| If the movement is working on: | CROSS LATERALIZATION |
|---|--|
| Why this is important to our brain and what does it helps with? | When information moves from left to right and right to left in the brain, it crosses a midline called the corpus callosum. When information moves from front to back and back to front it crosses another midline called the motor cortex. The body has corresponding midlines going top to bottom and left to right. Crossing the midlines integrates the brain hemispheres and organizes the brain. Cerebellar exercises that cross the midline enlist more parts of the brain for well-developed attention systems. |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in placing words on a page, reading words from left to right, and writing patterns in a sequence. When crossing the corpus callosum midline (sagittal plane), we are helping decode information coming in. This is done by doing movements like rolling and spinning. When we cross the motor cortex midline (coronal plane), we are helping get information from the brain to the paper. When crossing the transverse plane, we are helping move from lower to higher level thinking. |
| What activities does this include? | Any crossing the midline activity works for this. Some examples: crawling, rolling, spinning, jumping, brain boosters, core lateral snowboarder, skier, kneel n spin, starwalker, dual action core trainer, surf trainer, cross country skier, total body cycle, elliptical |

CROSS LATERALIZATION



HIGH FIVE JUNGLE



ALLIGATOR SCOOTER CRAWL



ROCKIN' TURTLE SHELL



OVER AND UNDER BARS



OPEN OBSTACLE



PATTERN WALKING MAT



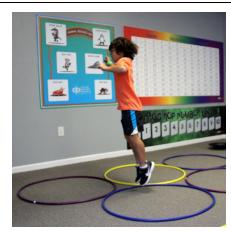
SS MOONWALKER

| If the movement is working on: | LOCOMOTOR MOVEMENTS |
|--|---|
| Why this is important to our brain and what the station helps with | What makes us move is what also makes us think. The brain uses motor skills to lay the framework for learning. The brain's cerebellum controls motor skills, agility and coordination. When the cerebellum is working well, cognitive function, which is our ability to think increases. We think better when we move! Activities that involve moving the legs to move the body activate and store BDNF. BDNF acts as fertilizer for the brain. Locomotor movements are a good example of activities that stir up our BDNF. Locomotor movements (walk, jog, hop, jump, gallop, slide, skip and leap) are ways we move from one place to another. Critical elements of locomotor movements are attached. Joint compression is a form of proprioception. It occurs when there is compression, push, or weight bearing placed on a joint. It is also very important for developing body awareness and body in space, as well as for joint stability and strength. It also promotes self-regulation and can be very calming, regulating, and organizing for the brain and nervous system. |
| Classroom relevancy | These concepts aid the brain in following the flow of words, sequencing patterns in |
| - What does this | math and reading, solving problems, and sorting information. They also aid the brain |
| mean in the | in putting numbers or letters in sequence, discriminating different sounds, placing |
| classroom? | letters and words on a page, and writing letters in proper proportion. |
| What activities does this include? | Locomotor movements (walk, jog, hop, jump, gallop, skip, slip, leap), animal walks, starwalker, stepper, Elliptical, obstacles (lily pads, fruit n' veggie and neuroconnector), aerobic steps, jumping and landing, advanced walking patterns. |

LOCOMOTOR MOVEMENTS



VEGGIE BOXES



PATTERN JUMPING



BOOMER BOARD



PLATFORM STEPS



ANIMAL ROUND-UP



VEGGIE BOX JUMP

| If the movement is working on: | STRENGTH & ENDURANCE |
|---|---|
| Why this is important to our brain and what does it helps with? | Developing the muscular system provides support for the relay of messages throughout the central nervous system. Upper body and hand strength allows the student to write for longer periods. Core muscular strength including abdominals and back muscles supports the spine and improves posture. Oxygen can then flow freely, supplying fuel to the brain. Muscular strength in the legs encourages the flow of BDNF, the "Miracle Gro" for the brain. |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid in the brain in finding out where you are in space. Using the whole body brings the body back into balance. |
| What activities does this include? | Ab cruncher, chin up trainer, pushup variations, curl up variations, plank variations, squats, wall sits, ab crunches, ab (Russian) twist, lunges, step ups, burpees. Resistance bands, kettle balls, |

