacks and red cards between 2-5
- All 3's and black cards between 7-10
- Hearts between 5-7 and clubs between 8-10
- All 7's and even-numbered black cards
- All clubs and red cards between 3-7
- Red face cards and black cards between 4-8

2) *Targets: Sustained attention, immediate visual memory*

Sort cards by suit with two of the piles face down to practice memory.

- Start by finding all 4 Aces and laying them out on the table.
- Turn the Ace of Hearts and Ace of Spades facedown and leave the remaining Aces face-up.
- Sort the cards into the piles by suit, leaving all of the Hearts and Spades facedown. Try to remember which ones are the correct piles for Hearts and Spades without looking.
- Repeat with other combinations of suits that are face down
- Leave clubs and diamonds face down
- Leave hearts and diamonds face down
- Leave clubs and spades face down
- For an extra challenge: Leave 3 suits face down and then try leaving all 4 suits face down

3) *Targets: Alternating attention, working memory*

Remove Aces and face cards from the deck. Turn the remaining cards face down in a pile. As you turn the cards face-up, alternate between saying the value of each card and saying the first letter of each card value (i.e. “T” for two, “S” for seven).

- For example if the first four cards were 2, 4, 5, 7, you would say “2, F, 5, S.”
- For an extra challenge: Alternate between 3 or 4 actions such as “value, first letter of value, color, suit”

4) *Targets: Sustained attention, working memory*

Use a full deck of cards and turn 2 of the cards face-up. Add the total of the two cards and say the sum out loud. Turn over a new card and add the total of the second and third cards. Continue turning over 1 new card and adding the total of the last two cards that have been turned over (for example: add the third and fourth cards, the fourth and fifth cards, the fifth and sixth cards, etc.).

- Aces are worth 1, all face cards are worth 10

5) *Targets: Alternating attention*

Separate a full deck of cards into 2 equal stacks. Turn over the top card from each stack and add the total. Turn over the next card from each stack and subtract the smaller value from the larger value. Turn over a third card from each stack and add the total. Turn over a fourth card from each stack and subtract the smaller value from the larger value. Continue turning over 1 new card from each stack and alternate addition and subtraction.

- Aces are worth 1, Jacks are worth 11, Queens are worth 12, Kings are worth 13.
- For an extra challenge: you can alternate between 3 actions (addition, subtraction, and multiplication)

6) *Targets: Selective attention, immediate visual memory*

Use 2 full decks of cards. Each person gets one deck. One person should create a sequence of 3 cards turned face-up. The second person should memorize the sequence of cards for 10-20 seconds. Then, turn the 3 cards face down. The second person should replicate the sequence of 3 cards using his/her own deck.

Next, the first and second person should switch roles and the second person should create a sequence of 3 cards for the first person to memorize. If you are successful with 3 cards, try memorizing a sequence of 4-5 cards. See how many cards you can memorize in the correct order.

7) *Targets: Selective attention, working memory, divergent naming*

Use a full deck of cards and assign 2 letters to each card value:

- Ace= A, N
- 2= B, O
- 3= C, P
- 4= D, Q
- 5= E, R
- 6= F, S
- 7= G, T
- 8= H, U
- 9= I, V
- 10= J, W
- Jack= K, X
- Queen= L, Y
- King = M, Z

As you turn over each card, say an animal that starts with one of the two corresponding letters. For example if you turn over a 5, you could say “elephant” or “rhino.” Go through the entire deck and try not to repeat any of the animals more than once. Repeat the same procedures by saying a food or the name of a famous person for each letter.

8) Targets: Selective attention, working memory

Start with a full deck of cards. Place 4 cards turned face-up in a diamond pattern like directions on a compass (north, east, south, west). Turn the card with the highest value face down. If there is a tie for the highest value, turn both cards face down. Place 4 new cards on top of the original cards and turn the card with the highest value face down again. Continue in this manner until you run out of cards. Keep a running total of how many cards have been turned face down in the north” position of the diamond. You may repeat these procedures and keep a running total of how many cards have been turned face down in a different position of the diamond (east, south, or west).

9) Targets: Sustained attention, working memory

Start with a full deck of cards turned face down in a stack. As you flip over cards, remember the following rule: say “one” for each heart that is turned over, say “two” for each club that is turned over, say “three” for each diamond that is turned over, and say “four” for each spade that is turned over. Continue in this manner until you run out of cards. Try to remember which number you are supposed to say for each suit without looking back at the rules.

10) Targets: Sustained attention, selective attention, working memory

Start with a full deck of cards. Place four cards face-up in a row. Memorize the value and location of each card and then turn them face down. Start flipping over the remaining cards. If the value of the card that you flipped over matches one of the face down cards in the row, place it on the appropriate stack face down. If the card does not match the value of one of the face down cards, discard it. Continue until you find all 4 cards that match the value of the face down cards.

- For an extra challenge: after you find a match for one of the face down cards in the row, replace it with a new face down card so that the four cards to remember are always shifting.

11) Targets: Selective attention, immediate visual memory

One person should place 4 cards face up in a row. The second person should memorize the value and suit of each card. The first person should gather up the 4 cards, remove one, and lay the 3 remaining cards back on the table. The second person should try to name the value and suit of the missing card. The two people should switch roles and the second person should lay out 4 new cards for the first person to memorize.

- For an extra challenge, try starting with 5-6 cards instead of 4. You can also try removing 2 cards instead of only 1.

12) Targets: Selective attention, working memory

Place all cards in a stack face down and turn over the top card. Flip over the next card and place it on top of the first card. If the value of the second card is higher than the first card, say the card's suit. If the value of the second card is lower than the first card, say the card's color. Flip over a third card and place it on top of the second card. If the value of the third card is higher than the second card, say the card's suit. If the value of the third card is lower, say the card's color. Continue flipping over cards one at a time and performing the appropriate action.

- For an extra challenge: Switch the actions halfway through the activity so that higher values now mean you say the color and lower values now mean you say the suit.