## Brain Gym at Work...and Play!

### **READING SKILLS**

### **Crossing the Visual Midline**

Moving the eyes across the page without inhibiting the receptive brain

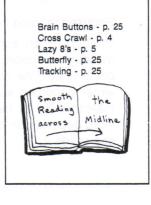
The development of visual skills for reading begins with the ability to move both eyes in tandem from left to right across the midline of the page and across the corresponding visual midfield. For reading, one eye must be dominant for focusing, the other eye for blending. Although both skills are available to each eye, stress in learning the tasks of focusing and blending for reading may cause visual disorientation.



**Brain Buttons** 



Cross Crawl





Lazy 8s

## **Oral Reading**

Expressive reading with emotion and interpretation

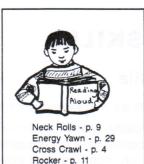
The reader must discover that he or she is telling a story and communicating ideas through reading. One must have the concept of a verbal code in order for true reading to be possible. In Western languages, the code includes an auditory as well as a visual and a motor component. All three of these must be used together for reconstruction of the code to take place.



The Energy Yawn



Cross Crawl



Belly Breathing - p. 12

Neck Rolls



The Rocker

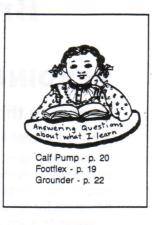


Belly Breathing

### **Reading Comprehension**

Focused reading involving anticipation and internalization of language

Reading is an active reconstruction by the reader of the author's message or code. There's nothing inherently meaningful about the code itself. The success of the communication depends upon the writer encoding something meaningful and the reader decoding it, making it his or her own. Thus, communication through the written word depends on the reader's active recreation of the work as he or she reads it.

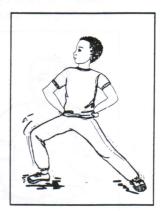




The Calf Pump



The Footflex



The Grounder

### THINKING SKILLS

### Organization Skills

Moving the eyes vertically as well as horizontally without confusion

Familiarity with multimodality (visual, auditory, tactile, kinesthetic) and multidirectional processes is a prerequisite for comprehending math and spelling. Until left, right, up, and down are recognized as unique visual spaces, the learner will have difficulty with words or symbols presented in columns, and with placing symbols in an ordered sequence.



Space Buttons



Earth Buttons - p.26 Space Buttons - p.28 Balance Buttons - p.27



**Balance Buttons** 

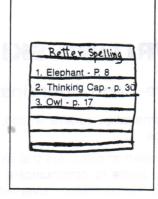


Earth Buttons

### **Spelling**

The ability to access visual memory and simultaneously build auditory constructs

For efficient spelling, development of both short- and long-term memory for storage of information about sounds and associations is essential.

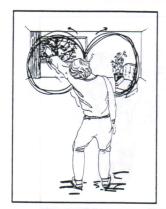




The Thinking Cap



The Owl

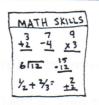


The Elephant

#### Math

The ability to work in a multidimensional, multidirectional medium

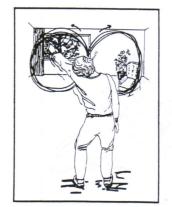
Math skills are more accessible to the student who has internalized concepts about space, mass, quantities, and relationships.



Elephant - p. 8 The Owl - p. 17 Calf Pump - p. 20 Neck Rolls - p. 9 Gravity Glider - p. 21



The Owl



The Elephant



The Calf Pump



Neck Rolls



The Gravity Glider

### **WRITING SKILLS**

### **Eye-Hand Coordination**

Penmanship, cursive writing, and drawing in the left, right, upper, and lower visual fields

The learner discovers that symbols (letters or pictures) can communicate meaning. The desire to communicate through symbols is the first step in acquiring writing skills. Gross-motor movement is established as a basis for handedness and fine-motor control.



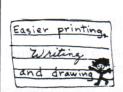
Double Doodle



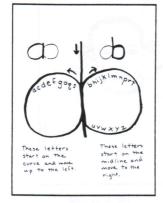
Arm Activation



Lazy 8s



Lazy 8's - p. 5 Alphabet 8's - p. 7 Arm Activation - p. 18 Double Doodle - p. 6



Alphabet 8s

### **Creative Writing**

The ability to express experiences received and stored in the hindbrain as personal language

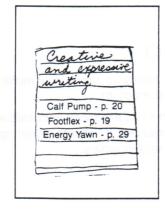
Skills of reading and writing the code develop together, each reinforcing the other. Writing helps to establish the skills of attention (focus), perception (meaning), and discrimination (connecting the code to associations and feelings). Writing skills must keep pace with reading skills, and ideally are maintained at a level no more than two years below the reading level.



