

# Equipping Minds with Games



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## BLINK



Example of step #10 sorting by the number in the first row, color in the middle row, and shape in the top row.

**Cognitive Skill:** visual working memory, visual & auditory processing, and logic

### Challenge:

1. Place the cards face up one at a time and ask them to say the number they see on the card. If they cannot identify five items, do not use this card initially but add later when they are ready. You can time how quickly they can do the entire deck.
2. Next, sort the deck by number. Place a card with one item, two items, three items, four items, and five items. Then, take a card and say “Two on two.” Take turns playing with the student.
3. Place the cards face up one at a time and ask them to say the color they see on the card. If they cannot identify some colors, do not use this card initially but add later when they are ready.
4. Next, sort the deck by colors. Place a card with one of each color and say “Red on Red.”
5. Place the cards face up one at a time and ask them to say the shape they see on the card. Most students will name the triangle and star. However, the “moon” may be a moon, crescent, smile, banana... The “drop” may be a rain or tear drop, a balloon, light bulb.... The “lightening” may be storm, bolt, thunder, zig zag.... The “flower” may be a clover, cloud, cookie, popcorn...
6. Next, sort the deck by shapes. Place a card with one of each shape and say “Star on Star.”

7. Place the cards down one at a time, and alternate by saying the number of the first card, the color of the second card, and the shape of the third card. Continue this pattern with the entire deck.
8. Place the cards down one at a time and alternate by saying the number of the first card, number and color of the second card, number, color, and shape of the third. Continue pattern.
9. Say the number, color, and shape of each card. "Two red stars."
10. Sort by number, color, and shape as shown in the picture. The student will place the number in the first row, color in the middle row, and the shape in the top row. Always use language when sorting.
11. Play the game as directed by the Blink instructions with the following adaptations. Take turns matching either the same number, color, or shape. When placing your card down say, "two on two" or "blue on blue" or "triangle on triangle."
12. Then, after a few weeks add "two on two, same number," "blue on blue, same color," and "triangle on triangle, same shape." Finally, simply say, "same number," "same color", or "same shape."
13. When the student is ready, play at a fast past as instructed and time them saying what they are playing and also playing silently.

## QWITCH



Example for step #12

**Cognitive Skill:** visual memory, long term memory, auditory and visual processing,

### Challenge:

1. Say the letter on each card.
2. Say the number on each card.
3. Sort the cards by letters and say "B on B." You can also say the sound to the letters.
4. Sort the cards by numbers and say "4 or 4."
5. Alternate saying the number on the first card and the letter on the next card.
6. Place 6 cards face up and find the matching (=) letter or number. Say the match that you see.
7. Shuffle the deck and divide the cards equally. Place 2 cards in the center pile. Each player has 5 cards. Begin by playing the game = (equal) and match the same number or letter. Say what you are matching, "8 on 8," or "C on C."
8. Place 6 cards face up and find letter or number which would be + (plus 1). Say the pair that you see such as "3 and 4" or "C and D."
9. Shuffle the deck and divide the cards equally. Place 2 cards in the center pile. Each player has 5 cards. Play = by matching the same letter and + by playing one number higher. The number 8 does moves up or wraparound to 1. Say the letter or number as it is played.
10. Shuffle the deck and divide the cards equally. Place 2 cards in the center pile. Each player has 5 cards. Play + with the number and letter. The letter H does move up or wrap around to A.
11. Shuffle the deck and divide the cards equally. Place 2 cards in the center pile. Each player has 5 cards. Play - with the number and letter. The number 1 does wraparound to 8 and the letter A does wrap around to H.
12. Shuffle the deck and divide the cards equally. Each player has 5 cards. Place the cards into 3 piles = (E3 is E or 3) + (D4 is E or 5), the third pile - (F7 is E or 6) as seen in the picture. When subtracting, 1 is 8, and A is H / adding 8 is 1 and H is A.



13. Play alone, and time yourself; compete against your best time. You can place 3 cards in the center pile when playing against yourself.
14. Place the cards down one at a time and alternate saying = on the first card (A3 is A3), + on the second card (B1 is C2), and – on the third card (F6 is E 5). Continue saying this pattern for the entire deck.

## SET



Example for #14

**Cognitive Skill:** visual memory, long term memory, auditory and visual processing, logic and reasoning

### Challenge:

1. Place the cards face up one at a time and ask them to say the number they see on the card. You can time how quickly they can do the entire deck.
2. Next, sort the deck by number. Place a card with one item, two items, and three items. Then, take a card and say “Two on two.” Take turns playing with the student.
3. Place the cards face up one at a time and ask them to say the color they see on the card.
4. Next, sort the deck by colors. Place a card with one of each color and say “green on green, red on red, and purple on purple.”
5. Place the cards face up one at a time and ask them to say the shape they see on the card. Most students will name the diamond and ova. However, the “squiggle” may be a squiggle, wave, worm...
6. Next, sort the deck by shapes. Place a card with one of each shape and say “Oval on Oval.”
7. Place the cards face up one at a time and ask them to say the pattern/shading they see on the card of solid, stripped, or outlined.
8. Next, sort the deck by pattern/shading. Place a card with one of each pattern/shading and say “solid on solid.”
9. Place the cards down one at a time, and alternate by saying the number of the first card, the color of the second card, and the pattern/shading of the third card and shape of the fourth card pattern/shading. Continue this pattern with the entire deck.

