

# The ConTENT Zone: Bringing the OuTdoors In



Kala Trantham, OTS  
Milligan College  
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## Purpose

The purpose of the ConTENT Zone is to help children be able to self-regulate when they are having problems with Sensory Processing Disorder (SPD). This area is a place that a child can go when they are feeling stressed out or over stimulated. It can also provide options for children to get some vestibular input and offer desensitization of tactile stimuli.

Sensory Processing Disorder is a condition in which the brain has difficulty receiving or responding to certain sensory information. The condition affects the child's motor and behavioral responses. It is a disorder that varies in severity and with every individual. No two children with SPD are alike. Some children over respond to certain stimuli while under responding to others. Secondary effects of SPD may include depression, underachievement, or social isolation. It is important to address SPD through sensory integration in order for children to perform everyday life tasks at home, at school, and in the community, which will help the child to live a more meaningful life.

There are also many sensory benefits in incorporating outdoor activities into a child's everyday life. Different outdoor activities or indoor activities that incorporate outdoor activities can be used to target specific sensory needs (visual perceptual skills, motor planning skills, vestibular processing, auditory processing, tactile processing, oral motor and processing, proprioception, and olfactory processing). Activities can be used to address the important occupations of play, leisure, and social participation. Activities can be graded up or down according to each child's strengths and weaknesses.

In most therapy settings, it is most practical to incorporate nature indoors. This is one of the purposes of the indoor ConTENT Zone. You can also place plants inside the room, add photographs of outdoor spaces on the walls, bring in an aquarium, or incorporate a sensory table with natural objects. "For young children, efficacy and hope are nourished by playing in wild and semi-wild places outdoors- turning over a rock and feeling connected to all of life; climbing a tree and feeling a surge of confidence and exhilaration, peace and perspective; having an adult share a place so special that the child feels valued and develops a lifelong connection to the power and beauty of the natural world" (The Ecology of Hope, 2011). Since children with disabilities are less likely to have these opportunities, we can incorporate them into our therapy practice and give these children a chance to experience the wild.

## **Main Components and Their Use**

### **S'more Pillows**

- Provides different textures for the child to touch.
- These can be used for tactile seekers and also for tactile defensive children to help them tolerate a certain texture.
- Children can lie on pillows to relax and calm down.

### **Bolster Log**

- Provides vestibular input by allowing the child to roll back and forth on the log.
- Provides proprioceptive input when therapist uses the bolster log to roll it on top of the child.
- Can be used to get out extra energy.

### **Weighted Sleeping Bag**

- Provides proprioceptive input by adding 10% of child's weight to the sleeping bag.
- Extra weight can be added or removed depending on weight of child using it.
- Used for added warmth, security, and way to calm down.

For the weighted sleeping bag, it is important that the child not use the sleeping bag if the weight exceeds 10 percent of their total body weight. Each weighted insert is 2 pounds. One of these is added per 20 pounds of the child's weight.

- 1 insert: 20 pounds or more
- 2 inserts: 40 pounds or more
- 3 inserts: 60 pounds or more

This specific project was designed for children that are preschool age to third grade, weighing up to about 60 pounds. For larger children and extra needed weight, more sections of the sleeping bag can be opened and more weighted inserts can be made.

### **Tent**

- Can be zipped up to make it darker, which is calming for some children or can be left open to let light in and so that the therapist can see the child.
- Used as a space for a child to go when they are feeling over stimulated or need to calm down.
- Is a dark, confined, comforting, and calming space, which simulates the womb.

### **Videos**

- Provides soothing sounds and scenery to help calm a child.
- Helps distract the child from something that may be overwhelming them.

