

**P A C E**  
 ④ Positives Hook-ups  
 ③ Active Cross-Crawl Kneecaps  
 ② Clarity Brain Buttons  
 ① Energy (Water - gives you energy hydrates your brain Juices & Oxygen flowing) = belly

# WATER

Water is an excellent conductor of electrical energy. Two-thirds of the human body (about seventy percent) is made up of water. All of the electrical and chemical actions of the brain and central nervous system are dependent on the conductivity of electrical currents between the brain and the sensory organs, facilitated by water. Like rain falling on the ground, water is best absorbed by the body when provided in frequent small amounts.

## TEACHING TIPS

- Psychological or environmental stress depletes the body of water, leaving cells dehydrated.
- Water is essential to proper lymphatic function. (The nourishment of the cells and removal of waste is dependent on this lymphatic action.)
- All other liquids are processed in the body as food, and do not serve the body's water needs.
- Water is most easily absorbed at room temperature.
- Excessive water taken less than twenty minutes before or one hour after meals may dilute digestive juices.
- Foods that naturally contain water, like fruits and vegetables, help to lubricate the system, including the intestines. Their cleansing action facilitates absorption of water through the intestinal wall.
- Processed foods do not contain water, and, like caffeinated drinks, may be dehydrating.
- Working with electronic equipment (e.g., computer terminals, TV) is dehydrating to the body.
- The traditional way of determining water needs is to figure one ounce of water per day for every three pounds of body weight; double that in times of stress (see box).
- Unless you are a doctor, it may be illegal to prescribe water amounts for another person. With proper information, the student can determine his own needs.

## ACTIVATES THE BRAIN FOR

- efficient electrical and chemical action between the brain and the nervous system
- efficient storage and retrieval of information

## ACADEMIC SKILLS

- all academic skills are improved by adequate hydration
- water intake is vital before test-taking or at other times that possible stress is anticipated

## BEHAVIORAL/POSTURAL CORRELATES

- improved concentration (alleviates mental fatigue)
- a heightened ability to move and participate
- improved mental and physical coordination (alleviates many difficulties related to neurological switching)
- stress release, enhancing communication and social skills

## RELATED MOVEMENTS

- Brain Buttons, p. 25
- Earth Buttons, p. 26
- Space Buttons, p. 28
- Hook-ups, p. 31
- Cross Crawl, p. 4

## WHY WE EMPHASIZE WATER

As a marathon runner, Dr. Dennison learned the many benefits of replenishing his system with water. At his learning centers, he noticed that students would arrive thirsty, drink great quantities of the bottled water in his office, and seem more alert and refreshed afterward. This observation led Dr. Dennison to look even further into the value of water.



Nikko and I help Mom with shopping. We feel best when we eat foods that contain natural WATER, like fruits and vegetables, and drink plenty of good, clear WATER. In science we read that the body is made up of 70% WATER — a necessary conductor for all electrical and chemical reactions. More important, I know how clean and clear I feel inside. thanks to WATER!

### Figuring Water Needs by Body Weight

weight	÷ 3	= number of ounces
# of ounces	÷ 8	= number of glasses per day
i.e., 144 lbs.	÷ 3	= 48 ounces
48 ounces	÷ 8	= 6 glasses of water per day

*A 144-lb. person needs about 6 glasses of water per day.*



# CROSS CRAWL

In this contralateral exercise, similar to walking in place, the student alternately moves one arm and its opposite leg and the other arm and *its* opposite leg. Because Cross Crawl accesses both brain hemispheres simultaneously, this is the ideal warm-up for all skills which require crossing the body's lateral midline.

## TEACHING TIPS

- Water and Brain Buttons help prepare the body and brain to respond to Cross Crawl.
- To activate the kinesthetic sense, alternately touch each hand to the opposite knee.

## VARIATIONS

- Cross Crawl as you sit, moving opposite arm and leg together.
- Reach with opposite arm and leg in varied directions.
- Reach behind the body to touch the opposite foot. (See *Switching On* for more variations.)
- Do a slow-motion Cross Crawl, reaching opposite arm and leg to their full extension (Cross Crawl for focus).
- Skip (or bounce lightly) between each Cross Crawl. (Skip-Across is especially helpful for centering; it also alleviates visual stress.)
- To improve balance, Cross Crawl with your eyes closed, or pretend to swim while Cross Crawling.
- Use color-coded stickers or ribbons on opposite hands and feet for children who may need this clue.
- Do Cross Crawl to a variety of music and rhythms.

