





Marie J. Amerson, M. Ed., TVI

In keeping with our philosophy to provide access to information for people who are blind or visually impaired, the American Printing House for the Blind provides this book in large print (18 pt.) with an accompanying CD that contains a braille ready file (BRF), HyperText Markup Language (HTML) file, digital talking book (DTB) file, and a text file.





Amerson, Marie Spangle Tangle: Play and Explore Copyright © 2013 American Printing House for the Blind, Inc. Louisville, KY 40206-0085

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About the Author

Marie J. Amerson began working with students who have multiple disabilities after she graduated with a degree in Special Education (1974). She worked in a community facility that served students with severe intellectual disabilities and

later took a position as a teacher of students with severe to profound intellectual disabilities. Her students ranged in age from infants to adolescents.

When Amerson moved to Macon, Georgia, in 1979, she took a job with the Georgia Academy for the Blind (GAB) to teach students with multiple disabilities including visual impairment. Amerson obtained certification in the area of visual impairment and received a Masters Degree in Interrelated Special Education. Her students ranged in age from 5-12 years old.



After Amerson participated in the Utah Ski-Hi INSITE training program, she became a Parent Advisor for GAB's Georgia PINES Program.

Amerson moved from the classroom at GAB into an outreach and resource position. She maintained a connection with the school's preschool classroom and assisted with evaluation of young students with multiple disabilities.

Since retiring from GAB, Amerson continues to work in the field as a consultant, and she coordinates a braille transcriber training program in the area near her home.



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Infinite Sculpture



Message to the Readers

Teachers, parents, and children know that active learning is FUN! The American Printing House for the Blind began selling our texture-color specific Tangle[®] Toy in 2005, and it has proven to be a great toy and learning tool. Tangle Toys provide opportunities for learners to improve visual and tactile attention, communication, and creativity. Through specially designed activities, the learner develops motor, problem solving, cognitive, self-care, social, and pre-braille skills. And, they get to have FUN!

The original Tangle Toy, created by artist Richard Zawitz, is based on the Tibetan Infinite Knot. His study of the Knot inspired him to create his world renowned sculpture titled *Infinite Sculpture*. Now available in plastic, over 100 million Tangle units have been sold since 1982. APH is happy to continue our relationship with Tangle Creations and thanks them for creating the Spangle Tangle per our specifications.

Anyone can learn and have fun with the Spangle Tangle, but it is designed specifically for children who have blindness and experience difficulty grasping and holding objects. The product includes the Tangle Stand, which is an accompanying support stand that allows learners to explore and play with the toy without it falling off their wheelchair tray, and three Tube Stands to use to play games and create sculptures. The Spangle Tangle is especially designed for children for whom haptic exploration may be their best—and perhaps only—way to gain information about their world.



Some of the activities in this book are adapted for wheelchair use from APH's *The Tangle Book* by Marie Amerson. Additional activities have been written specifically for the Spangle Tangle Kit.

Your Spangle Tangle Kit contains

- 1 Tangle Stand
- 3 Tube Stands
- 3 Plastic Tubes short, medium, and tall
- 36 Spangle Tangle segments

4 bumps - B 4 spirals - S 4 tire treads - T 4 alligator - A 20 smooth - X





Spangle Terms You Need to Know



CRADLE slotted opening in the Tangle Stand through which segments are threaded



RING 4 segments connected to form a circle



COIL 5 or more segments with open or closed ends



LOOP 6 or more segments with ends connected



STRAND any number of segments with open ends



We hope you enjoy implementing the activities in this book, and we encourage you to create new ones to share with APH, teachers, parents, and children.

Tristan Pierce

Multiple Disabilities Project Leader



Introduction

Children learn by doing; they interact with their environment in order to develop motor skills and to process information about the world they experience. This usually happens casually, as children watch the world around them. Children who have vision loss do not gather as much information incidentally about the environment as their sighted peers; add disabilities that affect mobility



A boy plays Short Stack.

and movement, and children are further limited in their ability to interact independently with the environment.