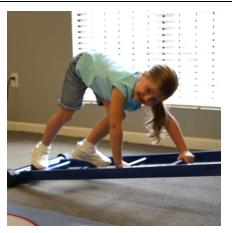
STRENGTH AND ENDURANCE



STEP-UP WITH VEGGIE BOX



4 POINTS ON THE FLOOR



CLIMBING LADDER



ELEMENTARY CHIN-UP TRAINER



AB CRUNCH



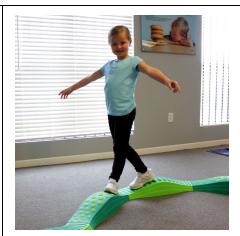
DIPPY-DOOS WITH VEGGIE BOX

| If the movement is working on: | BALANCE |
|---|--|
| Why this is important to our brain and what does it helps with? | We get information about where we are in space (spatial awareness) from our feet and not our seat! Balance promotes better focus and attention. Balancing activities challenge the brain to adjust its spatial orientation using the proprioceptor system. Using balance skills while practicing academic skills increases concentration because the physical takes over so that the students cognitive function will be enhanced. |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in placing words on a page, reading words from left to right, and writing patterns in sequence. They also aid the brain in anchoring information and improved memory retrieval, preparing the brain to take a test, and combining many skills for higher level thinking. |
| What activities does this include? | Obstacles, balance beam, balance rope, balance bridges, balance arches, connector bridges, tactile stepping pathways, colored rock obstacle, mini balance bridge, ABL ladder, surf boards, balance boards, whaler board, spooner boards, bosu balls, wobble boards. |

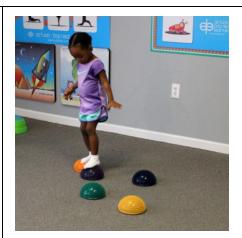
BALANCE



ARCHED LADDER



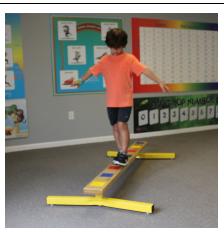
BALANCE BRIDGE



BALANCE DOMES



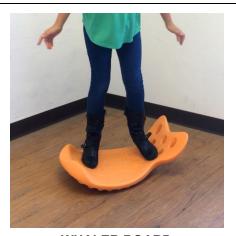
ABL LEARNING LADDER



BALANCE BEAM



BALANCE ROPE



WHALER BOARD



BALANCE BOARD

| If the movement is working on: | VISUAL TRACKING |
|--|---|
| Why this is important to our brain and what the station helps with | There are muscles in our eyes that focus near and far and muscles that allow us to track left to right and up and down. These muscles should be strengthened in the same way as our arm muscles. Eye (visual) tracking exercises strengthen the muscles in our eyes to increase the length of time that eyes can focus for reading. |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in encoding the stroke of each symbol of letters and numbers, following words from left to right focusing on reading for longer periods, discrimination sounds and organizing information. Increases visual stamina for test taking. |
| What activities does this include? | Juggling, toss and catch, cup catch, tracing, ABL surfboards, kendamas, ABC Pathways mat, rolling ball back and forth in hands. |

VISUAL TRACKING



SHAPE TRACERS



ABL PATHWAYS MAT



BOUNCE-N-CATCH W/ GEO COLOR HOP MAT



ABL EYE TRACKER



SCARF JUGGLING

| If the movement is working on: | RHYTHM & BEAT COMPETENCY |
|---|---|
| Why this is important to our brain and what does it helps with? | This is where we develop receptive and expressive language. This is when we learn to recieve, interpret and express language. It's where we hear and keep a steady beat which helps develop the inner dialogue. This helps sound out letters. This inner dialogue starts around 3-5 years old by hearing/listening to human voices (talk, sing, pitch). |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in encoding the stroke of each symbol of letters and numbers, following words from left to right focusing on reading for longer periods, discrimination sounds and organizing information. Increases visual stamina for test taking. |
| What activities does this include? | Large rubber bands, rhythms, juggling, spooner boards, snowboarder, cross country skier, downhill skier, stand up booster, any activity that uses elaborative rehearsal (or put to a familiar song), rhythmic patterns |

