

## BRAIN GYM

Brain Gym consists of 26 simple and pleasant movements aiming at improving learning skills through the use of both brain hemispheres.

### LIST OF 26 BRAIN GYM EXERCISES

- cross-crawl
- sit-up cross crawl
- think of an 'X'
- lazy 8's
- alphabet 8's
- the elephant
- double doodle
- neck rolls
- the owl
- the rocker
- belly breathing
- the energizer
- arm activation
- foot flex
- calf pump
- gravity glider
- the grounder
- water
- brain buttons
- earth buttons
- balance buttons
- space buttons

- energy yawn
- thinking cap
- hook-ups
- positive points

## Lateralization

It concerns the way the left and right hemispheres interact. The left hemisphere is specialized in sequential logical operations (language and logics), while the right one allows us a holistic global vision of reality (music and spatiality).

## Cross crawls

Students alternately move their arms towards the opposite leg and then vice versa. Since each limb is governed by the hemisphere of the opposite side, this exercise facilitates connection between the two hemispheres.

## Hook-ups

The exercise can be done while standing, sitting or lying down. Students cross the left ankle on the right one. Then they intertwine fingers and bring them near the chest. They close their eyes, breathe deeply for a few minutes and relax. Then students free hands and legs and finger tips touch gently while they keep on breathing deeply. Hook-ups help:

- mind and body relaxation

## Lazy eight's

The activity consists in drawing horizontal eight's in the air with your hands. It activates brain and improves:

- eye-muscles coordination
- connection between hemispheres
- bi-ocular and peripheral vision
- reading speed.

## Double doodle

This is a bilateral drawing activity which consists in sketching two images with both hands. It improves these learning skills:

- understanding of writing symbols
- spelling accurateness
- Maths calculations.

## The elephant

This movement activates the inner ear for improved balance and so integrates the brain for listening with both ears. It improves:

- listening comprehension and attention
- short- and long-term memory
- thinking ability

**Focalization** exercises help students to develop and reinforce those neural paths which link what they already know (which lays in the back of their brain) with the ability to process and express the information (frontal lobes)

## The owl

The owl's movements improve visual and auditory skills and also head rotation. They lessen the neck tension which develops in distressing conditions. The owl lengthens neck and shoulders' muscles while reestablishing width of movement and facilitating the blood flow to the brain. It enhances:

- attention and memory.

## The active arm

The active arm lengthens muscles in the upper part of chest and shoulders. When these muscles are contracted writing and tool controlling skills are inhibited. It activates the brain for:

- expressive reading
- diaphragm relaxation and deep breathing
- hand-eye coordination and tool controlling skills.

## The gravitational glider

The movement uses balance and gravity in order to lessen tension in the hips and pelvic area thus allowing to student to discover more comfortable postures when sitting or standing up. It betters:

- reading comprehension
- mental Maths calculations
- abstract thinking.

## The rocker

The rocker massages the hamstring and gluteus muscle groups (the bottom, in other words...). It can be very pleasant after hours spent sitting in the classroom. It also stimulates the circulation of the cerebrospinal fluid into the spinal column and activate the brain for:

- study skills
- left-to-right visual skills
- attention and comprehension.

## CENTRALIZATION

These are mostly relaxation exercises which help to reestablish the neural networks between brain and body and, this way, facilitating the passage of electromagnetic flow through the body. These activities help the chemical and electrical processes which take place during mental and physical efforts.

## Brain buttons

One hand massages two spots below the davicle while the other rests on the navel. The movements stimulates the carotid artery and this way enhances the blood flow to the brain. It activates the brain for:

- reading skills
- memorization.

## Earth buttons

One hand fingers rest on the lower lip while the others stay on the pubic bone. While having the sensation of a better connection between the upper and lower parts of the body the students feels more stable and centered. It improves:

- reading skills.

## Balance buttons

These buttons reestablish balance in every dimension: left-right, above-under, behind-before. The student massages the spot where the skull is attached to the neck and, at the same time, the navel. It improves the next learning skills:

- critical and decisional capacities
- spelling accurateness
- Maths calculations.