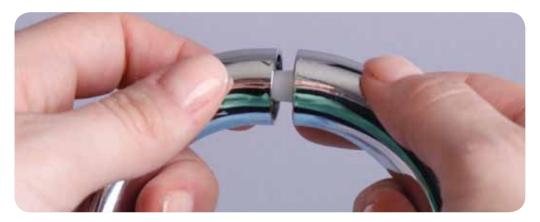
A child's early interactions with the environment are viewed as play, and interesting toys provide a target for a child's attention. Though the primary objective of play and toys is FUN, they also open the opportunity for service providers (parents, teachers, and others) to introduce learning objectives. For a child with visual and multiple impairments, it is a special challenge to introduce new experiences without overloading the child's sensory system. With its infinite knot shapes and shiny, textured surface, the Spangle Tangle has many features that are ideal in the selection of toys for children with visual impairmentsincluding visual and tactual appeal, sturdiness, and flexibility of use. The "spangle" of the toy attracts a child who has some vision. However, when a child has no vision to partner with touch for exploration, that child must depend on haptic perception alone for object recognition. When a child's hands and feet do not work well for exploration because of central nervous system or peripheral nerve damage, he or she needs to use his or her mouth to get information about the properties of the object regardless of chronological age or cognitive age (Smith, 2012). The Spangle Tangle and the accompanying Tangle Stand and Tube Stands are designed to accommodate a child who needs to use his or her mouth to gain knowledge about the object and activity. The guidebook activities encourage a child to discover and explore shape (curvature), edges, and textures.

Each Spangle Tangle is made of 18 pop-apart segments. It is easy to create a variety of patterns using the five distinct textures. The Tangle Stand offers a way to keep the movable toy stationary on a table or wheelchair tray while the child interacts with it.

Segments of the Spangle Tangle fit together tightly. Children especially those with motor impairments—are not expected to assemble or disassemble parts. Service providers and learning partners are encouraged to assemble, disassemble, fiddle with, create, and enjoy the Spangle Tangle as they prepare to introduce the delightful toy to children.



Choking Hazard - Small Parts Not recommended for children ages 5 and under without adult supervision.



These will snap together because the two pieces are held parallel.



No matter how hard you push, these will not snap together because they are not held parallel.



A girl explores a new texture while she plays with a smaller, 13 segment loop.



Bangles with distinct contrasting textures

Young Children With Special Needs

Infants without vision may not naturally regard their hands or bring them together at midline. The Spangle Tangle is useful to help a young child become aware of both hands and can be used to help the child practice movement patterns useful for later learning. It is a movable yet "stay-in-place" tool for haptic exploration, using the hands, mouth, or feet. To accommodate the specific needs of a child, adjust the number of segments and use certain textures.

- A very small or young child may be more successful manipulating a 10-segment loop as opposed to a heavier 18-segment loop.
- A child with low vision may be more successful when doing an activity with a bright covering on the wheelchair tray and/ or when the child wears a colorful shirt that reflects on the toy.
- A child with no vision may learn tactual discrimination better when he explores (perhaps orally) a toy that has distinct contrasting textures, (e.g., smooth and bumps or spiral and bumps).
- A child with no vision and an intellectual disability may learn and enjoy an activity better when simplicity is used (i.e., start out using one texture, slowly introduce a second texture, and gradually build complexity into games and activities).

 A child with no vision and low muscle tone may successfully manipulate a Spangle Tangle made with fewer segments and attached to the Tangle Stand; the stand prevents the toy from falling off the work surface.

Closely observe a child's responses to the Spangle Tangle and expand activities accordingly. Adjust activities for the child's chronological age and use age-appropriate language to describe the game. Combine the Spangle Tangle with the APH Tangle Toy (#1-08750-00) for more visual options.



For more contrast, play Spangle Tangle Knot using APH's Original Tangle Toy combined with the Spangle Tangle. This creates a "left-right" teaching opportunity.

