

## Executive Function Activities for 5- to 7-year-olds

Games can exercise children’s executive function and self-regulation skills—and allow them to practice these skills—in different ways. At this age, children start to enjoy games that have rules, but do so with widely varying levels of interest and skill. Since an important aspect of developing these skills is having a constant challenge, it’s important to choose games that are demanding but not too hard for each child. As the child players become familiar with these games, try to decrease the adult role as soon as possible; the challenge is greater for children if they remember and enforce the rules independently. Just be prepared with some techniques for negotiating conflict. Flipping a coin or drawing a straw are some methods used by Tools of the Mind, an early education program designed to build self-regulation.



### Card games and board games

■ **Games that require players to remember** the location of particular cards are great at exercising working memory. At the simplest level, there are games such as *Concentration*, in which children uncover cards and have to remember the location of matches. At a more complicated level are games that require tracking types of playing cards as well as remembering their locations, including *Go Fish*, *Old Maid*, *Happy Families*, and *I Doubt It*.

■ **Games in which the child can match** playing cards, either by suit or number, are also good at practicing cognitive flexibility. Examples include *Crazy Eights*, *Uno*, and *Spoons*. *Blink* and *SET* are newer card games in which cards can be matched on more than two dimensions.

■ **Games that require fast responses** and monitoring are also great for challenging attention and inhibition. *Snap* and *Slapjack* are card games that fall into this category. *Perfection* draws on similar skills.

■ **Any board game that involves some strategy** provides important opportunities to make and hold a plan in mind for several moves ahead, consider the varying rules that govern different pieces, and adjust strategy in response to opponents’ moves. Through strategizing, a child’s working memory, inhibitory control, and flexibility have to work together to support plan-based, effective play. *Sorry!*, *Battleship*, *Parcheesi*, *mancala*, *checkers*, and *Chinese checkers* are some of the many examples of these types of games for children this age.

### Physical activities/games

■ **Games that require attention** and quick responses help children practice attention and inhibition. They include *freeze dance* (*musical statues*); *musical chairs*; *Red Light, Green Light*; or *Duck, Duck, Goose* for younger children. Some of these games also require the person

who is “It” to mentally track others’ movements, challenging working memory as well; these games include *Mother May I?* and *What Time Is It, Mr. Fox?* Others require selective responses and test inhibition, such as the *Magic Word Game*, in which children wait for a “magic word” to start an action.

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■ **Fast-moving ball games**, such as *four square*, *dodgeball*, and *tetherball*, require constant monitoring, rule following, quick decision-making, and self-control.

■ **Simon Says is another great game** for attention, inhibition, and cognitive flexibility, as the child has to track which rule to apply and switch actions, as appropriate. Other versions are the Australian *Do This, Do That* or the variation, *Do As I Say (Not As I Do)*.

■ **Children are now old enough** to enjoy structured physical activities, such as organized sports. Games that require coordination and provide aerobic exercise, such as soccer, have been shown to support better attention skills. Physical activities that combine mindfulness and movement, such as yoga and Tae Kwon Do, also help children develop their ability to focus attention and control actions.

## Movement/song games

■ **Copy games**, in which the person imitating has to hold in mind the model's actions, draw on working memory. *Punchinella* is one example, with the model watching during the second verse ("I can do it, too"). Call-and-response songs provide a similar auditory challenge, like *Boom Chicka Boom* and *I Met a Bear*.

■ **Songs that repeat** and add on to earlier sections (either through words or motions) also challenge working memory, like the motions to *She'll Be Coming 'Round the Mountain*, or the words to *Bought Me a Cat*. The classic memory

games of *Packing for a Picnic* or *Packing a Suitcase for Grandma's* fall in this category, too. Older children can enjoy the added challenge of alphabetizing the list.

■ **Singing in rounds** is a challenge for older children that requires use of working memory and inhibition. *Row, Row, Row Your Boat* is a simple round to start with, but there are many with greater complexity.

■ **Complicated clapping rhythms** also practice working memory, inhibition, and cognitive flexibility, and have been popular with generations of children in many cultures. *Miss Mary Mack* and *Down Down Baby* are familiar examples.

## Quiet activities requiring strategy and reflection

■ **Children become increasingly independent** at this age, and puzzle and brain teaser books that include mazes, simple word finds, matching games, etc., exercise attention and problem-solving skills (requiring working memory and cognitive flexibility).

■ **Logic and reasoning games**, in which rules about what is possible need to be applied to solve puzzles, start to become interesting and provide great working memory and cognitive flexibility challenges. ThinkFun, a game and puzzle company, provides some appealing and age-appropriate versions with *Traffic Jam* and *Chocolate Fix*, while *Mastermind* is another

old favorite that now has a simpler version for younger children. Educational online game sites provide many similar activities as well.

■ **Guessing games** are also popular and require players to use working memory and flexible thinking to hold in mind previous responses while they develop and discard potential theories. Some examples are *20 Questions* or *Guess My Rule* (often played with blocks of different colors, sizes, and shapes, so that children try to guess which attribute, or set of attributes, defines the rule for the set).

■ **I Spy and the books derived from this game** require children to think about categorization and use selective attention in searching for the correct type of object.

## Resources

### Online games

- [www.coolmath.com](http://www.coolmath.com)
- [pbskids.org/lab/games](http://pbskids.org/lab/games)

### Game rules

- [www.pagat.com](http://www.pagat.com)
- [en.wikipedia.org/wiki/List\\_of\\_traditional\\_children%27s\\_games](http://en.wikipedia.org/wiki/List_of_traditional_children%27s_games)

### Fun songs

- [www.scoutsongs.com](http://www.scoutsongs.com)

### ThinkFun

- [www.thinkfun.com](http://www.thinkfun.com)

### Tools of the Mind

- [www.toolsofthemind.org](http://www.toolsofthemind.org)

### Helping your child manage social play

- [mindinthemaking.org/wp-content/uploads/2015/03/PFL-stubborn-play-schoolage.pdf](http://mindinthemaking.org/wp-content/uploads/2015/03/PFL-stubborn-play-schoolage.pdf)