## Space buttons

One hand rests on the upper lip while the other lays on the back-bone. It activates the brain for:

- relaxation and concentration
- eye-contact in communication with people

It improves these learning skills:

- focusing during a test
- reading
- motivation and interest.

## The thinking cap

This activity helps the student to focus attention on hearing. It also lessens tension in skull bones. The student gently pulls ears backwards and unrolls them with fingers. They start from the top of the ear, massage them delicately and end on the lobe. It activates brain for:

- hearing one's voice
- short-term memory

- inner dialogue and thinking .

## The energetic yawn

Don't get angry at your students if they yawn during English classrooms! Not now that you know that scientific research has proved yawning to be a perfect exercise which brings oxygen to the brain and so enhances learning performances!

Brain Gym: 26 Movements

Suggested length of each movement is about 30 seconds unless otherwise noted. Please perform all movements recommended with care and to the degree that feels comfortable. If any movement feels awkward or strenuous simply stop and consult with Sonya White, LBGC, or another Licensed Brain Gym Consultant.

### 1) Cross Crawl

1. Stand with feet hip distance apart.
2. Think of your body as a big 'X' - bring your hands up and out if you'd like.
3. Slowly bring one arm down and across while the opposite leg comes up to meet it. Twist the torso to get the most contact between the arm and opposite leg. Stay comfortable so as to not over-stretch, but be as engaged as possible. You can think of the dance "the twist" if that helps.
4. Change arm and leg. Remember to go slow because specific neurotransmitters are released, and integrated left and right brain hemisphere learning is better enabled. The slow contralateral movement activates speech and language centers in the brain. Coordination and balance are improved, and over time this slow movement may become easier and easier.

### 2) Sit-Up Cross Crawls

1. Lay face up on a comfortable yet firm surface.
2. Have knees bent towards the head and feet off of the ground.
3. Hands are behind the head, gently lifting the head a few inches off of the ground. Do not strain your neck.

4. Slowly bring one elbow and the opposite knee together, twisting the torso as much as is comfortable.
5. Bring the elbow and knee away from each other as the opposite elbow and knee twist towards each other and touch.

This exercise can be done for as long as feels comfortable, more can be added over time. Abdominal muscles are strengthened as the lower back relaxes. The left and right hemispheres of the brain are activated to work together more. Again, the slower the movement the better for every system Sit-Up Cross Crawls effects.

### 3) Think of an 'X'

Close your eyes and imagine looking at a big 'X'. If it helps, draw a large 'X' on a blank sheet of paper and look at it right in front of you. Imagining or looking at an 'X' strengthens the neural connections between the left and right hemispheres of the brain which helps us understand details and the big picture.

### 4) Lazy 8s

1. Sit at a table with a blank piece of paper directly in front of you. Position the paper so it is wider parallel to you.
2. Place the tip of a pen or pencil right in the center of the paper - It should also be right in the centerline of your body.
3. Draw with the pen or pencil first up and to the left. Circle down and around, coming to the middle again before going up and to the right. Circle down and around to the middle and repeat/re-trace the drawing beginning up and to the left. Repeat this at least three times, always starting up and to the left. Follow the pen or pencil tip with your eyes the whole time. End the drawing in the center where you started. Your drawing should look like an infinity symbol.

Infinity 8s help the eyes move together and for the left and right hemispheres of the brain to integrate. This movement is relaxing and also a great way to keep the eyes muscles exercised. Do Infinity 8s without eyeglasses.

### 5) Alphabet 8s

1. Sit at a table with a blank piece of paper directly in front of you. Position the paper so it is wider parallel to you.
2. Place the tip of a pen or pencil right in the center of the paper - It should also be right in the centerline of your body.

3. Draw with the pen or pencil first up and to the left. Circle down and around, coming to the middle again before going up and to the right. Circle down and around to the middle and repeat/re-trace the drawing beginning up and to the left. Repeat this at least three times, always starting up and to the left. Follow the pen or pencil tip with your eyes the whole time. End the drawing in the center where you started. You are making a large infinity symbol. After drawing three infinity symbols you are ready to begin drawing the first letter in the alphabet. All letters are written in lower case.