10. Say number of the first card, number and color of the second card, number, color, and pattern of the third and number, color, pattern, and shape. Continue pattern.
11. Say the number, color, pattern, and shape of each card. "Two red solid diamonds."
12. Sort by number, color, pattern, and shape. The student will place the number in the first row, color in the second row, pattern in the third row and the shape in the fourth row. Always use language when sorting.
13. Show examples of "sets" and begin with the 27 solid cards. Discuss the rules as describe in the Set instruction book.
14. Show two cards, describe each card, and ask what card is missing noting the number, color, pattern, and shape as seen in example #14. Ask "What number is missing, what color, what shading, and what shape?"
15. When they can find the missing card play with only the solids and lay 9 cards on the board. Model for the student how you are systematically searching for a set. "I am checking my colors first. I am checking the shapes and then the numbers." It is crucial to use language when playing.
16. Play with the stripped cards only and then the outlined cards only.
17. Play with the entire deck for 5 minutes and count the number of Sets found. Always use language to describe how you are searching for a set.
18. Select 3 cards which make a Set. Show the student the first card, describe the card, and turn it face down. Then show the student the second card, describe the card, and turn it face down. Now, ask the student what the third card would have to be. What number? What color? What pattern/shading? What shape?

## Deck of Cards



Example for step #15

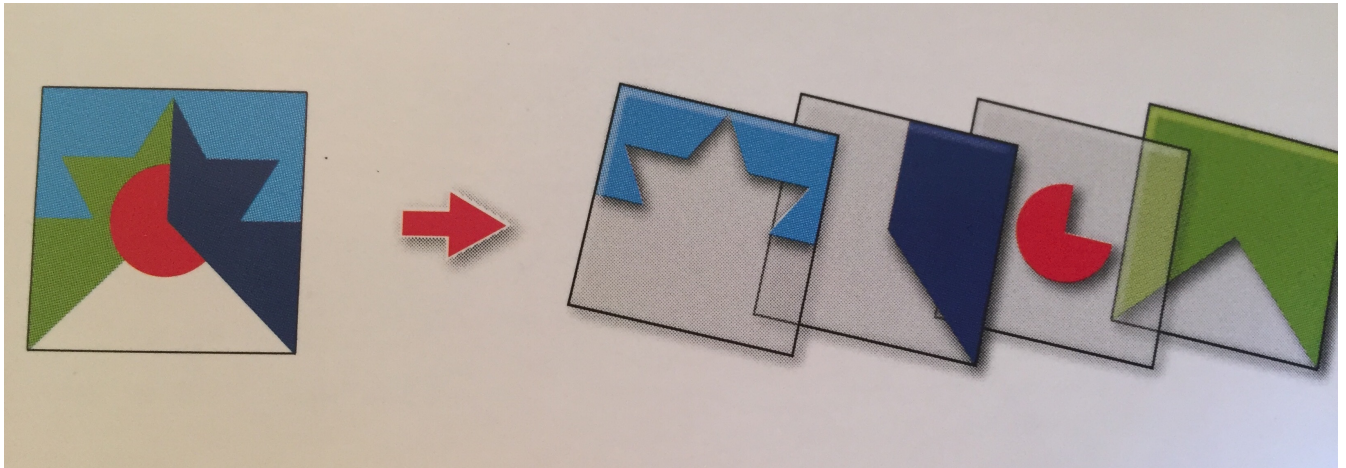
**Cognitive Skill:** visual working memory, visual & auditory processing, spatial reasoning

### Challenge:

1. Begin by using the number cards only. Place the cards face up one at a time and ask them to say the number they see on the card. You can time how quickly they can do the entire deck.
2. Next, sort the deck by numbers 2-10 and say “Two on two.” Take turns playing with the student.
3. Place the cards face up one at a time and ask them to say the color they see on the card.
4. Next, sort the deck by colors. Place a card with one of each color and say “red on red or black on black.”
5. Place the cards face up one at a time and ask them to say the suit they see on the card. Most students will name the heart and diamond. It is important to label the “club” and “spade” by their correct name.
6. Next, sort the deck by suit. Place a card with one of each suit and say “heart on heart.”
7. Place the cards down one at a time, and alternate by saying the number of the first card, the color of the second card, and the suit of the third card. Continue this pattern with the entire deck.
8. Place the cards down one at a time and alternate by saying the number of the first card, number and color of the second card, number, color, and suit of the third. Continue pattern.
9. Say the number, color, and suit of each card. “Two red diamonds.”
10. Sort by number, color, and suit. The student will place the number in the first row, color in the middle row, and the suit in the top row. Always use language when sorting.
11. Say the number on the card if you added + 1.
12. Alternate saying the number (=) of the first card and then say plus (+) 1 on the second card. Continue this pattern for the entire deck.