CAUTION: The Spangle Tangle is reflective. If using the toy in a room that has a ceiling fan in use, monitor children who have vision and are prone to seizures or migraines.

Children With Cortical Visual Impairment

The Spangle Tangle activities designed for children with ocular forms of visual impairment or blindness may be modified so they are appropriate for children with cortical visual impairment (CVI). The following guidelines take the unique visual and behavioral characteristics of CVI into consideration. They are adapted from *The Tangle Book* (2005).

- If the child demonstrates visual field preferences, initially present the Spangle Tangle in the dominant viewing field.
- If the child gains visual attention most consistently through movement, present the Spangle Tangle in the child's dominant peripheral field and slowly move it back and forth to help establish attention to the toy.
- If the child demonstrates latency, allow ample wait time for the child to visually locate the Spangle Tangle.
- If the child demonstrates a color preference, partner the Spangle Tangle with segments of the preferred color from the APH Tangle Toy Kit (#1-08750-00) or dress the child in that color so the clothing reflects in the Spangle Tangle.
- If the child demonstrates light gazing, position the Spangle Tangle so it reflects any natural or artificial light.



A girl plays Rocking Round Robin.

- If the child is nonresponsive to complexity,
 - keep the background simple,
 - avoid using verbal direction or praise while the child is looking at the toy,
 - select segments so the assembled Spangle Tangle has no more than one or two textures, and
 - recognize the child may not use vision while exploring the textures of the segments.

- If the child uses visual-motor skills incongruently, remember that looking and reaching may occur as separate events rather than as a single action.
- If the child demonstrates resistance to novelty, he or she may not visually attend to the toy; provide gradual experience with the object over time, use favorite color and reflected light (as appropriate to the individual child), and monitor the complexity of the activity to reduce its novelty.
- If the child has difficulty with distance viewing, place the Spangle Tangle within inches of the child's face to offer the best opportunity for him or her to see.





Play and Explore: Games and Activities

The following games and activities are provided as springboard ideas to use the Spangle Tangle with children who have visual and multiple impairments. Unlike APH's Tangle Toy, activities for the Spangle Tangle do not require the learner to pull apart or connect the segments. If the learner is capable and ready for that challenge, please refer to APH's Tangle Toy Kit (#1-08750-00) for additional games and activities.

The Tangle Stand—included with the kit—sticks on any flat smooth surface; press it down on a table or wheelchair tray. To insert the Spangle Tangle into the stand, push the open end of a segment into the cradle opening. Continue to thread the strand through the cradle. You can connect segments when at least two segments are threaded all the way through the cradle. You can also pop a connected segment into the cradle by pushing down hard on the loop.

The bumpy segments (B) maintain their position in the Tangle Stand better than some other textured segments and work especially well to form a 4-segment ring that doesn't move around too much.

The Tube Stands also stick on tables and wheelchair trays. Try the various lengths of tubes to accommodate the abilities of individual children or particular challenges of an activity. Recognize that toys can encourage interactive play and utilize the fascination of the twists and loops to engage the child with peers.

Coil/Strand Sort

Target Population

Low vision, blind, special needs

Segments and Combination

Ring of 4 smooth segments; multiple coils of 5 segments, each made up of either textured or smooth segments

Skill Areas

Motor skills, social skills, visual attention, tactile attention, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread smooth segments through the cradle to create a 4-segment ring and connect the ends, or make the ring and then push it down into the cradle, whichever is easier.
- Thread two or three coils through the ring and present the task to the child.
- Instruct and/or assist the child to remove each coil from the ring; ask the child to determine where to place the strand/coil.
- The uncoiled strand can be sorted as is, or direct the child to recreate the coil once it has been removed from the ring.