## ACTIVATES THE BRAIN FOR

- crossing the visual/auditory/kinesthetic/tactile midline
- left-to-right eye movements
- improved binocular (both eyes together) vision

## ACADEMIC SKILLS

- spelling
- writing
- listening
- reading and comprehension

## BEHAVIORAL/POSTURAL CORRELATES

- improved left/right coordination
- enhanced breathing and stamina
- greater coordination and spatial awareness
- enhanced hearing and vision

## RELATED MOVEMENTS

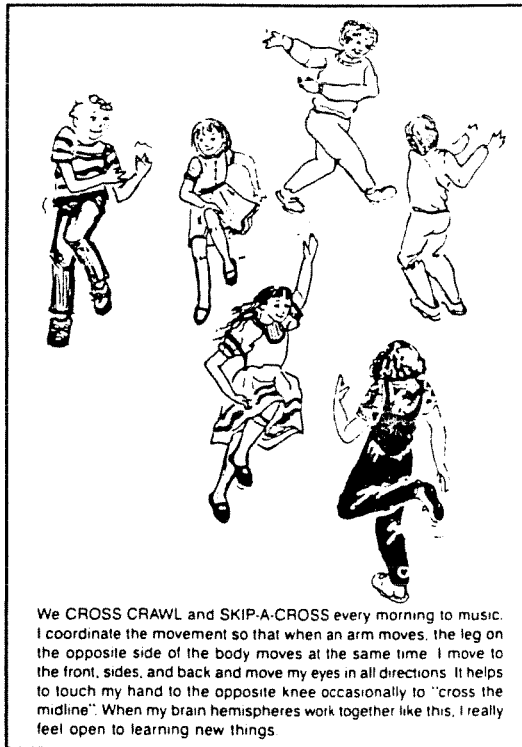
Lazy 8s, p. 5

Brain Buttons, p. 25

The Thinking Cap, p. 30

## HISTORY OF THE MOVEMENT

As the body grows, interweaving of the opposite sides through movement naturally occurs during such activities as crawling, walking, and running. Over the last century, crawling has been used in neurological patterning to maximize learning potential. Experts theorized that contralateral movements worked by activating the speech and language centers of the brain. However, Dr. Dennison discovered that Cross Crawl activity is effective because it stimulates the receptive as well as expressive hemisphere of the brain, facilitating integrated learning. This preference for whole-brain movement over one-side-at-a-time processing can be established through Dennison Laterality Repatterning (see *Edu-K for Kids*).



We CROSS CRAWL and SKIP-A-CROSS every morning to music. I coordinate the movement so that when an arm moves, the leg on the opposite side of the body moves at the same time. I move to the front, sides, and back and move my eyes in all directions. It helps to touch my hand to the opposite knee occasionally to "cross the midline". When my brain hemispheres work together like this, I really feel open to learning new things.



# HOOK-UPS

Hook-ups connect the electrical circuits in the body, containing and thus focusing both attention and disorganized energy. The mind and body relax as energy circulates through areas blocked by tension. The figure 8 pattern of the arms and legs (Part One) follows the energy flow lines of the body. The touching of the fingertips (Part Two) balances and connects the two brain hemispheres.


## TEACHING TIPS

- Part One: Sitting, the student crosses the left ankle over the right. He extends his arms before him, crossing the left wrist over the right. He then interlaces his fingers and draws his hands up toward his chest. He may now close his eyes, breathe deeply, and relax for about a minute. Optional: He presses his tongue flat against the roof of his mouth on inhalation, and relaxes the tongue on exhalation.
- Part Two: When ready, the student uncrosses his legs. He touches the fingertips of both hands together, continuing to breathe deeply for about another minute.

## VARIATIONS

- Hook-ups may also be done while standing.
- Cook's Hook-ups, Part 1: The student sits resting his left ankle on his right knee. He grasps his left ankle with his right hand, putting his left hand around the ball of the left foot (or shoe). He breathes deeply for about a minute, then continues with Part Two, as above.

### Deepening Attitudes



We do HOOK-UPS whenever we feel sad, confused, or angry. This cheers us up in no time! The activity is done in two parts. Grandpa is doing part 1. Grandma is doing part 2. First, put your left ankle over the right one. Next, extend your arms and cross the left wrist over the right; then interlace your fingers and draw your hands up toward your chest. (Some people will feel better with the right ankle and right wrist on top.) Sit this way for one minute, breathing deeply, with your eyes closed and your tongue on the roof of your mouth. During the second part, uncross your legs and put your fingertips together, continuing to breathe deeply for another minute.