## What You'll Need

### Materials

- Child's Tent (Ozark Trail 2 person dome tent, 72 in. x 48 in. x 36 in.)
- Child's Sleeping Bag (Ozark Trail, 33 in. W x 66 in. L)
- Bolster/ Foam Roll (38 in L, 9 in. D or 4.5 in. r)
- Fabric
  - White- Fleece/Soft (1 yd.)
  - Brown- Satin/Silky (1 yd.)
  - Tan- Vinyl/Smooth (2 yds.)
  - Brown- Cotton/Patterned (3 yds.)
  - Tan- Canvas/Sturdy (2 yds.)
- Matching Thread (white, tan, brown)
- Tan Buttons (44)
- Paracord/ Rope (10 ft.)
- Polyester All Purpose Zippers (3 Black, 9 in. X 23 cm.)
- Rice (6 lbs.)
- Polyester Stuffing (5 lb. box)

### Tools

- Sewing Machine
- Needle
- Pins
- Scissors
- Seam Ripper
- Food Scale
- Lighter
- Bags/Cups
- Computer/Tablet

## Directions

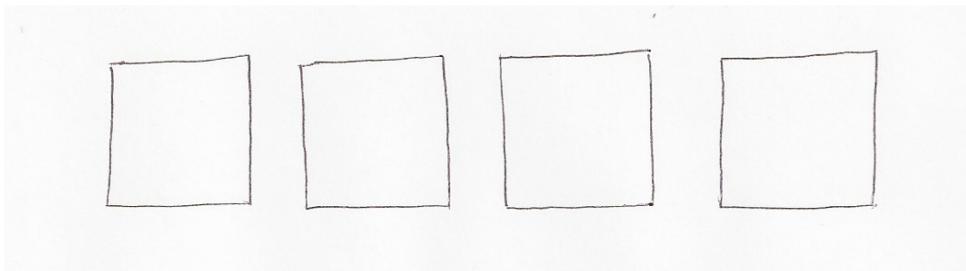
### Tactile Pillows



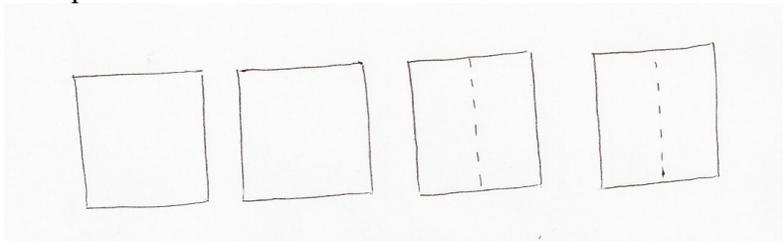
- Graham Crackers



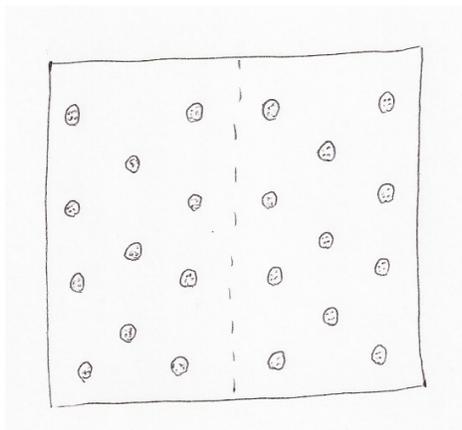
- Using vinyl or a smooth material, cut 4 square pieces that are 28 x 28 inches.



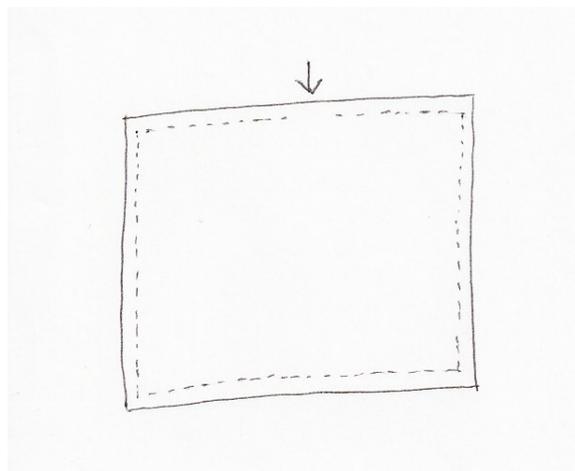
- On two of the pieces, fold the pieces in half to find the middle. Hand sew a line down the middle using a running stitch, on the front, to look like the graham cracker perforations.



- Hand sew tan buttons on the two pieces that you sewed the perforations on using the pattern below.



- After completing this on both, place the front sides on top of each other. One will have the buttons and the other will be blank.
- Pin 3 sides completely, and part of the last side, leaving enough space to flip inside out and place the filling in the pillow. When pinning, pin so that there is a  $\frac{1}{2}$  inch seam.

