Cognition, Affect & Behavior Lab (CABLab)
Department of Psychology, CHRIST (Deemed to be University)

Psychology Experiment Building Language (PEBL)
PEBL 2.0
Test Battery List

Name	Area	Description	Status
Attention Network Test (PANT)	Attention	A paradigm to assess three types of attentional networks. An implementation of the ANT test by Fan et al. (2002)	Works
Balloon Analog Risk Task (BART)	Risky decision	A paradigm to assess risk-seeking behavior that balances gains with increasing risk. Blow up a balloon but collect the money before it pops; Mueller, S. T. (2011)	Dosen't work
The Bivalent Shape Task Version 1.0	Attention	A simple nonverbal dimensional filtering task akin to the stroop task; Shane T. Mueller & Alena Esposito	Works
Deese-Roediger-McDermot Memory test	Memory	A So-called test of 'false' memory.	works
Paced Audio Serial Addition Task (PASAT)	Working memory	In this task, you repeatedly compute the sum of the previous two stimuli. Stimuli are presented both auditorily and visually; originally developed by Gronwell (1977)	Works
Remote Association Test (RAT)		Mednick & Mednick (1962, 1967)	Works
SNARC Task	Decision making	Participants are asked to make magnitude decision on numbers. <source available on description>	Works
The 'aiming' task	Control mapping	It is a simple control mapping task in which the subject has to push a rolling ball to hit a target. They learn the amount of force and direction to hit targets, which are at different distances and different sizes.	Works
The PEBL Anti-saccade task	Response inhibition	Based roughly on Miyake's method, this task requires suppressing an automatic eye movement to a prompt to detect an arrow stimulus in the opposite direction.	Works
Berg Card-Sorting Test-64 (PBCST-64)		A free implementation of the Wisconsin Card Sort-64 (a shortened standardized form of WCST); Mueller, S. T. (2011)	Works
Brown-Peterson task	Memory	This task was intended to measure simple decay of short-term memory, and requires participants to remember stimuli while performing backward arithmetic for different time durations.	works
Change Detection Test	Change detection	Search for changes in presence, location, size, and color of random circles among background field of circles; Mueller, S. T. (2011)	Works
Clock Test	Visual Attention	An implementation of the Mackworth Clock Test; A sustained visual attention task; Mueller, S. T. (2011)	Works
Connections Test	Trail making	A trail-making test based on Salthouse et al. (2000)	Not Working
Corsi Blocks Test	Working memory	It is a visual-spatial working memory test. Subjects are asked to replicate sequences of clicks onto a set of spatially-arrayed square targets	Works

Choice Reaction Time Test		It provides no instructions, and is basically a 2-alternative forced choice (2AFC) task	Works
Mouse Dexterity Task	Dexterity	The participant must move the cursor to a target under different noise conditions. It assesses overall control in a noisy motor modality.	Works
Hungry Donkey Task	Decision making	It is a isomorph of the "iowa gambling task", but more suitable for children	Works
Dot Judgment Task		This sample task demonstrates the use of simultaneous interleaved staircase procedures to estimate thresholds	Works
Digit Span Test	Memory	This task asks to remember a list of numbers	Works
Ebbinghaus Memory Procedure	Memory	A simple implementation of the Ebbinghaus's memory learning and re-learning procedure.	Works
Even-Odd test	Judgement	This is a brief test in which participant must judge whether a number is even or odd.	Works
Aimed Movement Task		A paradigm to measure Fitts's Law using mouse movement. Quickly move cursor from home position to target, which has varying sizes and distances from home.	Works
The Flanker Task		An implemenation of the "Eriksen Flanker Task", see Eriksen, C. W., & Schultz, D. W. (1979). Method modeled roughly after one described by Stins et al, 2007.	Works
Four-choice response time task		An implementation of the Wilkinson & Houghton's 4-choice task. Respond via keystroke based on which quadrant the stimulus appears in	Works
Free Recall task	Memory recall	This uses a random sampling of words from the Toronto Word Pool	Works
Generation Effect experiment		Example study demonstrating the generation effect--that words generated are better remembered than words simply learned.	Works
Global-Local task	Attention	A basic version of Navon's global-local task. It only uses Navon-like stimuli to do a simple interference experiment akin to stroop.	Not Working
Go/No-Go Test		A continuous performance task based on Bezdjian, S. Baker, L. A., Lozano, D. I & Raine, A. (2009)	Works
Hick's law test	Decision making	This test has participants make choice responses under increasing numbers of options, whose mean response time should scale with the log of N.	Works
Implicit Association Task (IAT)		This implementation uses two distinct dimensions (manmade versus natural) and verbs versus adjectives as its image and word dimensions. These could be replaced with dimensions of the experimenter's choice.	Works
Bechara Gambling Task (Iowa Gambling Task)	Decision making	an independent implementation of Bechara et al.'s so-called "Iowa Gambling Task". Choose which option and receive rewards and costs.	Works
Item-order task	Memory	This is a simple short-term memory for order/item information. Participants make a same-different judgment about 7-letter strings for which either an item or order change is made (or not).	Works
Letter-digit substitution Test	Working memory	This is a letter-digit substitution (or code substitution) task, akin to one found in the UTC Test Battery, and the paper-and-pencil Wechsler test.	Works
Lexical Decision Task	Lexical decision	A very simple implementation of the lexical decison task (ala Meyer & Schvaneveldt).	Works
Visual change-detection task	Working memory	This task measures visual working memory by making simple changes to arrays of objects and requiring participant to detect the difference.	Works