4. Write a lower case 'a' by going up to the left, down and coming to the middle before adding a little tail. Bring the pen back to the infinity symbols center and draw three more infinity 8s, always starting up and to the left.

5. Stop the pen in the center of the infinity symbol. Draw a 'b' by drawing a straight line up, coming straight back down and following the infinity symbol up to the right and around back to center. Draw three more infinity symbols before drawing the 'c'.

the letters are drawn like so:

'c' = left

'd' = left

'e' = left

'f' = left

'g' = left

'h' = right

'i' = center

'j' = center

'k' = right

'l' = center

'm' = left to right

'n' = right

'o' = left

'p' = right

'q' = left

'r' = right

's' = left

't' = center

'u' = right

'v' = right

'w' = left to right

'x' = right

'y' = right

'z' = right

Remember, always draw three infinity symbols between each letter. End with three infinity symbols.

## 6) The Elephant

1. Stand with feet hip distance apart.
2. You will be making the infinity symbol with one arm at a time. Rest your left hand on your hip. Bring the right arm straight up and touching the side of your head.
3. Your straight arm and head stay "attached" at the ear as you bring your arm in front and in the middle, perpendicular to your torso. Look at your middle finger and imagine a line extending straight out from it's tip.
4. Make a large infinity symbol with the extended hand, moving first up and to the left in a wide arc, down around to your center, then up to the right and around back to center. Move using your whole torso. With a soft focus notice the object furthest in the distance that your middle finger points to as it moves slowly and steadily through the infinity symbol. Do three infinity symbols with one arm before switching arms and repeating the entire exercise three more times.

This exercise is designed to improve attention, recognition, perception, discrimination, and memory. Make sure to keep a relaxed neck and to focus the eyes gently throughout the exercise, allowing them to notice objects and easily move onto the next.

## 7) Double Doodle

1. Have as large a piece of paper in front of you. Use an easel or dry erase board if you have one.

2. Draw a line right down the middle of the paper. The middle of the paper should also correlate to the middle of your body, left and right.
3. Have a pen/pencil in each of your hands and put the left and right of the line, same distance from the line. Keep your eyes looking straight ahead.
4. Begin drawing with both pens at the same time, let them draw the same shapes simultaneously on opposite sides of the paper. Never cross the center line with either pen. "Doodle" as much as is desired. You can make squares, hearts, flowers, infinity symbols, or anything else you'd like. Double Doodles is a fun, spontaneous exercise.

This exercise is excellent for and-eye coordination, spatial awareness, visual discrimination, and creativity.

#### 8) Neck Rolls

1. Stand or sit comfortably.
2. Turn the head to one side and take a deep breath.
3. Slowly exhale for a count of eight seconds as you bring the head gently down and around to the other side. Imagine the chin drawing a smiley face as it slowly makes its way around your clavicle and back up over your shoulder.
4. Take another deep breath and repeat the movement in the opposite direction for a total of three times in each direction. Try this exercise both with eyes open and closed and see which you prefer.

This exercise releases tension in the neck that can prevent us from being able to concentrate visually on tasks right in front of us. Vision and hearing is improved through muscle relaxation and greater blood flow to the head. Neck Release helps to center, ground, and relax our central nervous system.

#### 9) The Owl

1. Stand or sit comfortably.
2. Bring one hand up to the opposite shoulder and grab and hold a sturdy pinch around the trapezius muscle between the neck and shoulder. Your thumb should be on one side of the muscle and the other fingers clasping around the other side. Make sure you have a sturdy grip but do not hurt yourself, it should feel good.

3. Turn your head to the same side as your hand is gripping and take a deep breath.
4. Slowly exhale for a count of eight seconds as you bring the head gently down and around to the other side. Imagine the chin drawing a smiley face as it slowly makes its way around your clavicle and back up over your shoulder. This should feel like a nice release of tension.
5. Bring your head back to the starting position with your face towards the gripping hand. Take a breath in and repeat the head turn as you slowly breath out. Repeat this movement one more time.
6. Face directly in front of you. Take a deep breath and exhale slowly as you bring your chin down straight in front of you as far as is comfortable. Repeat two more times.
7. Repeat steps 2 through 6 with the other hand on the opposite shoulder.