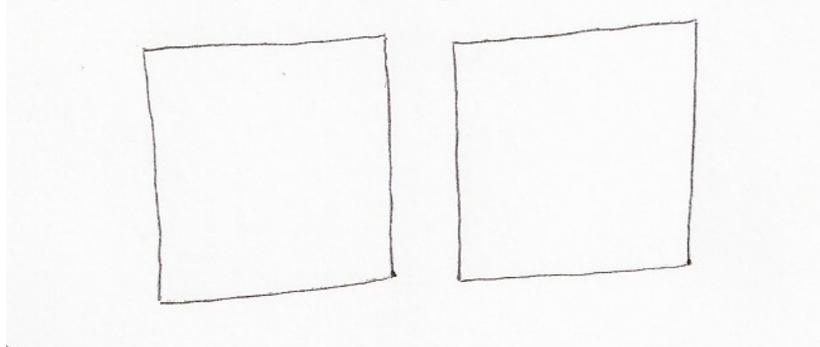


- Sew  $3\frac{1}{2}$  sides closed on the sewing machine.
- Flip fabric inside out.
- Fill the pillows with the stuffing.
- Hand sew the holes closed, making sure to fold the edges down to make a straight seam.

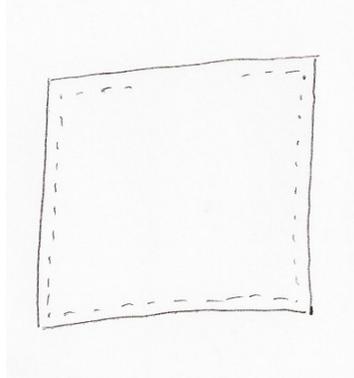
- Chocolate



- Using the satin/silky material cut 2 pieces that are 28 x 28 inches.

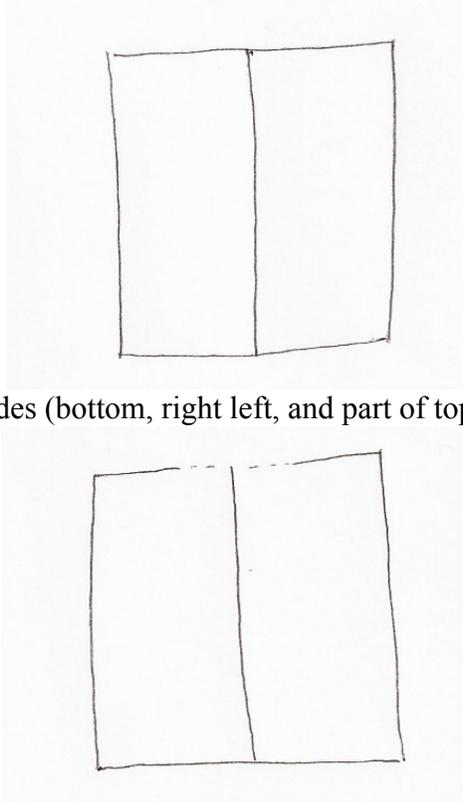


- Place the front sides on top of each other.
- Pin 3 sides completely, and part of the last side, leaving enough space to flip inside out and place the filling in the pillow. Pin so that there is a  $\frac{1}{2}$  inch seam.

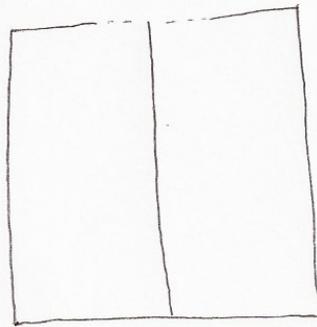


- Flip fabric inside out.
- Fold fabric in half long ways and pin.

- Sew a line down the middle to look like 2 pieces of chocolate in one.



- Sew the 3 ½ sides (bottom, right left, and part of top).

