

## SET OT Skill Connections

SET is a game mainly played for fun and entertainment. The fact that it teaches, strengthens and exercises an abundance of skills makes it one of the best possible tools for Occupational Therapy. Because it is fundamentally a game people enjoy, SET inspires an intrinsic motivation and desire to “play”. The repetition of playing again and again encourages progress and success.

### SET Strengthens

- Cognitive Development
- Visual Perception
- Physical Development
- Social Development
- Emotional Development

### About SET

SET is a game of triple matching mania that anybody can play, but nobody can stop!

A *SET* is 3 cards that are either *all the same* OR *all different* in each individual feature.

Each card has four features: **color** (red, green or purple), **shape** (oval, diamond, or squiggle), **number** (1, 2 or 3), and **shading** (solid, open or striped).

The goal is to find the most *SETs*. There are no turns and no luck, the first player to see a *SET* from the 12 cards on the table says “*SET!*” and takes the *SET* from the table. The dealer replaces the 3 cards and play continues. The player with the most *SETs* at the end of the game wins!

### How SET Develops Skills

#### **Cognitive Development:**

- **Analytical Skills & Critical Thinking:** In SET, players continually analyze the different combinations of cards, considering all four features to find patterns and reveal *SETs*.
- **Attention:** There are no turns in SET, so all players must continually pay attention and keep focused on the cards to find the most *SETs* and win. Because SET is fun to play, players repeatedly practice this skill which is crucial for development.
- **Cognitive Flexibility:** The ability to quickly transition from one feature to another is improved by playing SET because players must evaluate all four features to find *SETs*. The ability to shift from one concept to another is also improved because players constantly apply different methods and types of thinking to find *SETs*. These are just a few of the many methods of finding *SETs*:
  - looking for a *SET* that is all the same color,
  - sequencing through the 12 cards, two at a time to see if the third card that completes the *SET* is on the table,
  - looking for a *SET* that is all different in all four features.

Playing SET increases the brains’ ability to make quick shifts in thinking.

- **Left Brain Right Brain Connectivity:** The SET game involves learning a rule of logic, and so players must invoke “left brain” logical thinking skills. To find *SETs*, players must also examine the spatial array of cards and locate the cards that satisfy the rule – which exercises “right brain” spatial and intuitive thinking skills.
- **Logical Reasoning:** Players practice their logical reasoning skills by applying the rule of SET to identify which card combinations make a *SET*. For every two cards, there is only one card that completes the *SET*. Players must determine what the third card is and if it is on the table. Logical deduction is often used to confirm if there are any *SETs* on the table.
- **Processing Speed:** Because there are no turns in SET, players must process information quickly to find a *SET* before the other players. Once they see a *SET*, they must respond appropriately by



**Ages:** 6 to adult

**Players:** 1 or more

saying “SET”, pointing it out and picking it up. Players are intrinsically motivated to think as fast as they can to win. Playing SET improves players’ processing speeds, which helps with learning, communication and social relationships.

- **Working Memory:** When playing SET, players must be able to recall the rules of the game, what constitutes a SET and the methods used to find SETs.

### Visual Perception:

- **Visual Perception:** Every time a SET is found, three more cards are dealt creating a new assortment of visual information. The 12 cards on the table are never the same. Players repeatedly exercise their ability to interpret, analyze and give meaning to every new group of cards, strengthening their visual perception skills. SET also exercises many building blocks of visual perception.
  - **Form Constancy:** Players exercise form constancy when they find SETs. Players learn that a SET may be
    - all the same shape, but different in number and color or
    - all the same shape and all the same number, but different in color or
    - all the same shape and all the same color, but different in number.
  - **Spatial Reasoning:** Players practice spatial reasoning by mentally re-arranging or grouping the cards on the table to find a SET without physically touching the cards.
  - **Visual Discrimination:** To find SETs, players must be able to detect differences in four characteristics — color, shape, shading and number.
  - **Visual-Motor Integration & Speed:** To play SET, players must be able to quickly perceive and process the visual information, say “SET” and then physically move their hands to point out and pick up the SET. Being able to quickly and efficiently integrate visual and motor skills is key, because the first player to see and say “SET” gets the SET!

### Physical Development:

- **Bilateral Coordination:** SET helps with symmetrical integration, asymmetrical integration as well as crossing the midline.
  - **Symmetrical Integration:** Shuffling the cards using the *riffle* technique — where half of the deck is held in each hand with thumbs inward and the cards are released by the thumbs so that they fall to the table interleaved practices symmetrical integration.
  - **Asymmetrical Integration:** There are many opportunities to practice asymmetrical integration while playing SET: holding the deck with one hand while dealing with the other; shuffling the cards using the *overhand* technique — where the deck is held in one hand and the other hand moves small groups of cards, from the back to the front, essentially making a series of cuts.
  - **Crossing the Midline:** Because a SET can be anywhere in the 12 cards on the table, players cross the midline each time they pick up a SET. If a player needs to work on this skill have them first point out the SET using one hand and then use the other hand to pick up the cards.
- **Fine Motor Skills:** Playing SET helps strengthen ***finger isolation, in-hand manipulation, hand arches, pincer grasp*** and increases overall ***dexterity***. These skills are used when shuffling the cards, dealing the cards face up in a 3 x 4 rectangle on the table, pointing out the cards that make a SET, picking up a SET, replacing the cards with 3 new cards and counting SETs at the end to tally scores.
  - **Motor Planning:** The location of the cards that make a SET are constantly changing so the mind and body must perceive a SET, call out “SET!”, plan to grab the SET and finally take the correct 3 cards from the table. There are also many other ways to play with the SET game found at [www.setgame.com](http://www.setgame.com) offering new sequences of events while still having fun making SETs!

### Social Development:

- **Social Skills:** Playing SET provides multiple opportunities for learning and exercising proper social skills such as: ***verbal and non-verbal communication; following rules; listening; using***

***appropriate vocal volumes, words and touch; and coping with losing and proper behavior when winning.***

- **Social Balance – Self-Control:** SET even helps balance some common social differences like overly introverted people and overly extroverted people. During the game, players must first say “SET” (loud enough that everyone can hear) before they can take the SET, encouraging shy players to speak up and be heard. But if a player says “SET” and doesn’t have one, he or she loses a point, this immediate consequence helps boisterous players think before acting and increases their self-control.

#### **Emotional Development:**

- **Confidence:** Each time a player finds a SET, his or her confidence grows. As players repeatedly play SET their cognitive, physical, social and emotional skills continually develop increasing their overall self-confidence.
- **Growth Mindset:** Over time each player’s ability to find SETs increases dramatically. Excelling at something that was once difficult reinforces a growth mindset.
- **Intrinsic Motivation:** Playing SET is fun so players are intrinsically motivated to play again and again. This repetition is key to developing skills. The intrinsic motivation to win triggers players’ desires to advance their skills so they become better and faster at finding SETs. Each time a player finds a SET, he or she feels a sense of accomplishment, which creates an urge to find more.
- **Mood Enhancement:** SET offers kids and adults a way to improve or maintain essential skills in a fun and positive way. The enjoyment of playing and the feeling of success every time a SET is found naturally enhance moods. It’s purposeful play that impacts each player’s environment and mindset in a very positive way.
- **Self-Esteem:** Playing SET increases players’ skills and abilities, which builds their confidence, improving their overall self-esteem. A strong, positive self-esteem directly relates to players’ abilities to think and cope with challenges throughout their lives. It is the foundation of success and happiness.