Neck and Shoulder Release releases tension and lengthens the neck to shoulder area. Range of motion is increased. Greater blood circulation to the brain improves focus, attention, and memory. This exercise is EXCELLENT if you work often on a computer.

#### 10) The Rocker

1. Sit on a comfortable yet firm ground/floor.
2. Lean back onto your arms as you bring your bent knees up. Cross your ankles.
3. Your sacrum, or tail bone should be on the floor. Gently rock your sacrum, making circular movements. Make figure 8s, or the infinity symbol movements with your sacrum if you'd like. You should be able to feel the muscles around your sacrum relaxing.

This movement improves posture, stabilizes the pelvis, and increases the ability to focus. Energy level is increased and you may find yourself breathing deeper.

#### 11) Belly Breathing

1. Stand or sit comfortably.
2. Place your hands gently on your belly, right around your navel.
3. Take a long deep breath into your belly. Imagine your belly filling up, bottom first, all the way up to the top. You can imagine a pitcher being filled up with water.
4. Exhale for a count of eight. Imagine all of the air slowly being expelled.

5. Repeat steps 2 through 4, two more times or as desired.

This exercise improves expressive communication and attention span. Greater breathing and therefore greater oxygen flow increase energy level.

## 12) The Energizer

1. Sit in a chair, spread your legs comfortably and rest your hands on your knees

2. Bend your head and torso so that your head is between your knees - or as far down toward your knees as is comfortable.

3. Take a deep breath in. Exhale slowly as you slowly bring your torso up, one vertebrae at a time starting at the lowest point. Your head should be the last part to extend. Let your spine extend as far back as is comfortable as you fully exhale.

4. Repeat steps 2 and 3, two more times or as desired.

This exercise improves spinal mobility, flexibility, and relaxation. Improves posture, concentration, attention, and breathing.

## 13) Arm Activation

1. Stand or sit in a chair where your arms can hang all the way down your sides. Notice how your shoulders and arms feel.

2. Bring the right arm straight up along the side of your head.

3. Bring the left arm up and wrap the fingers around the straight arm.

4. Lift the straight, right arm shoulder just to give a little stretch and gently, yet firmly, press the arm against the four fingers to the right for a count of eight. Relax.

5. Repeat step 4 two more times for the right arm. Bring your arms down to your side and notice if one shoulder and arm feel different from the other. Your right of course may feel more relaxed.

6. Repeat step 4 three more times with the left arm extended. Bring arms down and notice how the shoulders and arms feel - any different than when you began?

This exercise is excellent to do before and while you have a computer or writing project because it enhances the ability to express ideas. Improves focus, concentration, breathing, and a relaxed attitude.

#### 14) Footflex

1. Sit and bring the right ankle over the left knee.
2. With your right hand fingers find tight muscles and tendons on the back and inside of the calf, right by the knee. Once you find some give them squeeze in as much as is comfortable and hold.
3. With your left hand fingers find the achilles tendon close to the ankle and again squeeze and hold.
4. With the tendons being squeezed take a breath in. Slowly exhale for a count of eight as you flex your foot as far as is comfortable. Release.
5. Repeat step 4 two more times on the right leg.
6. Switch legs and repeat steps 2 through 4 three more times on the left leg.

This exercise and stretch improves posture, relaxation, and ability to socialize both in expression and response.

#### 15) Calf Pump

1. Stand facing a wall or solid flat structure. Lean toward the wall and place your hands flat onto the wall.
2. Bring the right leg back and have only the ball and toes of the foot in contact with the ground. Put your weight on your left leg and take a breath in.
3. Exhale for a count of eight as you bring your right heel down to the floor. Feel the stretch in your calf and only stretch as far as is comfortable. Relax and bring the heel back up off the ground.
4. Breath in and repeat step 3, two more times with your right leg.
5. Repeat step 3, three more times with the left leg extended.

