BRAIN POWER

We Train The Brain™

Treating Dyscalculia

As with other types of learning disabilities, dyscalculia is believed to involve problems with language and visual processing, and nonverbal reasoning. For example, these children often have trouble with mental visualization which makes it difficult to perform mental calculations. Consequently, they must rely on counting on their fingers. Problems with nonverbal reasoning and other executive functions create difficulties understanding mathematical concepts and operations. Language processing problems interfere with performing word problems.

Common symptoms of dyscalculia include:

- Confusing signs (+, -, /, x)
- Reversing and/or transposing numbers
- Reliance on counting strategies rather than "knowing"
- Difficulty with mental arithmetic & measurements
- Inability to grasp and remember math rules/formulas
- Shows difficulty understanding concepts of place value, and quantity, number lines, positive and negative value, carrying and borrowing
- Has difficulty understanding and doing word problems
- Exhibits difficulty using steps involved in math operations
- Is challenged making change and handling money
- Displays difficulty recognizing patterns when adding, subtracting, multiplying, or\dividing
- Has difficulty putting language to math processes
- Has difficulty understanding concepts related to time such as days, weeks, months, seasons, quarters, etc.
- Exhibits difficulty organizing problems on the page, keeping numbers lined up, following through on long division problems

Treatment with Brain Power® needs to occur in stages. The treatment plan below is numbered to indicate the typical sequence of training. First, it will be necessary to develop mental visualization abilities, particularly related to visualizing the number line. Also begin training of language processing skills and nonverbal reasoning (#1).

Once adequate progress has been made on these tasks, then add training of basic numerical operations (addition and subtraction) (#2A). When adequate progress has been made on these tasks, add the tasks labeled 2B which will drive the ability to perform mental calculations to a level of high proficiency.

You may also add additional tasks to further strengthen visual processing and executive functions (#3).

Patient: Treating Math Disorders

Treatment Plan

Date: _____

Put an X under each processing skill to be treated and in the box each of the tasks to be trained.	Visual Processing	Auditory Processing	Visual Memory	Verbal Memory	Executive Functions	Academic Skills	Motor Skills	Language Processing
Visual Tracking								
Visual Matching	1							
Line Orientation	1							
Visual Discrimination Speed	1							
Visual Scanning Sequential	3							
Visual Scanning Random	3							
Spatial Number Visualization	1							
Spatial Visualization	1							
Visual Construction	3							
Puzzle Construction	3							
Rhythm Discrimination								
Pitch Discrimination								
C/V (Phonemic Processing I)								
CV/VC (Phonemic Processing II)								
CVC (Phonemic Processing III)								
CCV (Phonemic Processing IV)								
VCC (Phonemic Processing V)								
CCVC (Phonemic Processing VI)								
CVCC (Phonemic Processing VII)								
CCVCC (Phonemic Process VIII)								
Phonemic Blending Visual								
Phonemic Blending Verbal								
Phonemic Segmenting Oral								
Phonemic Segmenting Written								
Phonemic Identification								
Phonemic Elimination								
Phonemic Addition								
Phonemic Reversal								

	Visual Processing	Auditory Processing	Visual Memory	Verbal Memory	Executive Functions	Academic Skills	Motor Skills	Language Processing
Visual Word Memory								
Auditory Word Memory								
Visual Association Word Memory								
Aud. Association Word Memory								
Visual Word Pairs								
Auditory Word Pairs								
Visual Story Memory								
Auditory Story Memory								
Visual Spatial Memory								
Spatial Picture Memory								
Concentration/Inhibition Visual								
Concentration/Inhibition Auditory								
Number Color Sequencing	1							
Color Arrows	1							
Color Words					3			
Divided Attention Letter Disc.					3			
Divided Attention Aud. Calc.						2B		
Divided Attention Visual Calc.						2B		
Conceptual Reasoning					1			
Deductive Reasoning					1			
Post Office					3			
Basic Addition						2A		
Basic Subtraction						2A		
Basic Multiplication						2A		
Finger Tapping								
Fine Motor Sequencing								
Visual-Motor 1								
Visual-Motor 2								
Gross Motor Sequencing								
Confrontation Naming								
Verbal Commands								1