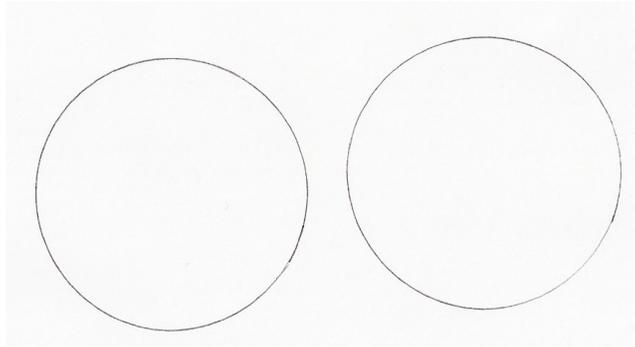


- Use the two open holes to fill the pillow with stuffing. Make sure that each side has the same amount of stuffing.
- Hand sew the holes closed, making sure to fold the edges down to make a straight seam.

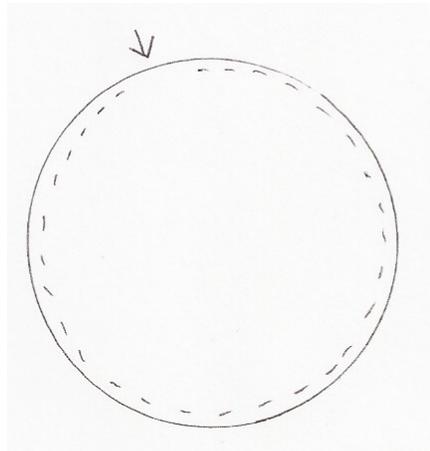
- Marshmallow



- Using the soft fleece material, make 2 circles with a diameter measuring 28 inches.



- You can use a compass in the middle with a string attached to a pen or pencil to make your marks or you can just measure from a center dot and connect the dots.
- Place the front sides on top of each other.
- Pin around the circle, leaving enough space to flip inside out and place the filling in the pillow. Pin so that there is a  $\frac{1}{2}$  inch seam.



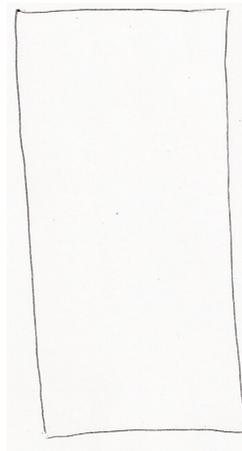
- Sew seam around, except for the hole you are leaving open.
- Flip fabric inside out.
- Stuff pillow.
- Sew the hole that is left open using a whip stitch, making sure to fold the fabric down to make a straight edge.

## Vestibular Log

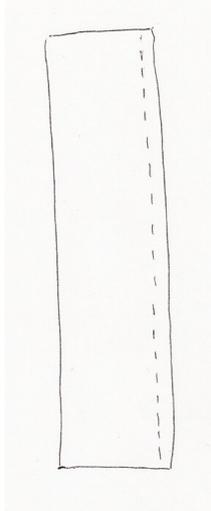
- Foam Roller Cover



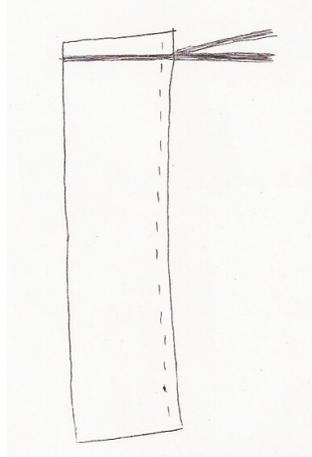
- Using the brown, patterned fabric, cut out one piece of fabric that is the length of the foam roller, plus the length of the diameter, plus another three inches for the seam allowance and to place the paracord through the seam. The length of my foam piece was 38 in. and diameter was 9 in. making the length of my fabric 50 inches with seam allowance. The width is equal to the circumference of the circle, which is  $\pi \times \text{diameter}$ , plus about an inch on both sides for the seam allowance. This made my fabric 32 in. W x 50 in. L



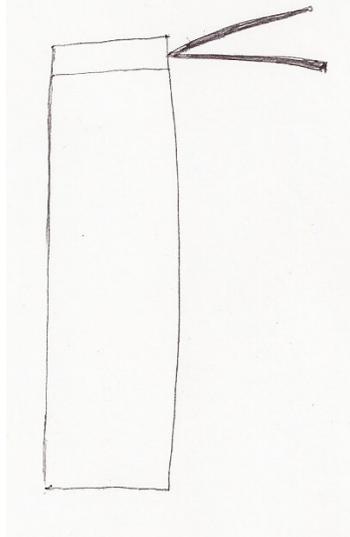
- Fold the fabric in half long ways and sew two inches from the top down to two inches from the bottom (from 2 inch mark to 48 inch mark).



