Cognitive Games

Cognitive skill	Games
Attention **Sustained Attention (SUS):** The ability to remain focused and on task, and the amount of time we can focus. **Divided Attention (DA):** ability to remember info while performing a mental operation &attending to 2 or more things at once (multi-tasking).	SUS=Chess, Connect Four, Cribbage, Domination, Dominos, Go Fish, Mancala, Memory, Rummikub, Solitaire, Sudoku,Trax, Quiddler DA=Battleship, Chess, Cribbage, Domination, KenKen, Risk, Rummikub, Trouble,
Executive Functioning Ability to enable goal-oriented behavior, such as the ability to plan, and execute a goal. These include: **Decision making(DM):** the ability to make decisions based on problem-solving, or incomplete information **Emotional self-regulation (ES):** the ability to identify and manage one's own emotions for good performance. **Flexibility(F):** capacity for quickly switching to the appropriate mental mode; adopt multiple approaches **Planning(P):** ability to organize steps of an activity& anticipate consequences	DM= Battleship, Boggle, Catch 22, Chess, Mastermind, Racko, Risk, Scrabble, Sudoku, Solitaire, Sort It Out!, Trouble, Trax, Uno, Wordplay ES= Go Fish, Uno, Scrabble, Battleship, Connect Four, Chess, Hangman, F= Rummikub, Sudoku, P= Battleship, Catch 22,Chess,Connect Four, Domination, Mastermind, Racko, Risk, Rummikub, sequence, Sort It Out!, Trouble, Trax, Wordplay
Language Ability to translate sounds into words& generate verbal output. **Listening skills (LS):** ability to take in & process auditory info. **Reading(R):** recognition of sight words and decoding new words **Comprehension(C):** understanding what is read or said **Formulation(F):** ability to access &organize information to express it	LS= Battleship, Wordplay, Go Fish, Hangman, Quiddler, R= Boggle, Catch Phrase, Hangman, Wordplay C= Boggle, Catch Phrase Hangman, Rummikub, Sort It Out!, Wordplay, Quiddler F=Boggle, Catch Phrase, Scrabble, Quiddler, Wordplay,
Memory **Short term/working :**ability to apprehend & hold information in immediate awareness & simultaneously perform a mental operation	STM= KenKen, Mastermind, Memory, Rummikub, Battleship, Trouble, Go Fish,
Motor Ability to mobilize muscles, bodies &manipulate objects	Battleship, Chess, Connect Four, Cribbage, Dominos, Go Fish, Mancala, Mastermind, Memory, Rummikub, Scrabble, Solitair, Trouble, Trax, Uno
Perception Recognition & interpretation of sensory stimuli (smell, sight, touch, hearing, etc.)	All
Processing Ability to process information **Visual-spatial:** process incoming visual stimuli, understand spatial relationship between objects and visualize images & scenarios	Battleship, Boggle, Chess, Connect Four, Cribbage, Dominos, Go Fish, Mancala, Mastermind, Memory, Rummikub, Scrabble, Solitair, Trouble, Trax, Uno
Problem solving Defining the problem in the right way to then generate solutions &pick the right one. **Deductive reasoning(DR):** ability to draw conclusions and come up with solutions by analyzing the relationships between given conditions **Inductive reasoning(IR):** using specific examples/observations and forming a more general principal **Strategy(S):** ability to plan a series of maneuvers/stratagems for obtaining a specific goal or result	DR= Battleship, Catch Phrase, Hangman, Memory, Mastermind, Word play IR= Chess, Connect Four, Cribbage, Risk, Solitaire, Kenken, S=Battleship, Chess, Connect Four, Mastermind, Sudoku, Risk, Trax,
Sequencing Ability to break down complex actions into manageable steps and prioritize them in the right order.	Uno, mastermind, Solitaire, Rummikub, Sequence, Racko, Dominos, Sudoku , Sort it out!

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Game	Cognitive skills
Battle Ship	PS (deductive), strategy, processing, STM, Attention (divided), EF (planning, decision making, ER),motor
Boggle	Language(formulation, reading ,comprehension),EF(decision making, flexibility),motor
Catch 22	PS(strategy, inductive reasoning),processing, EF(decision making, planning),
Catch Phrase	Language(comprehension, LS, reading),processing, PS(deductive reasoning)
Chess	PS(strategy, inductive reasoning), processing, EF(DM,ER, flexibility, planning), attention(sustained, divided),motor
Connect Four	Sequencing, problem solving(inductive, strategy), attention(sustained), EF(ER, planning),motor
Cribbage	Sequencing, PS (inductive),attention(divided, sustained) processing, motor
Domination	EF(decision making, planning), sequencing, Attention(divided, sustained),
Dominoes	Attention(sustained), sequencing, motor, processing
Go Fish	STM, attention(sustained),sequencing, EF(ER,DM), Language (LS)
Hangman	Language(reading, comprehension, LS),PS (deductive),EF(DM,ER)
KenKen	Sequencing, PS(inductive),processing, STM, Attention(divided),processing
Mancala	EF(planning), attention(sustained), motor
Mastermind	STM, PS(deductive), sequencing, processing, EF(decision making, planning)
Memory(match)	STM, processing, PS(deductive),processing, motor, attention(sustained)
Racko	Sequencing, EF(decision making, planning), PS (inductive reasoning),STM,
Risk	PS (strategy), attention(divided), EF(decision making, planning),PS(strategy)
Rummikub	Sequencing, strategy, STM,EF(planning, flexibility), attention (divided, sustained),Language (comprehension)
Sequence	Sequencing, EF(planning), attention(sustained),processing, motor
Scrabble	Language(formulation, reading, comprehension), sequencing, EF(planning, DM,ES),motor
Sudoku	Attention(sustained), memory, EF(DM, flexibility), STM, processing, EF(decision making, planning), PS (inductive)
Solitaire	Attention(sustained), EF(planning, DM), processing, motor, PS(inductive)
Sort it Out!	Sequencing, EF(decision making, planning), language(comprehension), processing
Trouble	Attention(divided), EF(DM, planning),STM, PS (inductive reasoning), motor
Trax	Attention(sustained), EF(planning, DM), processing, motor
Uno	STM, processing, EF(decision making, ES),sequencing, motor
Wordplay	Language(reading, comprehension, LS),motor, EF(DM, planning),PS (deductive reasoning)
Quiddler	Language(reading, formulation, comprehension, LS),sequencing, processing, attention(sustained, selective)

EF= Executive Functioning   STM= Short Term Memory   ER=Emotional self regulation
PS= problem solving   LTM= Long Term Memory   DM=Decision making
LS=Listening Skills

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