Table SII. Lumosity™ memory game description and target

Game title	Description	Memory construct
Face memory workout	Users must recognize and match human faces.	Visual working memory
Familiar faces	Challenges users' ability to make associations between visual and verbal information. Task is closely related to kinds of memory challenges experienced on daily basis.	Associative visual and verbal memory
Follow that frog	Users are challenged to follow the hops of a frog across a pond filled with lily pads.	Spatial working memory
Memory lane	Stylized version of the dual-n-back task that requires users to recall both spatial and auditory information presented previously.	Visual and verbal working memory
Memory match	A 2-back visual working memory task requiring users to indicate whether the current symbol on screen matches 1 presented 2 symbols previously.	Visual working memory
Memory match overdrive	Similar to "memory match", but more challenging in that users are required to recall symbols presented 3 items previously.	Visual working memory
Memory matrix	Users are asked to recall the location of target squares in a grid.	Spatial working memory
Moneycomb	Users must remember the location of coins hidden within a honeycomb-like structure.	Spatial working memory
Monster garden	Exercise requiring users to recall the location of several obstacles that appear only momentarily, while simultaneously navigating through the game environment.	Spatial working memory
Pinball recall	Users are required to recall the location of multiple objects and mentally predict a ball's path accounting for those objects.	Spatial working memory
Rhyme workout	Similar to "memory matrix", where users are asked to decide whether a word n trials ago rhymes with the current word.	Spatial working memory
Rotation matrix	Similar to "memory matrix" with the addition of a rotation component that makes the task more challenging.	Spatial working memory
Tidal treasure	Users must identify a washed up object on a beach that has not previously been selected in earlier trials.	Visual working memory