- Place half of your paracord around the fabric and near the top.



- Fold down the top of the fabric over the cord to make a 1 ½ inch seam.

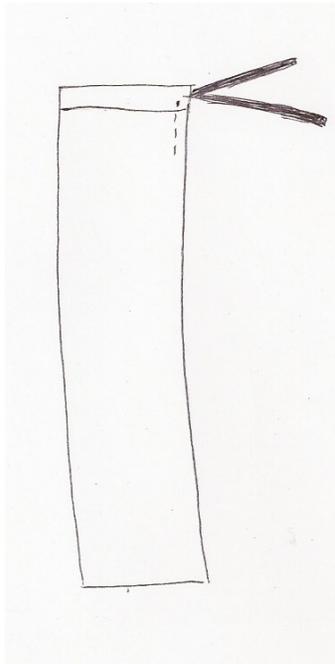


- Pin the seam, making sure that the cord is still towards the top.

- Sew the seam going straight around the loop of fabric. Make sure that you do not sew both layers of fabric together in order to leave an opening.



- Go back and sew from the opening up toward the top of the seam, stopping before you sew over the paracord. Leave about 1 inch at the top.



- Repeat for the other side of the cover.
- Tie paracord tight.
- Cut off excess paracord and use a lighter to secure the ends.

## Proprioceptive Sleeping Bag

- Sleeping Bag



- When buying a sleeping bag, make sure to look for one that has big horizontal sections and has uniform padding that will not fall out when a seam is opened. It is also good if there is a side that is solid or a calming color so it is not over stimulating.
- Use a seam ripper to release the seam from the sections you want to insert weight. I alternated my sections to distribute the weight.
- Hand sew the ends of where you seam rip in order to reinforce the edges and to keep other sections from unraveling.
- Pin both sides of the zipper to the edges of the open hole. Make sure that the seam of the sleeping bag is folded down so that the fabric does not ravel.
- Sew one side with the zipper open and then the other.

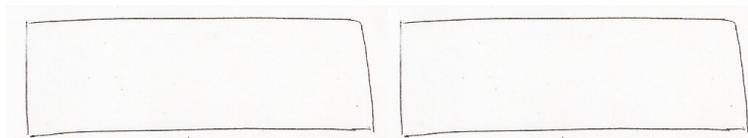


- Repeat for all sections opened.
- Zip zippers closed and hand sew any spots that need to be closed or reinforced some more. It may be hard to sew all the way to the ends on the sewing machine.

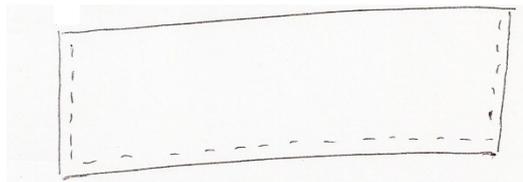
- Weighted Inserts



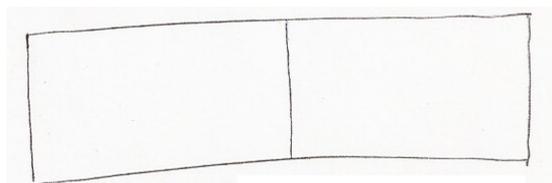
- Use a scale to measure out  $\frac{1}{4}$  pound (4 oz.) cups/bags. You will need 16 of these per 2 pound insert.
- Measure and cut 2, 10 in x 32 in rectangles of canvas material.



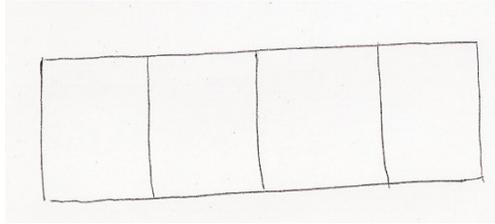
- Sew the two short ends and one long end with about a  $\frac{1}{2}$  in. seam.