Manikin test		A test of 3-D spatial reoreientation. This test is for demonstration purposes only	Works
Match To Sample Task		This is an implementation of 'match to sample task described in the UTC Test Battery test #24; originating from Skinner (1950). A simple task measuring visual memory after delay.	Works
Math Processing task	Reasoning	Based on the math processing task in the UTC test battery. A simple measure of arithmetic, requiring computing simple addition/subtraction problems and comparing to a value.	Works
Math Test	Reasoning	A test of math performance	Works
Matrix Rotation Task Version	Working memory	This is a simple version of the 'matrix rotation' task. A sort of mental rotation task.	Works
Memory Automaticity Task	Memory	A simple implementation of the Shiffrin & Schneider (1977) automaticitytask. In this task, the participant performs Sternberg-style memory search to achieve automaticity.	Works
Move-to-target task		("whack-a-mole") This task requires the user to move to a target within a time limit; immediately after that the target appears elsewhere.	Works
Visual-response serial learning task	Working memory	See pictures/names in a sequence, and respond by clicking on grid. This tests works like the Simon game, where each sequence builds on the previous one.	Works
Visual-response memory span task	Memory	Using a staircase method	Works
Muller-Lyer Illusion Task	Perception	Psychometric study of classic Muller-Lyer illusion which finds point of indifference.	Works
N-Back Test		with dual N-Back options Settings allow for either single or dual N-Back with a variety of settings,	Works
Object Judgment task		Judge whether two alternative shapes are the same or different. This is an 'absolute' identification version; determine which target is identical to the given.	Works
OddBall Task		A continuous performance task thought to involve prefrontal strategy updating. Method modeled roughly after one described by Huettel and McCarthy, 2004	Works
Operation Span task		By: D.L. Hegarty & Dufflecoat Enterprises (2014)	Works
Paired associates learning task		Learn and recall pairings between related and unrelated, words and names	Works
Partial Report Procedure		An implementation of the Lu's version of Sperling's partial report task. Determine identity of target when primed shortly after target disappears.	Works
Path Memory task		See a path, draw a path. Also includes a utility to create new paths.	Works
Pattern Comparison Task Version 0.1		This is a simple version of the Pattern Comparison' task described in the UTC Test Battery test # 13 Compare two color-filled grids. (3 versions there)	Works
Card-sorting test		This is a variation on card-sort tests such as the wisconsin card sorting test, but it involves only two alternatives, 10 dimensions, and the possible rules are all known.	Works
Continuous Performance Task (PCPT)		a continuous performance task modeled after a set of classic paradigms, and implements a version of Conner's CPT. This is a vigilance task, which takes approx 14 minutes to complete.	Works
Plus-minus task		A task of executive function and switching. The task compares the time and accuracy for adding or	Works