This exercise relaxes the calves and increases circulation and breathing. Calf pump improves social behavior by increasing attention span and ability to express and respond.

#### 16) Gravity Glider

1. Sit in a chair that will stay still as you stretch forward in it. Bring your legs out in front of you and cross right over left at the ankles.
2. Take a deep breath in. Exhale for a count of eight as you slowly lean forward, arms stretching towards the feet. Relax.

3. Repeat step 2, two more times.
4. Repeat step 2, three times with your left leg over the right.

Gravity Glider is a great stretch for the hamstrings, improves posture, and increases blood and oxygen flow. This exercise improves confidence, stability, and self-expression.

#### 17) The Grounder

1. Stand on a flat surface. Stretch the right leg out directly to the right side of the body as far as is comfortable. Point the right foot directly out to the right.
2. Take a deep breath in. Exhale slowly to the count of eight as you bend the right knee and move to the right. Stop the movement when your knee is directly over your foot and you have fully exhaled.
3. Repeat step 2, two more times.
4. Repeat step 2, three times with the left leg outstretched.

The Grounder is a deep ileopsoas stretch that improves whole-body relaxation and spatial awareness. This exercise also improves comprehension, short-term memory, and organization.

#### 18) Drink Water

Sip some water.

Feel free to drink water throughout the day for best absorption and utilization by the body. All electrical and chemical actions of the brain and central nervous system depend on good electrical conductivity between the brain and our senses. Water helps us stay alert and think!

#### 19) Brain Buttons

1. Stand with legs about hip distance apart, feet flat on the ground.
2. Place one hand flat over your belly button, and keep it still.
3. Your other hand makes a long V sign with the thumb in one direction and the pointer and middle finger going in the other direction. Ring finger and pinky can just fold in towards the palm.
4. With the V shaped fingers find the soft spots underneath your clavicle bone. Rub the soft spots back and forth. Find the amount of pressure that feels good, there is no need to press so hard to cause discomfort, or so soft that nothing feels like it's happening.

5. Move your eyes horizontally from side to side. Use a soft focus as your eyes just notice what's in front of them. Eyes slowly, steadily flow from one side to the other. Move the eyes only as far as is comfortable yet also the full range of your eye movement. Head stays forward, unmoving. Notice if it is difficult to just move the eyes independent of the head. Gently remind yourself to keep the head still if necessary.

6. Move your eyes and hand together for about 30 seconds, switch hands and continue for about another 30 seconds. Brain Buttons are excellent at times when feeling confused or unsure. The movement supports left and right brain hemisphere connections through the eye movements. Massaging under the clavicle increases the amount of oxygen brought to the brain by relaxing the muscles around the carotid arteries, giving the arteries more space and stimulation of blood flow.

## 20) Earth Buttons

1. Stand or sit down comfortably.
2. Place your right hands pointer finger and middle finger gently on your chin.
3. Place the palm of the left hand gently over the navel while the fingers are pointing downward and making contact with the belly as well.
4. Begin to gently rub both your chin and below your navel with your fingers in a small, circular motion.
5. While rubbing with your fingers, slowly move your eyes in a straight vertical line, up and down. It can be helpful to find the line of a wall corner or a long pole to follow and let the eyes continue up and down beyond as far as is comfortable. Breathe slowly and deeply the whole time. Remember to just be moving your eyes, head stays forward and still.
6. Switch hands respectively and repeat steps 4 and 5 for five or six more deep breaths.

Earth Buttons improve mental alertness, grounding, and whole-body orientation.

## 21) Balance Buttons

1. Stand with feet hip distance apart.
2. Place the right hand gently over the belly.
3. Place the middle and pointer fingers of the left hand on the bone right behind the ear - your temporal bone.
4. Bend your right knee and lift the foot off of the ground. Breathe evenly as you balance on your left leg for a count of eight. If it helps, look at one stationary object while balancing.

5. Then balance on your right leg for a count of eight.
6. While still balancing on the right leg, switch your hands and balance for a count of eight.
7. Change your balance to the left leg and hold for a count of eight.