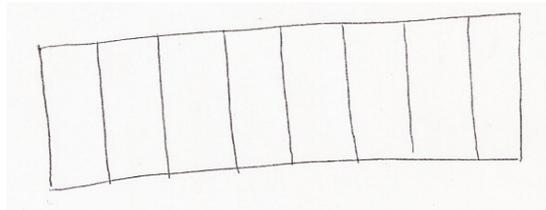
- Flip fabric inside out.
- Fold in half and sew a vertical line down the center.



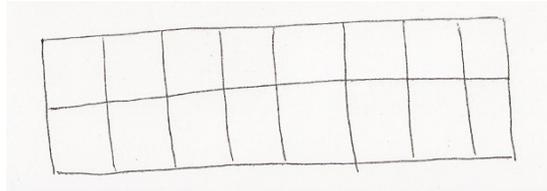
- Fold these two sections in half towards the middle seam and sew 2 more vertical lines down the centers.



- Fold these sections in half again to find the centers. Sew 4 more vertical lines down the center of these. This will give you 8 equal sections.



- Pour  $\frac{1}{4}$  pound of rice into each of the 8 sections.
- Fold the top down  $1\frac{1}{2}$  inches and then fold down to find the middle.
- Unfold and sew a horizontal line across the middle, making sure that the rice stays towards the bottom and does not fall out.



- Pour the rest of the  $\frac{1}{4}$  pound of rice into the rest of the 8 sections.
- Fold the top down to make a  $\frac{1}{2}$  in. seam, and sew straight across. Make sure that the rice is towards the bottom of the middle horizontal seam and does not come out the top or get under the sewing needle.



- Trim the excess strings.
- Repeat for other inserts.
- Place inserts into the sleeping bag.



#### **Sewing Notes:**

- When using the sewing machine, make sure to backstitch to reinforce your stitches on the ends.
- When hand sewing, make sure to double knot the ends to hold secure before cutting.
- Measurements may vary depending on the size of sections in sleeping bag, size of foam roll, and desired size of the pillows.

## Video Links

The following videos can be accessed via Youtube on any electronic device.

- Forest Campfire at the River with Relaxing Fire and Water Sounds (long version)  
[https://www.youtube.com/watch?v=GKwYfc\\_k4IU](https://www.youtube.com/watch?v=GKwYfc_k4IU)
- Relax 8 Hours-Relaxing Nature Sounds-Study-Sleep-Meditation-Water Sounds-Bird Song  
<https://www.youtube.com/watch?v=eKFTSSKcZWA>
- Relaxing Nature Sounds of the Soothing Sound of Water Lapping on the Lakeshore-Calm Relaxation  
<https://www.youtube.com/watch?v=CPo7zrmvQq8>
- Relaxing Nature Sounds of a Soothing Waterfall with Forest Bird Song-Calm Relaxation & Sleeping  
<https://www.youtube.com/watch?v=YvM-pnzRDYE>
- 8 Hours Relaxing Nature Sounds Calming Birdsong Sound of Water Relaxation Meditation  
<https://www.youtube.com/watch?v=ja8pA2B0RR4>
- Rain Sounds | 12 HOURS High Quality | Relaxing Sounds Thunder, Sleeping, Studying, Meditation  
[https://www.youtube.com/watch?v=J6-sOY\\_IV30](https://www.youtube.com/watch?v=J6-sOY_IV30)
- Rain Sounds, Ocean Waves and Distant Thunders – 4k Ultra Hd – Relaxing Sleep Sound  
[https://www.youtube.com/watch?v=cO\\_IFJaWmhA](https://www.youtube.com/watch?v=cO_IFJaWmhA)
- 4 HOURS Natural sounds: Morning Birds singing (no music)  
<https://www.youtube.com/watch?v=WarL4vURLYw>
- The Wind in the Trees ( 10 Hours of Natural White Noise )  
<https://www.youtube.com/watch?v=4KzFe50RQkQ>
- Rain Sound and Thunder - 2 Hours Sleep Meditation Sound  
<https://www.youtube.com/watch?v=Fm0sToWtatw>
- Sleep and Relaxation Nature Sounds, Crickets Summer Night - Sleep Music  
<https://www.youtube.com/watch?v=eKmRkS1os7k>
- A Short Meditation-Soothing Sound of the Sea-Relaxing Lapping Waves-Sound of Nature-Relaxation  
<https://www.youtube.com/watch?v=iyMWmzqyDFo>

## Activities

### Tent Component Activities

#### Zippering/unzipping sleeping bag

- Child can zip and unzip sleeping bag in order to improve finger dexterity, in hand manipulation, eye hand coordination, grasp patterns, and fine motor movements while holding the zipper.
- Hand over hand assistance can be used to make it easier.