The Energy Yawn



The Footflex





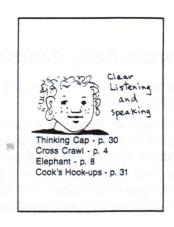
The Calf Pump

### **SELF-AWARENESS SKILLS**

# Crossing the Auditory Midline: Clear Listening and Speaking

Active listening involves both external and internal feedback and feedforward

Active listening involves both reception and processing of meaning, and is a basic prerequisite to all effective communication. Externally, motor responses are necessary for hearing and speech. Internally, one must interpret thoughts and associations to be able to respond from one's experience. The feedback-feedforward loop allows comprehension and expression to take place.

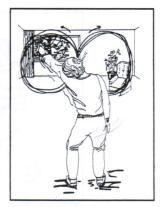








Cross Crawl



The Elephant

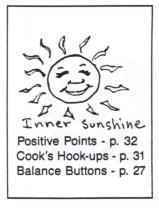


Hook-ups

### Self-Concept: Inner Sunshine

Self-esteem is both the goal and the means of self-directed learning

Having confidence within the boundaries of personal space helps one to feel safe, to know when risk-taking is appropriate, and to respect other people's space. Personal space is the immediate working area around the body, including all the space one can comfortably reach in any direction. Into this space, we can radiate our thoughts, feelings, and self-expression.





Positive Points



Hook-ups



**Balance Buttons** 

## Whole-Body Coordination for Sports and Play

Basic brain-body reflexes are essential for decision-making while one is in motion

The learner develops a sense of the physical area of his personal space and defines his boundaries. This safe space has left/right, top/bottom, and back/front dimensions. Improved visual and kinesthetic figure-ground manifest on the playing field as ease of tracking and hand-eye coordination. The learner discovers greater autonomy while coordinating his brain and body through focused movement.



Think of an X - p. 15 Cross Crawl - p.4 Balance Buttons - p. 27 The Rocker - p. 11 Space Buttons - p. 28 The Energizer - p. 14



Think of an X



Cross Crawl



**Balance Buttons** 



The Rocker



Space Buttons



The Energizer

### **HOME-STUDY SKILLS**

### **Memory and Abstract Thinking**

Integration of silent speech and visualization skills, better known as thinking

Silent speech is necessary to interpret abstract concepts and to process language once reading vocabulary exceeds speaking vocabulary (sixth-grade level). Auditory and visual input must be integrated to enable the storage of information into short-term memory for analytical use and the retrieval of information from long-term memory for verbal expression.



Cross Crawl - p. 4
Balance Buttons - p. 27
Positive Points - p. 32
Neck Rolls - p. 9



Cross Crawl



**Balance Buttons** 



Positive Points



**Neck Rolls** 

### **Creative Thinking**

Integration of what is presented by others with one's own life and thought

Focus, attention, and concentration require integration of prior life experiences (actual, imaginary, or vicarious) and new information (received by the hindbrain and expressed in language through the forebrain), so that the new is processed and stored as personal knowledge.



Cross Crawl - p. 4 Any Lengthening Activities p. 16-22 The Energizer - p. 14 The Rocker - p. 11



Cross Crawl



The Gravity Glider



The Energizer



The Rocker

### Speed-Reading

Skimming and scanning abilities made accessible

In speed-reading, one bypasses as much of the linear process as possible while still actively taking in information. Skimming is exploring the printed page for meaningful material, while skipping the redundant. Scanning is reviewing the data for anticipated information, such as a name or date. The skilled speed-reader varies his speed according to writing style and subject matter.



Cross Crawl - p. 4 Any Lengthening - p. 17-22



Lazy 8s



Cross Crawl



The Owl



The Calf Pump

## **Test Taking**

Relaxing the butterflies

Information which has been learned or experienced is stored in the long-term memory centers of the brain. The ability to retrieve and use this information, especially in a situation which tests our skills and abilities, requires focus and presence, without confusion, anxiety, or distraction.



Water - p. 24 Lazy 8's - p. 5 Earth Buttons - p. 26 Space Buttons - p. 28 Cook's Hook-ups-p. 31 Cross Crawl - p. 4



Space Buttons



Cross Crawl



Water



Lazy 8s



Earth Buttons



Hook-ups

## PERSONAL ECOLOGY SKILLS

## Productivity at the Keyboard and Video Screen

The ability to stabilize homeostasis

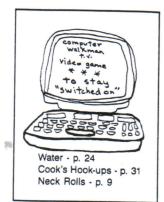
For the sensitive individual, electronic devices may aggravate visual, auditory, or other physiological stresses. The video screen provides only one visual plane, limiting the use of binocular vision, depth perception, and peripheral vision. The constant hum of many devices switches off auditory skills, while the electromagnetic field of radio-controlled equipment may negatively affect body meridians.



Water



Hook-ups



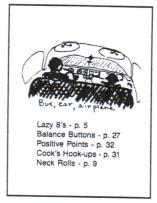


Neck Rolls

### Riding in a Car, Bus, or Plane

Crossing the moving midline

The body must keep its sense of balance in a moving vehicle by compensating with the inner ear for motion left to right, back to front, or side to side. Binocular vision and depth perception may also be affected by this motion.





Balance Buttons



Lazy 8s



Positive Points



Hook-ups



Neck Rolls



The Thinking Cap