Learning can be fun!

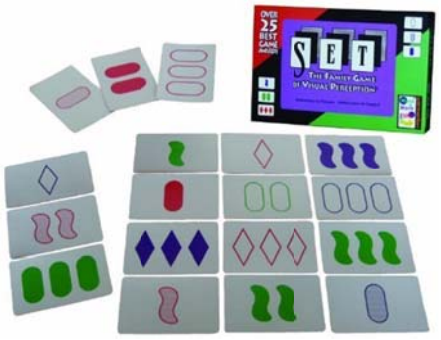
This is a list of games gathered by Drs. Susanne M. Jaeggi (University of California, Irvine) and Geetha Ramani (University of Maryland at College Park), who have been conducting and collaborating on various projects to foster children's cognitive development and learning. Children's early numeracy and literacy skills, as well as their working memory skills and self-regulatory behavior are critical in many domains and have been shown to be related to scholastic achievement. Although we have developed many computerized applications to foster those skills, playing commonly available off-the shelf card and board games is another fun way to practice those skills, and they can also get children (and adults) off their screens and tablets to interact as a family. Apart from fostering reasoning, math, and reading skills, playing games in a social context is also beneficial for children in that they learn to take turns, deal with loosing/winning, and interact with other players – and of course, it allows for a valuable time spent with the entire family! This list should only provide a few ideas about what games could be fun, engaging and targeting those important skills (some of which have been used in scientific research by us and other researchers; see reference list at the end), but it is by no means a complete list, and also, there is no guarantee that your child will experience those benefits specifically. Also, please note that neither Dr. Jaeggi nor Dr. Ramani have any financial or other interests related to the companies distributing those games.

Games to foster reasoning, working memory, and problem solving

SET / SET Junior

~$12.99

For ages 3 and up



Description: In this multiplayer game, players have to find sets of three as quickly as possible in an array of cards that changes constantly – the sets can vary across several dimensions (color, shape, patterns, count). The dealer arranges 12 cards, face up, and the players -without taking turns - hastily scrutinize the images for logical "sets" of three cards linked by combinations of sameness or difference. It's not as complicated as it sounds: examples include a trio of paired ovals with increasing levels of shading between cards, or disparate symbols in different colors which increase in number on each card (card one has a green squiggle, card two a pair of purple ovals, card three a trio of diamonds).

Your kids could practice and learn:

- Executive control (i.e. set shifting, inhibitory control)
- Reasoning
- Speed of processing

Blink

~$9.99

For ages 7 and up

Description: Two players race to be the first to play all of their cards by matching their cards according to various changing dimensions (color, shape, count). In order for a card to be played it must match at least one of the characteristics, color, shape, or count, of the card on which it is being played. For instance a card with four yellow stars could be played on any card with yellow (color), or on a card with stars (shape), or on a card with four symbols (count). Be the first to play all the cards from your draw pile to win!

Your kids could practice and learn:

- Executive control (i.e. set shifting, inhibitory control)
- Speed of processing

Mastermind / Mastermind for kids

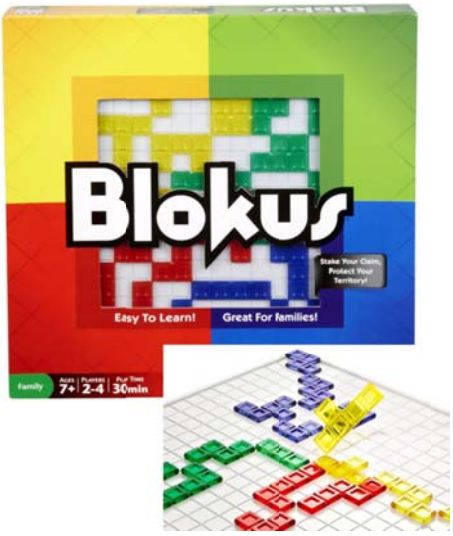
~$17.99

For ages 6 and up

Description: Break the hidden code of jungle animals. Younger kids can develop their powers of logic and deduction in this game of code-cracking fun. The “mastermind for Kids” version is simplified for younger children and comes with colorful animal pegs, a jungle-and-mountain-theme board, and fewer code options. The point is the same: one player duplicates the other's code in as few turns as possible. The code maker sets a code of 3 colored animals (choosing from 72 in six colors), and conceals it beneath a "rocky mountain" tray at his or her side of the board. In each of nine rows (of large holes), the code breaker attempts to replicate the pattern. After each row (or turn), the code maker places red or white creature pieces in the adjacent row of small holes, which gives the code breaker clues on how he or she doing. Complete instructions include rules for younger players (based on colors only), older players (color and position), and expert players (a blank-space option adds complexity).

Your kids could practice and learn
- Planning
- Deductive Reasoning

Blokus



~19.99

For ages 7 and up

Description: Blokus is the perfect strategy game for the whole family - less than a minute to learn with the depth to challenge all ages. As players take turns placing their 21 pieces on the board, each piece played must touch another piece of the same color, but only at the corners. Stake your claim and protect your territory by fitting as many of your pieces on the board as you can while you strategically block your opponents.

Your kid could practice and learn:
- Planning
- Spatial abilities

Qwirkle

~$34.99

Ages: 6 and up

Description: This multiplayer strategy game is as simple as matching colors and shapes, but this game also requires tactical maneuvers and well-planned strategy. Earn points by building rows and columns of blocks that share a common shape or color. Look for opportunities to score big by placing a tile that touches multiple pieces with matching attributes. The player with the most points wins!