Corkscrew Twist

Target Population

Low vision, blind, special needs, toddlers

Segments and Combination

Ring of 4 segments, all B; 12-segment strand, all X

Skill Areas

Motor skills, social skills, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread bumpy segments through the Tangle Stand cradle to create a 4-segment ring and connect the ends, or make the ring and push it down into the cradle, whichever is easier.
- Loop the 12-segment strand through the ring and form a coil; leave the ends unconnected.
- Instruct (or assist) the child in problem-solving to "unlock" the coil by unthreading the strand from the ring.





Infinity

Target Population

Young child (12-month-old) who has torso and head control, low vision, blind, special needs

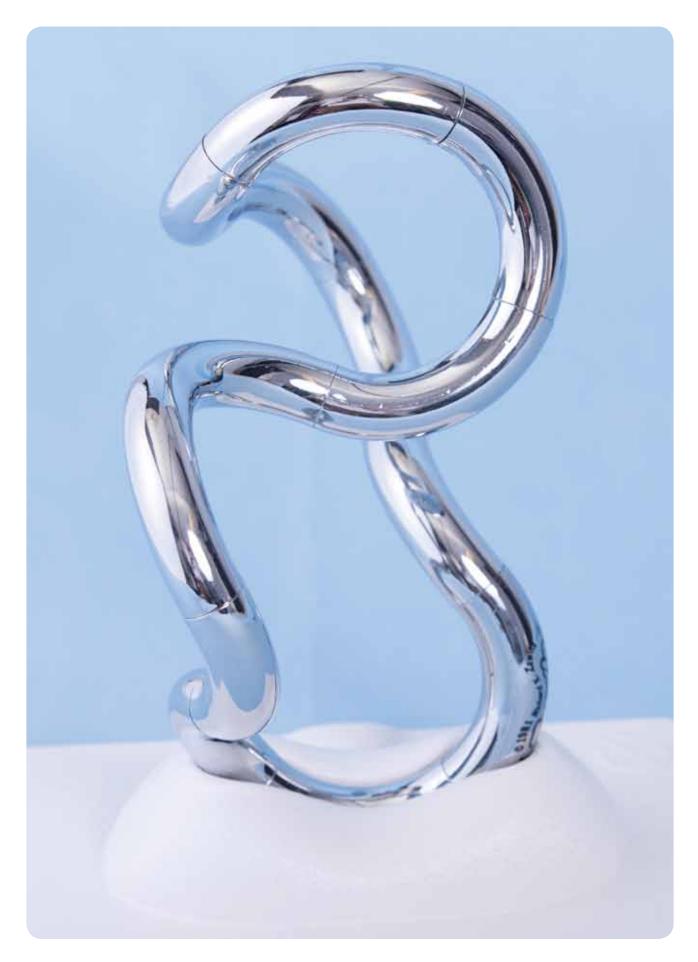
Segments and Combination

Loop with maximum 16 segments, all X

Skill Areas

Motor skills, tactile attention, creativity

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread the strand of smooth segments into the Tangle Stand and connect to form a loop.
- Use cues to bring the child's attention to the Spangle Tangle.
- Allow the child time to explore (orally if needed) the Spangle Tangle and to pull, push, and make circles with it.
- Encourage two-hand manipulation of the Infinity loop.
- As the child becomes familiar with the activity, add one texture to the loop for Infinity+1 or two textures to have Infinity+2.



Loop Toss

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple 10-segment loops of segments the child enjoys

Skill Areas

Motor skills, social skills

- Attach the Tube Stand to a surface near the child, either in front of or to the side; insert the tall tube in the stand; and add a sound source to the area if needed.
- Direct the child to toss the loop onto the tube to score points.
 - Involve several children as team members or game competitors.
 - Make the loops larger or smaller if needed.



Page Turn

Target Population

Low vision, blind, special needs

Segments and Combination

Ring of 4 segments, all X; Choice of

- two or three textured rings
- one smooth ring and two or three textured rings

Skill Areas

Motor skills, social skills, cognitive skills

Instructions

- Attach the Tangle Stand to the wheelchair tray or table.
- Make the smooth ring and push it into the Tangle Stand cradle.
- Place two or three 4-segment strands through the X ring and connect the ends to form rings. Place all the rings on the right side of the ring in the cradle (from the child's viewpoint).
- Instruct the child to "turn the page" and assist to move individual rings from the right side to the left side of the ring in the cradle.

