

Visual Processing Disorders Brain Locations and Function

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Brain Location	Function	Disorder
Visual Association Cortex	Processes visual stimuli	Inability to process visual information (Visual processing disorder)
Visual Association Cortex	Color, form, spatial position, orientation and movement	<i>Pure Alexia</i> : Cannot see words. Can write but cannot read one's own writing. In a deaf person: Cannot read signs or words, but can sign words
Visual Association Cortex	Spatial orientation	Affects ability to direct the eyes to focus and results in Impaired Visual Scanning : reduced ability for the eyes to move quickly back forth between points of fixation. Overcrowding of the letters leads to the inability to clearly sort out the letters results. Overcrowding of the lines leads to losing one's place within the paragraph
Right hemisphere	The ability to understand perceive spatial relations and recognize complex geometrical forms	Difficult to read and understand maps and charts such as pie charts or bar graphs. May also have difficulty verbally explaining these concepts to others.
Extrastriate cortex divided into two streams called the ventral and dorsal streams	Ventral stream = identifying objects and the colors associated with them, Dorsal stream = where in space the object is positioned and information regarding movement of the object	Cannot visualize changes in size

Reference: Carlson, N. R., & Birkett, M. A., (2017). *Physiology of behavior* (12th ed). Boston, MA: Pearson Education Limited.