#### Rolling/unrolling sleeping bag

- Child can roll and unroll the sleeping bag for some heavy work and to get some extra needed proprioceptive input. This activity also works to improve eye hand coordination, joint mobility, gross motor movements, bilateral integration by using both hands, muscle strength needed to push the bag, coordination, and motor planning to know how to roll/unroll it.
- This activity can be graded easier by taking the weights out, and graded harder by adding more weights in.

#### Putting up/taking down tent

- OT and child can work together to put up or take down the tent to work on social interaction, sequencing and following directions to put it up /take it down correctly, fine and gross motor movements, in hand manipulation of supplies, orientation of how parts go, problem solving to do it without directions, motor planning to plan movements, touch, and visual thinking. The tent can be taken outside for use to incorporate some of the therapeutic benefits of being outside.
- Child can put up the tent without directions to make it harder. To make it easier, the OT can give step by step verbal guidance or by providing directions or pictured steps.

#### Stacking s'more pillows

- Child can stack the pillows in order to work on fine and gross motor movements, eye hand coordination, grasp, and motor planning. The child can be asked to put the pillows in a correct order to work improve sequencing, following directions, logical/coherent thought, and concept formation, orientation by putting the graham crackers the right way, while also using touch to feel different textures and fabrics.

#### Tossing pillows

- OT and child can toss the pillows back and forth as a game. This will address social interaction and interpersonal skills. Joint mobility, coordination, reflex, eye hand coordination, grasp patterns and gross motor movements are needed to hold on to the pillows and is used in this activities. Level of arousal, attention, motor planning and visual thinking are needed to catch the pillows, throw the pillows, and to know when their turn is. Tossing pillows also incorporates the tactile senses.

### Rolling foam bolster

- Child can roll the bolster back and forth with their hands or with their feet. Child can also roll the bolster on the wall from right to left or up and down. This works on touch and helps to enhance gross motor movements, while also addressing reach, eye hand coordination, bone and joint mobility. This activity also addresses attention, concentration, and motor planning to make the foam bolster go where one intends it to.

### Rolling on foam bolster

- Child can use their body in order to roll back and forth on the bolster, which focuses on vestibular movement. The bolster can be placed up against a wall to roll on it from left to right or up and down. Like rolling the foam bolster, this also works on touch and gross motor movements, righting reactions, bone and joint mobility, attention, concentration, motor planning, and self-regulation in calming themselves.

### Therapist facilitated rolling

- OT can use the bolster to roll over the front or back of the child to provide proprioceptive input in order to calm the child. This can help to increase the child's level of arousal and consciousness and also helps to reduce stress and provide the child with a form of anxiety relief.

### Jumping over foam bolster

- Child can hop over the "log" from left to right or forwards and backwards to work on right-left discrimination, gross motor movements, eye-foot coordination, righting reactions to maintain balance, coordination, and bilateral integration by incorporating both sides.
- To make easier, the child can use one foot and then the other to jump. To make it more challenging, the child can jump with both feet together or even across the whole length of the bolster.

### Putting or taking bag on/off foam bolster

- Taking the bag off of the bolster requires an up and down shaking movement, which works on in hand manipulation, eye hand coordination, grasp, motor planning, concentration, delay of gratification, and frustration tolerance. Putting it on would require a child to shimmy the cover on little by little, working on similar performance components as taking it off. It often takes the assistance of another person to hold the fabric out straight and the other end of the foam roll, which would add a social interaction and interpersonal skill component and make it easier.

### Tying foam bolster bag closed

- Child can tie and untie the ends of the bolster drawstring bag in order to work on tying skills needed for shoe tying and dressing. In hand manipulation, grasp patterns, joint mobility, and fine motor movements are used while holding the strings. Sequencing, attention, recognition, following directions, logical thought, motor planning, and touch are addressed when carrying out the steps of tying.

