

Critical Windows Timeline Poster

Brain development critical and sensitive periods from prenatal through age 5

Critical Windows of Brain Development

Each brain region has a period of peak plasticity when it's most responsive to input. Missing the window doesn't mean the door is locked, but it does mean you'll need to push harder.

AGE RANGE	BRAIN REGION / SYSTEM	WHAT'S DEVELOPING	HOW TO SUPPORT
Prenatal	Neural tube, basic architecture	Neurons forming at 250,000/minute; brain structure laid down	Adequate folate, DHA, choline; avoid alcohol and toxins
0-6 months	Sensory cortex (vision, hearing)	Visual acuity, auditory discrimination, face recognition	Eye contact, high-contrast images, talking and singing
6-12 months	Motor cortex, hippocampus	Crawling, reaching, early object permanence, memory	Tummy time, free floor play, peek-a-boo, varied textures
1-2 years	Language areas (Broca's, Wernicke's)	Vocabulary explosion, receptive language, first sentences	Narrate everything, read aloud daily, limit screen time
2-3 years	Prefrontal cortex (early), cerebellum	Impulse control beginnings, coordination, imaginative play	Simple rules/routines, outdoor play, pretend play
3-5 years	Prefrontal cortex, corpus callosum	Executive function, working memory, emotional regulation	Board games, puzzles, social play, music lessons

KEY POINT

Windows don't slam shut. Sensitive periods have peak plasticity, but the brain retains some ability to rewire throughout childhood. Earlier is easier, but later still works.