Your kid could practice and learn:
- Planning
- Reasoning

Abalone

~9.99 (travel version)

Ages: 8 and up

Description: The object of this strategy game is simple: push six of your opponent's marbles off the board before he or she does the same thing to you. But you can only move the other player's marbles if you have more than s/he does (i.e., three can push two, two can push one, or three can push one. Three can't push three, because you don't outnumber them). And, because moves are diagonal, there are dozens of options for every turn.

Your kid could practice and learn
- Planning
- Reasoning

Rush hour / Rush Hour Jr.

~$19.99

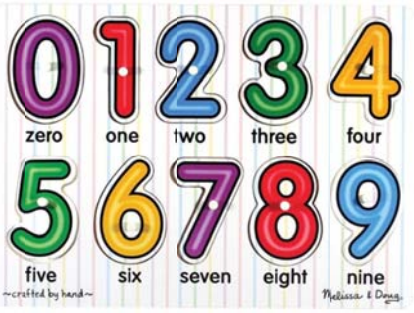
For ages 5 and up

Description: In this single player game, the task is to move the red car/ice cream truck out of the gridlock by sliding the blocking vehicles out of the way. There are various challenge levels to choose from, ranging from fairly easy to very difficult.

Your kids could practice and learn:
- Planning and reasoning
- Problem solving
- Spatial skills

Games to foster numeracy skills

Wooden Number Puzzle



~$9.99

For Ages 2-5

Description: The See-Inside Number Puzzle introduces the numbers and number quantities of 0-9. A colorful picture under each piece shows the same number of items as the numeral on top of the piece.

Your kids could practice and learn:
- Number recognition
- Counting skills

Bingo (Numbers)

~ $9.99

For Ages 4 and Up

Description: In bingo, players listen and match number names to the numerals. The game is simple, so children with differing skill levels can play together. Games can be fast paced and fun.

Your kids could practice and learn:
- Number identification
- Matching number names to numbers

Chutes and Ladders

~$12.99

For Ages 3-7

Description: Be the first to move your piece from square one to square 100 on the game board - but watch out! If you land on the square that shows you ate too much candy - Ouch! -you get a tummy ache and slide down a chute to a square a few numbers below. But if you end your turn on a good-deed square, such as helping sweep up a mess, you'll be rewarded by a ladder-climb up the board.

Your kids could practice and learn:

- Counting skills
- Recognition of numerals
- How big and small numbers are

Hi Ho! Cherry-O

~$12.99

For Ages 3-6

Description: In this game, kids get the chance to pick cherries (or other fruit) from a tree by spinning a spinner that tells them to take either one, two, three, or four cherries. The spinner could also land on the dog, bird, or spilt bucket (all causing you to lose your cherries), which makes this game challenging, but most of all fun!

Your kids could practice and learn:

- Counting skills
- Recognition of number quantities

Monopoly Junior

~$14.99

For Ages 5-8

Description: Own your own piece of the amusement park with this introduction to the world's most popular board game. Travel around the park. Buy sites. Set up ticket booths and collect money from anyone who lands on them! The player with most money at the end of the game wins.

Your kids could practice and learn:

- Counting
- Adding and subtracting

UNO / My first UNO

~$5.99

For Ages 3 and up

Description: My first UNO is much like regular UNO, only the cards are bigger and have pictures of Winnie the Pooh and his friends on them (there are versions with other characters as well). Kids will take turns matching colors and numbers trying to be the first to get rid of all their cards.

Your kids could practice and learn:

- Counting skills
- Number identification
- Differences between numbers and how big/small they are
- Basic addition skills

Rat-a-tat-cat (or: Beaver Gang)

~$13

For ages 6 and up

Description: A game of suspense, strategy, and anticipation. Get rid of the high cards (rats) and go for the low cards (cats). Sneak a peek, draw two, or swap cards for an added twist. Low score wins the game (a poker face helps!). As children play Rat-a-tat Cat, they develop a sense of timing and an understanding of basic, but essential, mathematical concepts. They learn ways to remember their cards and strategies to figure out what cards other players might have. They also begin to develop an intuitive sense of probability. Rat-a-tat Cat requires skill, strategy, and awareness, challenging both young children and adults.

Your kids could practice and learn:

- Counting skills
- Differences between big/small numbers and how big/small they are
- Basic addition and subtraction skills
- Updating / working memory

Games to foster literacy skills

Wooden Alphabet Puzzle

~$14.99

For Ages 3-5

Description: On (or underneath) each letter piece of this puzzle there is a picture of an object or animal that begins with that very letter. With the help of these pictures, your kids can match the letter pieces with their shapes and form a beautiful puzzle!

Your kids could practice and learn:

- Letter recognition
- Letter sounds

Super Why ABC Letter Game

~$19.99

For Ages 3-6

Description: In this game, the game piece that you choose will be a Super Why Hero! Spin the spinner and move your character based on what number is on the spinner. When you get to a character card, the card will have a fun and challenging question for you to answer, but which will teach you skills that involve reading, matching, letter learning, etc.

Your kids could practice and learn:

- Letter recognition
- Rhyming
- Basic reading skills
- Word and sentence comprehension

Scrabble Junior

~$14.99

For Ages 5 and up

Description: The game is similar to the regular Scrabble, but with pictures! Your kids can use letter tiles to form words on the game board. The catch is that there are different pictures on the board so your kids will be able to make words that match the objects.

Your kids could practice and learn:

- Basic spelling skills
- Recognition of words with the objects they represent
- Word meanings

Bananagrams

~$14.99

For ages 7 and up

Description: Players race against each other to build crossword grids. The player who uses all his or her letter tiles first wins. Great for travel (does not require a board).

Your kid could practice and learn:

- Vocabulary
- Spelling
- Reading

References:

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