Balance Buttons can improve your overall sense of well-being, create a more receptive attitude, and improve reflexes.

## 22) Space buttons

1. This exercise is best done in a space big enough where visual objects are up close and far away - outdoors is best but not necessary. Stand with the right leg comfortably in front of the left, there's no need to stretch.
2. Place your left middle and pointer finger gently onto the space between your nose and upper lip.
3. Place the palm, fingers, or back side of your right hand gently on your tail bone - however it's most comfortable.
4. Move both sets of fingers in small circular motion in their respective areas as you breathe and bend at the torso to look down at your right foot. Look at the foot just long enough to register that it's your foot.
5. Still moving your fingers and breathing bring the torso back up and look out to the farthest object your eyes can see. Look at the object just long enough to register what the object is, ie. cloud, tree, plate...
6. Bend the torso back down again to look at the right foot. Repeat steps 4 and 5 at least two more times or until it feels complete.
7. Switch legs and hands and repeat steps 4 and 5 three more times or until it feels complete.

Space buttons helps strain and "trying" with the ease of clear understanding. You want to be able to quickly and easily label what you are seeing and then move on. Ability to relax and pay more attention are increased.

## 23) Energy Yawn

1. Stand, sit, or lay down face up.
2. Place the middle and pointer fingers of both the left and right hands on the left and right jaw muscles respectively. To find the jaw muscles you can first find the corner bone of the jaw that joins together, then move your fingers in a bit while pressing gently. When you feel tight muscle you know you're in the right place.

3. Rub your jaw muscles with just enough pressure to feel a massage while opening your jaw in a wide, long yawning motion. You may even feel yourself yawning as you do this, it's a natural response. Close the jaw gently after the long yawn.

4. Repeat step 3 two more times or until the movement feels complete.

The Energy Yawn can be used to relax the jaw and enhance creative expression visually and verbally by increasing circulation to the brain. This movement also improves balance.

#### 24) Thinking Cap

1. Stand or sit comfortably.

2. Starting at the top of the ears, gently grab both ears between the thumb and pointer fingers. With just enough pressure to feel good, let the thumb slide up and out off of the ear before grabbing the next piece of ear directly below what was pulled. Slide the thumb off of the ear all the way down to the last part of the lobe, giving the whole outer ear a nice massage.

3. Repeat step 2, two more times or until it feels complete.

Thinking Cap helps improve breathing, energy, focusing attention, hearing, peripheral vision, and equilibrium. The jaw, tongue, and facial muscles relax.

#### 25) Hook-Ups

1. Stand, sit, or lay down.

2. Cross one ankle over the other.

3. Cross the same arm over as the leg that is over the other. Open your hands and clap the palms together. Join the fingers together and bring the hands under and up to the chest.

4. Place the tongue on the roof of the mouth.

5. Wait to feel a "shift" in emotions or thinking. Hook-ups connect the electrical circuits all over the body. Better ability to focus, organize, and relax through release of tension. Breathe deeply. You may also feel more tension come up and move through and out of your nervous system as you do this. Hook-ups can be done anytime, anywhere to bring emotions back into balance.

6. To finish un-hook the arms and legs. Place legs hip distance apart. Bring hands to belly level and put fingers together that correlates. Keep the tongue on the roof of the mouth. Stand for about 8 seconds to ground, or integrate, the body-mind shift.

## 26) Positive Points

1. Stand or sit down.
2. Cross the hands in front of you and hook thumbs together.
3. Place all fingertips except thumbs horizontally along the forehead, halfway between the eyebrows and hairline. Just rest the fingertips gently. Eyes can be open or closed as long as they are relaxed.
4. For additional effectiveness do hook-ups by crossing the ankles and placing the tongue on the roof of the mouth.
5. Hold position until emotional stress is released. These points are related to the stomach neurovascular system. Stomachaches due to abdominal tension can be released using Positive Points. Blood flow is increased to the hypothalamus for greater hormonal regulation. Blood flow to the frontal lobes is increased for better relaxed, clear thinking.