Core Skills Analysis

Cognitive Science and Psychology

- Learned about various aspects of human cognition and brain functions through interactive demonstrations.
- Gained insight into perception, memory, attention, and problem-solving as the show explores how the brain processes information.
- Observed real-world applications of psychological principles, such as optical illusions and mental shortcuts.
- Understood how cognitive biases and limitations can affect decision-making and behavior.

Critical Thinking and Problem Solving

- Developed awareness of how the brain generates assumptions and quick judgments.
- Recognized the importance of questioning initial perceptions and evaluating evidence critically.
- Practiced identifying logical fallacies and common cognitive errors demonstrated in experiments on the show.
- Strengthened skills in analyzing situations from multiple perspectives.

Tips

To further deepen understanding and retention of cognitive science and critical thinking skills introduced by Brain Games, consider engaging in a mix of hands-on activities and discussions. Start by encouraging the student to recreate some of the show's brain teasers or optical illusions, which promotes active learning and reinforces perceptual concepts. Next, have discussions around everyday situations where cognitive biases appear, analyzing decisions made by peers or media examples. Introducing simple experiments in observing memory or attention in familiar contexts can make learning tangible and personal. Finally, exploring neuroscience basics through models or apps helps connect psychological concepts to physical brain structures, fostering a holistic understanding of cognition.

Book Recommendations

- The Brain: The Story of You by David Eagleman: A captivating exploration of how the brain shapes our reality, perfect for teens wanting to understand their own minds.
- Mindware: Tools for Smart Thinking by Richard E. Nisbett: This book provides practical strategies to improve reasoning and avoid common cognitive pitfalls.
- Brain Rules for Aging Well: 10 Principles for Staying Vital, Happy, and Sharp by John Medina: Though focused on aging, this accessible book teaches key brain functions and how lifestyle affects cognition.

Learning Standards

- CCSS.ELA-LITERACY.RI.9-10.1: Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text (applied through nonfiction media analysis).
- CCSS.ELA-LITERACY.SL.9-10.1: Initiate and participate effectively in a range of collaborative discussions (about cognitive concepts from the show).
- NGSS HS-LS1-3: Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis (extended through exploring brain function regulation).
- CCSS.ELA-LITERACY.W.9-10.2: Write informative/explanatory texts to examine and convey complex ideas (reporting on cognitive experiments from the show).

Try This Next

- Create a worksheet with different types of optical illusions and have the student explain why each works based on brain perception.
- Design a short quiz focused on identifying cognitive biases demonstrated in the show, such as confirmation bias or inattentional blindness.