RHYTHM AND BEAT COMPETENCY



| If the movement is working on: | FINE MOTOR - GROSS MOTOR W/ MANIPULATIVES |
|---|--|
| Why this is important to our brain and what does it helps with? | Thirty-five percent of the brain's motor cortex is dedicated to the use of the hands and the feet. The motor cortex helps the brain get what we are thinking to the paper. Therefore, 35% of the brain's ability to transfer information to the paper depends on good eye-hand, eye-foot coordination. Throwing and catching skills and soccer dribbling skills, for example, prepare the brain for putting ideas on paper. |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in processing thought, organizing thoughts in sequence, discriminating likenesses and differences, discriminating sounds and advancing to higher level thinking. The motion used while walking on the ABC Pathways mat crosses the midlines of the brain and body which organizes the brain, integrates the hemispheres, and energizes the brain to enable the brain to put thoughts into action. |
| What activities does this include? | Fine motor skills could include screwing and unscrewing nuts/bolts, using clothespins, juggling, rolling dice, playing jacks, picking up stuff with tweezers, cutting patterns with scissors. Gross motor skills could include bigger blocks or puzzle pieces, using a mat (like keyboard or math mat) to work on locomotor movements or animal walks. |

FINE AND GROSS MOTOR SKILL W/ MANIPULATIVES



REEF RESCUE



SHOE TYING



GRIPPERS AND COLOR SORTING



MONKEY-SEE BEAN BAG TOSS



KEYBOARD MAT



TARGET TOSS & CATCH W/
LETTER LEARNING WALL MOUNT

| If the movement is working on: | CARDIO |
|--|---|
| Why this is important to our brain and what the station helps with | Exercise grows brain cells. Neurogenesis (new neurons) provides the brain more capacity to learn. Exercise benefits the brain first and changes the brain at the molecular level. The brain does not store its own fuel or produce its own fuel. The brain relies on cardiovascular exercise to pump oxygenated blood to the brain giving it the oxygen and glucose needed for fuel. Exercises that increase the heart rate and sustain the elevation put the brain and body back into balance so it is ready to learn! |
| Classroom relevancy - What does this mean in the classroom? | These concepts aid the brain in delivering fuel to the brain. The brain does NOT store or produce it's own fuel. Brain fuel is oxygen and glucose. 20% of the blood supply in the body is designated to the brain. The brain is dependent on the heart. The better the heart works, the better the brain works. |
| What activities does this include? | Bikes, elliptical, treadmill, stepper, fitlights, platforms, plyometric steps, aerobic steps, hurdles, jump roping, jog/run, jumping jacks, butt kickers, high knees, agility run, and burpees. |

CARDIO



JUMPING ROPE



CARDIO CONES



ELEMENTARY ROWER



SS ELLIPSE



SS SKIER



SS SNOWBOARDER



| If the movement is working on: | MINDFULNESS & PROBLEM SOLVING |
|---|--|
| Why this is important to our brain and what does it helps with? | The prefrontal cortex and the cerebellum are connected. The prefrontal cortex controls executive functions like decision-making, problem solving, memory, language, emotions and attention. The cerebellum controls motor skills, agility and coordination. It also controls putting patterns into a sequence, like letters into words, words into sentences and numbers into order. Activities that activate the cerebellum while performing challenging cognitive skills strengthens areas in the brain for focus and attention. This station also promotes flexibility. |
| Classroom relevancy What does this mean in the classroom? | These concepts aid the brain in anchoring information and improved memory retrieval, help to prepare the brain to take a test, and combine many skills for higher level thinking. |
| What activities does this include? | Brain teasers, brain boosters, calm breathing, kinesthetic desks, abl mats, go noodle with academics, yoga, tanagrams, seatwork, and puzzles. |

MINDFULNESS AND PROBLEM SOLVING



KC-35 PEDAL DESK



YOGA POSTER



BREATHING HEARTBEAT



KEYBOARD MAT



FROG HOP NUMBER LINE



ABL PATHWAYS MAT



KEYBOARD MAT

| If the movement is working on: | NUTRITION |
|--------------------------------|---|
| | Your brain requires sufficient nutrients to function normally. Proper nutrition is essential for normal cognition, or thinking skills. A healthy diet that is low in fat and high in essential nutrients reduces the risk of memory loss, helps prevent strokes and boosts alertness. |
| Classroom relevancy | Existing data suggests that with better nutrition students are better able to learn, |
| - What does this | students have fewer absences, and students' behavior improves, causing fewer |
| mean in the | disruptions in the classroom. |
| classroom? | |
| What activities does | Any activity that has movement and includes nutritional educational components. |
| this include? | |

