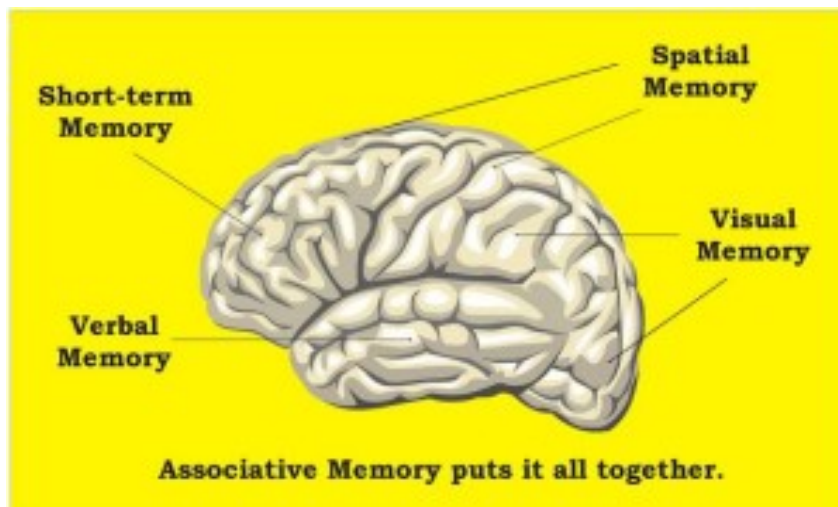


What is Visual Spatial Working Memory?



What is Visual Spatial Working Memory? The term “Memory” is used in casual conversation to generally describe an individual’s capacity to recall, but in psychological communication may have a far more specific meaning. Not only do terms such as “Short Term Verbal Memory,” “Verbal Working Memory,” “Visual Spatial Memory,” “Visual Spatial Working Memory” and “Long Term Memory” all have different (though sometimes overlapping) meanings. They also tend to activate varying locations in our brains. So, a parent who describes their child as having a “great memory” because they can recall every ride they went on at Disney World 2 years ago (Long Term Memory), but is frustrated by their child’s lack of effort because he cannot seem to remember a 2 step direction (Verbal Working Memory), may be looking at 2 very different types of memory using 2 distinct portions of the brain.

As scientific research continued to investigate Visual Memory, the more complex idea of Visual Spatial Working Memory (VSWM) emerged. VSWM manipulates the visual information stored in the brain to process information. Visual-spatial working memory skills involve the ability to recall shapes and colors as well as their locations and movements. These skills aid

children in letter/number recognition, reading, writing, and math. Each of these tasks typically involve some level of visualization in order to follow along in a story or complete complex math problems. It is important for parents and teachers to remember that working memory difficulties are not directly linked to general intelligence.

Visual Spatial Working Memory is assessed in measures such as the Spatial Span Backwards test of the WISC-IV Integrated and the Spatial Recall Test of the AWMA. These skills are also closely associated with the capacity to master higher level mathematics such as geometry, trigonometry , and calculus.

Check out these resources for More Information on Visual Spatial Working Memory:

[The Cognitive and Behavioral Characteristics of Children With Low Working Memory](#): This article includes a study that explores the cognitive and behavioral profiles of children with Working Memory impairments, and an overview of working memory deficits in children.

[Working memory and mathematics: 5 Ways to Boost Working Memory and Improve Math Skills](#): This article has strategies to help children with their working memory and math skills.

[Is Working Memory Training Effective?](#) : This article published in the journal of Developmental Psychology discusses the potential of working memory training in youth.