Reverse the turning motion to put rings back in their starting position.





Ring Sort

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple 4-segment rings, each made up of one texture (X-X-X-X; B-B-B-B; S-S-S-S, etc.)

Skill Areas

Motor skills, social skills, visual attention, cognitive skills

- Attach the Tube Stand to the wheelchair tray or table; insert a tube appropriate to the child's motor abilities (short, medium, or long tube).
- Assemble rings and randomly stack on the tube.
- Instruct the child to remove each ring and sort by texture—smooth rings on one side of the tray and textured rings on the other.



Rocking Round Robin

Target Population

Low vision, blind, special needs, toddlers

Segments and Combination

Multiple loops of 7 segments each (X-B-B-X-X-B-B, X-S-S-X-X-S-S, X-X-X-X-X-X)

Skill Areas

Motor skills, tactile attention, cognitive skills, social skills

- Create the loops; make at least one with all smooth segments.
- Twist each loop so the textured segments will rock on the table surface and the smooth segments form the front edge of the rocker seat and top of the rocker back.
- Assist the child to put each rocker in motion and try to keep all of them rocking at once.
- Help the child distinguish between the sounds of the different rockers.
- A rocker made with the bump segments (B) does not rock well; let the child compare the way the rockers behave and sound as they are put into motion.
- Invite peers to participate in a game of "musical chairs" where each person has a rocker and tries to keep their rocker moving until the music stops. Swap the rockers around so each child has an opportunity to play with his or her favorite rocker.





Short/Tall Stack

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple rings of 4 segments, each made of one texture (A-A-A-A, T-T-T) or mixed (A-X-A-X, B-X-B-X, S-X-S-X, T-X-T-X)

Skill Areas

Motor skills, tactile attention, visual attention, cognitive skills

- Attach one of the Tube Stands to the wheelchair tray or table and insert the short, medium, or tall tube in the stand.
- Assemble the rings.
- Instruct the child to stack rings on the tube.
 - Challenge the child to stack rings in a specific pattern.
 - Challenge the child to complete the task in a specific amount of time.
 - Challenge the child with varying tube lengths at various times.
- Direct the child to signal "finished" when the stack is complete.



Skyline

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple rings, each made with one texture (X-X-X, A-A-A, etc.)

Skill Areas

Motor skills, tactile attention, cognitive skills, creativity

- Attach both Tube Stands to the wheelchair tray or table and insert a tube in each stand.
- Assemble the rings.
- Place rings on the wheelchair tray or in a container on the table.
- Instruct the child to stack rings on the tubes to create skyscrapers.
 - Challenge the child to stack in a specific pattern (smooth, texture, smooth, texture, etc.; all textured rings on one tube and smooth rings on the other).



Spangle Bangle Hunt

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple rings, each made of one texture (X-X-X, A-A-A, etc.)

Skill Areas

Motor skills, cognitive skills, sound localization, social skills

Instructions

- Hide the rings around the room, each with a portable, remote-controlled sound source.
- Activate the sound source for the first ring. If the child does not ambulate independently with a power wheelchair, have the child point to the direction of the sound. Assist or push the child's manual wheelchair following the child's guidance.
- Team up children to locate and collect the rings.
- Child collects the rings on his or her wheelchair tray, on the Tube Stand, or as "bangles" to wear on his or her arms.

Portable Sound Source, Sport Edition is APH catalog #1-03045-00.