		subtracting versus interleaved adding and subtracting. It is modeled after the task used by Miyake et al (2000).	
Psychomotor Vigilance Task		The "Psychomotor Vigilance Task", an "Unprepared Serial Reaction Time (USRT) test as described by Wilkinson and Houghton (1982). Commonly used as a test of sleepiness and alertness.	Works
Probe Digit task		Used by Waugh & Norman, 1965, to study decay and interference in short-term memory. Participants hear sequences of numbers, and at the end of a sequence of undetermined length, must report the number following the the last digit the previous time it was presented.	Works
Probability Monitor task		An implementation of the UTCPAB version. Watch one to three dials to see when one starts to produce a reading.	Works
Probabilistic Reversal Learning task		An implementation of Cools et al's task. Learn when a response contingency changes.	Works
Compensatory Tracker		A work-alike for 'CompTrack' by Makeig & Jolley (1995), a compensatory tracking task. Originally used to investigate vigilance, as the cursor must be continuously adjusted to keep it 'in the bullseye'.	Works
Trail-making test (ptrails)		This is a simple connect-the-dots task, which compares a pure (number or letter only) with switch (alternating number and letter) problem.	Not working
Pursuit Rotor Task		A visual-manual dexterity tracking task. This is a computer implementation of the physical one popular in the mid 20th century.	Works
Random Generation Task		A test of executive function. The participant must generate random digits at a fixed pace. Various statistics are used to sasess the degree to which randomness is achieved.	Not working
Symmetry Span task		By: D.L. Hegarty & Dufflecoat Enterprises (2014)	Works
Mental Rotation Task		An implementation of Shepard's mental rotation task.	Not working
Situation Awareness Task		A dynamic spatial tracking task. Track moving targets and, when probed, identify where and what were there.	Works
Big-five personality scale		50 question ; incorporating subscales for intro/extraversion, agreeableness, conscientiousness, emotionality, and intellectualism	Works
Berlin Numeracy Test		A 4-question validated measure of numerical literacy	Works
handedness inventory		It provides a 'right-handedness quotient', which gives you a number between -1 an +1 indicating handedness.	Works
Comfort Scales		Visual-analytic scales that measure heat comfort.	Works
Tiredness scale		This implements a novel 'current sleepiness scale', involves asking about how a person person generally feels; this scale asks how they feel right now, and could be used to assess alertness.	Works
NASA TLX workload rating scale		This gives the NASA six TLX ratings scales and (optionally) weight comparisons.	Works
Simon Interference Task		Judge the color of a stimuli while ignoring its horizontal position.	Works
Spatial Cueing task		An implementation of Posner's Cueing task	Works
Spatial priming task		Respond to a target in a 3x3 grid whose row, column, identity, or neither are primed.	Works
Simple response time task		Respond as quickly as possible when you see a stimulus.	Not working
Sternberg Scanning Task			Works
PEBL Color Stroop task		This is a simple color/word interference test	Works
PEBL Number-stroop task		This requires deciding between the number of characters, and	Not working

		the (character) number it is printed in.	
"Victoria" stroop task		This is a very brief test that involves responding to many targets (either color or word) on a single screen.	Works
Survey generator		Edit questions.csv to tailor to your own study.	Works
Switcher task		A novel task to measure cognitive flexibility and rule switching.	Works
Symbol-Counter Task		After Gehring's implementation of Garavan's task. Keep track of two counts represented by four symbols.	Works
Symmetry Span task			Works
Tapping Task		Tap keyboard as quickly as possible. A measure of fine motor ability.	Not working
Time-tapping Test		Tap the button at an established rate.	Works
Time Wall Task		An implementation of Jerison et al.'s (1957) task. Judge when a target will hit an opening after passing behind a wall.	Works
Test of Attentional Vigilance (TOAV)		A version of the TOVA. Test is useful for assessing sustained attention.	Works
Tower of Hanoi Problem		Move discs into the specified configurattion.	Not working
Tower of London Test		Move a stack of disks to form a new configuration	Works
Traveling Salesman Problem		Participants solve TSP problems to judge efficiency and speed of spatial reasoning and planning	Works
Two-column addition test		Add three two-digit numbers together. Based on Test 4 from UTCPAB	Works
Typing Test		Test speed and accuracy of typing specified tests.	Works
Urns Task		Simple decision under uncertainty task in which participant must decide what type of ball is more in an urn based on random sampling.	Works
Vigilance task		This is a continuous performance task in which you have an alternating 'rest' period, prior to the 'vigilance' period, during which a target appears.	Works
Visual Search Task		Search for one or more targets defined by color or shape in a field of distractors.	Works
Word Fluency Test		An implementation of the Chicago Word Fluency Test, also known as the Thurstone word fluency test.	Works
Weather Prediction Task (PWPT)		An implementation of the task used extensively by Knowlton, Gluck, Bower, etc. In the task, the participant identifies whether it will rain based on probabilistic cues from four cards.	Works