- Tying can be made easier for the child by use of hand over hand assistance, or by providing written, verbal, or picture directions. The OT can do certain steps and allow the child to do the rest.

Identification- what's this noise, object, texture, color, shape, etc.

- By using the CD with different sounds, the different texture pillows, and the other aspects of the camping sensory components, the child can work on identifying different things by utilizing hearing and touch. Recognition is used to identify the object/sound. Memory is used to remember what it is called. Attention and level of arousal is used to pay attention to what is being introduced to them.
- This can be graded easier by providing potential items through lists or pictures for the child to pick from.

Camping storytelling

- While sitting in the tent or around the tent, the child can tell campfire stories or about a time that they went camping or did things outdoors. This works on a lot of psychosocial and cognitive components such as expression of emotions, openness, interests, confidence, interpersonal skills, role performance, self-expression, social conduct, socialization, meaning, logical/coherent thought, attention, concentration, creativity, and functional communication.

Campfire songs with movements

- By listening to different songs/music by paying attention and listening, the child can dance/move to the sounds. The child can come up with a dance/movement routine or the therapist can teach the child one. These routines would work on self awareness, stress and anxiety relief, joint mobility, coordination, gross motor movements, orientation, sequencing, memory, right-left discrimination, following directions, creativity, motor planning, and visual thinking, while working on vestibular and proprioception.
- List, picture, or video directions can be provided to make the routine easier for the child. The OT can also perform the routine along with them. When they are creating a dance themselves, they can have potential dance moves to choose from to put together a sequence.

### Indoor Sensory Activities Incorporating the Outdoors

- Lace hiking boots
- Crafts with sticks, dirt, leaves, etc.
- Make snack dirt cups, trail mix, edible mud pies, s'mores
- Making birdfeeders
- Make a fire out of toilet paper rolls and tissue paper
- Contact paper leaf sun catcher
- Plant plants
- Paint rocks
- Inspiration rocks
- Nature sensory bags
- Nature collages/art
- Nature bracelets
- Tin can lanterns
- Tic-tac-toe (sticks, pine cones, rocks, etc.)
- Camping bingo
- Bag of outdoor things to reach in and guess, astereognosis
- Firewood building blocks or game you pull out sticks without making the stack fall
- Obstacle course (puddle, log jumping, etc.)
- Pine cone wreaths
- Bird finder binoculars made out of toilet paper rolls
- Nature mobile/wind chime

### Outdoor Sensory Activities

#### Visual Perceptual Skills

- "I Spy"
- Treasure Hunts
- Map Reading/Orienteering
- Navigating land contour when walking
- Bird Watching
- Nature Photography
- Binoculars
- Sunglasses or No Sunglasses
- Hat or No Hat

#### Motor Planning Skills

- Rock Climbing
- Tree Climbing
- Walking on uneven surfaces or in creek beds
- Stepping over/ducking under branches
- Going around the poison ivy patch
- Casting/reeling and rigging fishing equipment

#### Vestibular Processing

- Rope Swing
- Log rolling down a hill
- Walking/scooting/balancing across a log
- Trail Running
- Rock Hopping

#### Auditory Processing

- Birds Chirping
- Rivers, Creeks, Waterfalls, Waves
- Rain
- Wind
- Thunder
- Echoes

#### Tactile Processing

- Dirt, Mud, Grass, Moss, Sand
- Water
- Barefoot
- No Gloves
- Rocks
- Tree Bark
- Tree Branches
- Spider Webs
- Worms, bugs, insects, salamanders, lizards, fish

#### Oral Motor Processing

- Edible plants (be sure they're edible)
- Chewing gum while you hike

#### Proprioception

- Heavy Work- pushing a log up or down a hill
- Building a dam in a creek
- Rock/stick/log throwing
- Challenging climbing
- Hiking
- Jumping
- Swimming
- Paddling
- Reeling in fish
- Log-scooting

#### Olfactory Processing

- Flowers and other plants
- Fish
- Dirt

## References

- Occupational Therapy, Your Child, and the Great Outdoors. (2015). Retrieved from <http://www.kidscreektherapy.com/great-outdoors-sensory-dysfunction-occupational-therapy>
- The Ecology of Hope. (2011). Retrieved from <https://www.childrenandnature.org/2011/12/02/the-ecology-of-hope/>