13. Say the number on the card if you subtracted (-) 1.
14. Alternate saying the number (=) of the first card, then say plus (+) 1 on the second card, and subtract (-) 1 of the third card. Continue this pattern for the entire deck.
15. Place the cards out one at a time and say only the cards you see after a red card. If there is a 3 red heart and the next card is a 4 red diamond you would say "4" and then you would also say the next card which is "7" as seen in the example for #15.
16. Place two cards face up and describe them. Now turn them face down and recall what you saw.
17. Continue using the cards in #16 and add a third card, then a fourth, and continue building.

## Color Code



Example for challenge #6

**Cognitive Skill:** visual spatial reasoning

### Challenges

1. Lay out all of the puzzle pieces and group with the matching color.
2. Begin with number 1 and move through in order. It is important not to skip a puzzle.
3. Look at the picture and ask “What colors do you see?” Choose the tiles necessary to match the design.
4. “Which piece will be on top?” Notice that it will be the one where the entire piece can be seen.
5. Ask, “Will the white pieces EVER go down first?” Discuss why not.
6. Arrange the pieces in order on the table. Do NOT place pieces on top of each other in your hands; rather, you will visualize this in your mind.
7. Match the puzzle and describe what you are doing.
8. Take the puzzle apart
9. Once you have completed a level, you can go back and remake the puzzle from memory.



## SPOT IT - Any Version



Constant Card

**Cognitive Skill:** visual memory, long term memory, auditory and visual processing,

### Challenge:

1. Show one CONSTANT card.
2. Say the objects on the *constant* card: "I see a red knife, I see a gold acorn, I see a gray raccoon, I see orange leaves, I see a brown moose, I see a red knife, I see a brown cabin, and I see a hiker."
3. Each player draws a card, finds the match on the "constant" card, and says "I see two red chairs." Always use a full sentence and say, "I see (number, color, animal/object)."
4. Players can take turns or play competitively. I recommend taking turns initially.
5. After the players have matched each card to the constant card, turn the *constant* card over and recall the items on the *constant* card.
6. Do **NOT** show the one *constant* card to the players. Choose someone to say what is on the card, "I see two green trees..." Keep the constant card hidden.
7. Each player draws a card, finds the match on the *constant* card, and says "I see two brown cabins." Always use a full sentence. Recall the items on the *constant* card when finished.
8. Players can take turns or play competitively. I recommend taking turns initially.
9. Recall any of the objects on the cards in 1 minute or longer. Keep a record of the objects mentioned.

### **Comparison**

1. When you find the items that match, compare the sizes. They will be either the same size, smaller or larger.

### **Categorization/Classification**

1. Place 9 cards on the table.
2. Starting at the top left card and move left to right. Classify or group the objects into categories.
3. Spot it Animal categories could be
  - a) water animals b) land animals c) animals that fly, or
  - a) mammal b) reptile c) bird d) amphibian e) fish f) invertebrates
4. Spot It Party and Camping categories could be
  - a) inanimate (non- living) b) animate (living) c) vegetation, or
  - a) things you would wear b) things you would use or c) classify according to color.

### **Reading, Writing, and Grammar**

1. Have students tell you what they see. The parent and/or teacher can write it on a dry erase board. The student can then read it.
2. Have the students write what they see. "I see two red balloons."

## Teaching Classification through SPOT IT

The ability to categorize concepts and objects is a prerequisite to logical reasoning. For our purposes, we will use the Spot It Jr. Animals to teach students the concept of categorizing through the exercise of animal classification.

Animal Classification 1 is in the form of a Venn diagram. It categorizes the Spot It Animals based on the environment(s) in which they primarily live. This exercise is ideal for younger students, though it is also beneficial for students of any age. It is a good warm up for students before they are introduced to more difficult types of classification diagrams.

Animal Classification 2 categorizes the SPOT IT Animals in a hierarchal manner, beginning with the two largest categories of all animals and progressing to further detailed subcategories. This diagram is more advanced than the Venn diagram and requires a greater amount of in-depth thinking (and possible research) for students. The answers to Animal Classification 2 are provided in the table below:

Vertebrates					Invertebrates
<u>Mammals:</u>	<u>Reptiles:</u>	<u>Birds:</u>	<u>Amphibians:</u>	<u>Fish:</u>	
Bear	Snake	Parrot	Frog	Fish	Spider
Skunk	Turtle	Duck		Octopus	Crab
Came	Crocodile	Owl		Shark	Bee
Squirrel		Chicken			Grasshopper
Pig		Penguin			Octopus
Bat		Flamingo			Starfish
Zebra					
Seal					
Dog					
Hippopotamus					
Elephant					
Cow					
Cat					
Horse/Pony					
Dolphin					
Rabbit					
Lion					

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Classification												

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