Spangle Bangle Match Point

Target Population

Low vision, blind, special needs

Segments and Combination

Multiple pairs of rings; some with 2 smooth and 2 textured segments, some that are all smooth

Skill Areas

Motor skills, tactile attention, social skills, cognitive skills

- Place one bangle from each pair into a basket or bag.
 Distribute the other bangles to the children and have them join in a group or circle.
- Direct one child to select a bangle from the basket and circle around the group as everyone sings "In and Out the Window" or another simple verse.
- When the verse ends, the child with the extra bangle checks to see if he or she is behind a child with the matching bangle; if yes, the child with the bangle keeps the extra bangle and both children earn a match point; if no, the child must return the bangle to the basket and another child takes a turn.
- When all the bangles have been matched, the children with the most points earn a sticker.





Spangle Bangle Partners

Target Population

Low vision, blind, special needs

Segments and Combination

Two, three, or four pairs of rings with 2 textured and 2 smooth segments in each ring

Skill Areas

Social skills, cognitive skills

- Place all the rings in a bag and help a group of children each select a ring to place on their arms or on the table or tray in front of them.
- Take turns having a child locate his or her partner—the child who has a matching ring.
- Allow the partners to wear the Spangle Bangles while they complete the next task or activity as partners.



Spangle Coil

Target Population

3-5-year-olds; low vision, blind, special needs, CVI

Segments and Combination

Strand of all 36 segments

Skill Areas

Motor skills, tactile attention, visual attention

- Connect all segments to create a long strand.
- Help the child curl the strand to create a coil that rolls back and forth on the wheelchair tray or table.
- If the child has low vision, direct attention to his or her reflection in each segment as the coil is rolled on the tray or table.
- Teach the child to move both hands over the coil to create a "stadium wave" reflection in the coil.





Spangle Sculpture

Target Population

Low vision, blind, special needs

Segments and Combination

Strands and loops of any combination of segments (may include APH Tangle Toy for added variety)

Skill Areas

Motor skills, cognitive skills, decision-making, creativity, social skills

- Place segments in a basket or tray so the child can select segments by texture and/or color.
- Instruct the child to count the segments and determine how many he or she wants to have connected for his or her Spangle Sculpture.
- Have the child decide which segment goes next as you connect segments.
- Have the child direct whether to thread a strand into the Tangle Stand or choose to use a Tube Stand for his or her sculpture.
- Attach the Tangle Stand or Tube Stands to the wheelchair tray or table. If using the Tube Stands, insert a tube in each stand.

- Direct the child to create a sculpture with his or her chosen segments.
- Have the child choose a name for his or her sculpture.
- Include the Spangle Sculpture in a classroom or school art exhibit.







Spangle Steering Joystick Ride

Target Population

Low vision, blind, special needs

Segments and Combination

Strand of 9 segments: X-X-X-B-X-X-A-A

Skill Areas

Motor skills, social skills, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread the segment into the Tangle Stand so the B segment is in the cradle of the stand.
- Connect ends and arrange the loop so the A segments are at the top.
- Instruct the child to move the steering loop with one hand in the direction he or she would like to go as someone pushes the wheelchair. The steering loop operates like a joystick.