- For Part One of any of the above versions, some people may prefer to place the right ankle and right wrist on top.

## ACTIVATE THE BRAIN FOR

- emotional centering
- grounding
- increased attention (stimulates reticular formation)
- cranial movement

## ACADEMIC SKILLS

- clear listening and speaking
- test-taking and similar challenges
- work at the keyboard

## BEHAVIORAL/POSTURAL CORRELATES

- improved self-control and sense of boundaries
- improved balance and coordination
- increased comfort in the environment (less hypersensitivity)
- deeper respiration

## RELATED MOVEMENTS

Positive Points, p. 32

Cross Crawl, p. 4

Balance Buttons, p. 27

Cross Crawl Sit-ups, p. 13

## HISTORY OF THE MOVEMENT

Hook-ups shift electrical energy from the survival centers in the hindbrain to the reasoning centers in the midbrain and neocortex, thus activating hemispheric integration, increasing fine-motor coordination, and enhancing formal reasoning. Developmentally, such integration pathways are usually established in infancy through sucking and cross-motor movement. The tongue pressing into the roof of the mouth stimulates the limbic system for emotional processing in concert with more refined reasoning in the frontal lobes. Excessive energy to the receptive (right or hind) brain can manifest as depression, pain, fatigue, or hyperactivity. This energy gets redirected in Part One to the expressive (left) brain in a figure-8 pattern. Dr. Dennison discovered that this posture could also be used to release emotional stress and alleviate learning difficulties. Wayne Cook, an expert in electromagnetic energy, invented the variation of this posture (see above), from which Hook-ups are adapted, as a way to counterbalance the negative effects of electrical pollution.









## Alphabet Sequencing Ideas:

- Sing the alphabet song.
- Toss a ball or bean bag back and forth while saying the alphabet.
- Say the alphabet in groups of two or three letters.  
Ex. ab- cd- ef- ... or abc- def- ghi- ...
- Put magnetic letters or letter tiles in order.
- Take a letter away from the sequenced alphabet and have the student guess which letter is missing.
- Make cards with two letters sequenced on each with the third letter blank. Have the student tell what letter is missing. Ex. bc\_ rs\_ ...  
Change the missing letter from an ending position to an initial or middle position.  
Ex. \_ef or k\_m
- Have a student draw two letter cards from an alphabet deck and say all the letters that come in between the two.
- Have a student draw a letter and tell what letter comes before and after it in the alphabet.
- Balance an eraser on a student's head and have him say the alphabet while walking. If the eraser falls the tutor then balances the eraser and continues where the student left off.
- Fill a paper with rows of random letters, but have the alphabet embedded in throughout the lines in order. Have the student find the alphabet by penciling under each letter and circling each letter of the alphabet as it appears starting with the first letter a.  
Ex. b t d a f o b k m r x c  
In this sequence the student would circle a – then the next b- then the c- skipping letters that do not belong in the sequence. This continues until the whole alphabet is found.
- Play a game where you pick a letter of the alphabet and have the student try guess the letter. For each guess, say “your letter comes before mine in the alphabet” or you letter comes after mine in the alphabet” until the correct letter is guessed.



## **Other Sequencing Ideas:**

- Toss a ball or bean bag back and forth and alternate saying the days of the week. This can also be done for the months of the year, counting by 2's, 3's, 5's, etc.
- Put 5-10 word cards in alphabetical order. Use red word cards and read them once they are put in order for extra practice.
- Write the days of the week on note cards and arrange in order. Do the same for the months of the year.
- Put the days of the week or the months of the year in alphabetical order.
- Play the dictionary game. Think of a CVC word and write it down. Have the student try to guess the word. For every guess tell the student whether your word comes before or after his word in the dictionary. The student should narrow down the guesses until the word is discovered.
- Look up words in the dictionary.
- Look up addresses or businesses in the phone book.
- Have students write out their school schedules if they are in middle school or above. Do this on a blocked schedule sheet and highlight areas of free time for studying or for doing homework. Add in any extra activities as well.
- If tutoring at a library, ask the student to find a book by author for you to read together at the end of the lesson.
- Look up a street on a map index and find it on the map.
- Use a map and have the student tell how they would get from their house to a museum, hospital, etc.