Spangle Steering Wheel Ride

Target Population

Low vision, blind, special needs

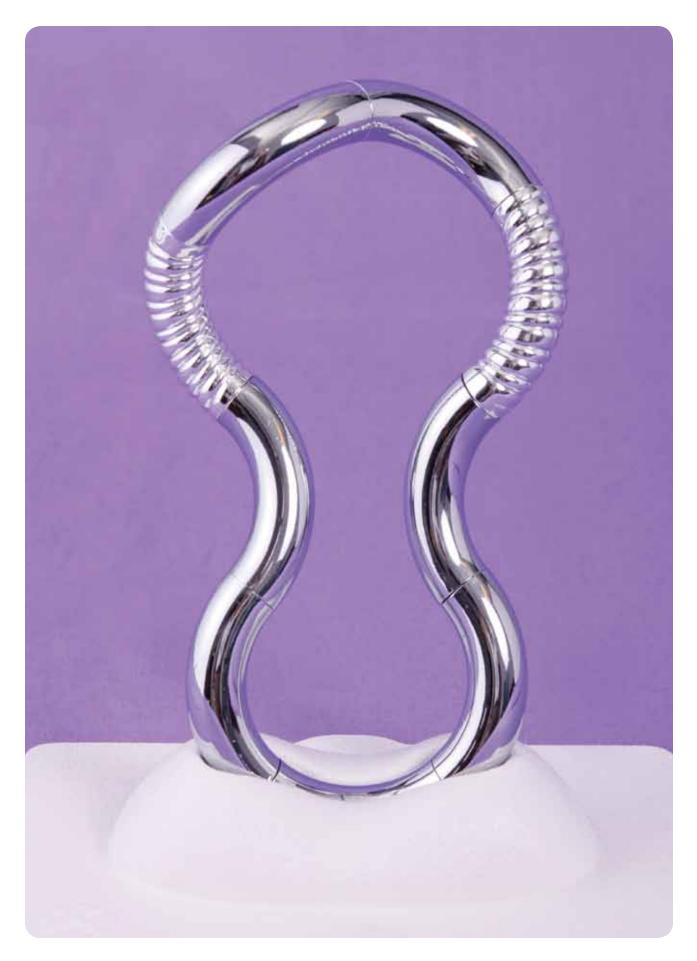
Segments and Combination

Strand of 9 segments: X-X-S-X-X-X-X-S

Skill Areas

Motor skills, social skills, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread segments into the Tangle Stand so the five X segments are in the cradle of the stand.
- Connect ends and arrange the loop so the two X segments are at the top.
- Instruct the child to grasp the two S segments with both hands and move the steering wheel loop to the right or left indicating the direction he or she would like to go as someone pushes the wheelchair. The steering wheel loop slides freely left and right in the cradle like driving a car.



Spangle Tangle Knot

Target Population

Low vision, blind, special needs

Segments and Combination

Strand of 12 segments: 5 X, 2 B, and 5 other textured segments (X-X-X-X-B-B-A-T-A-T-A); select tight-fitting segments for the textured side so they hold their position better.

Skill Areas

Motor skills, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread the strand through the Tangle Stand so the B segments hold the strand in the cradle firmly.
- Position the strand in front of the child so the smooth segments are on the right and the textured segments are on the left. (Note: Adapt this as needed to place the segments with the tightest fit on the right side so the strand section that starts on the left moves more freely.)
- Assist the child to create a knot:
 - cross the textured segments over the front of the smooth segments,
 - grasp the Spangle Tangle where the segments cross,

- twist the textured segments so the end points down on the backside,
- push the textured end up through the loop of the Spangle Tangle, and
- twist the smooth segments forward and connect to the textured segment to finish the knot for the child.



Stir the Pot (or Song Time)

Target Population

Low vision, blind, special needs

Segments and Combination

Strand of 7 segments: B-B-X-T-X-S-S (or other preferred texture); to encourage a child to reach higher or extend their reach farther, add more segments

Skill Areas

Motor skills, cognitive skills, creativity

- Attach the Tangle Stand to the wheelchair tray or table in front of the child.
- Thread the strand into the Tangle Stand so the two B segments are in the cradle and hold the strand firmly in place or push the strand down into the cradle.
- Direct the child to locate the two textured (S) segments near the end of the strand and to grasp and hold them.
- Direct the child to "stir the pot" left/counterclockwise or right/clockwise.
- Direct the child to perform actions to go along with songs, e.g., "Wipers on the bus go swish, swish, swish." Instruct the child to move the strand to the left and right in rhythm with the song.



Tangle Tracking

Target Population

Low vision, blind, special needs

Segments and Combination

Strand with 11 segments: 10 X and 1 textured (X-X-X-X-X-X-X-X-S-X or X-X-X-X-X-X-X-X-B-X)

Skill Areas

Motor skills, tactile attention, cognitive skills, pre-braille skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Assemble all 11 segments into a strand, placing the textured segment near the end of the strand.
- Thread the first two smooth segments into the Tangle Stand and flatten the strand so it creates a curvy horizontal line on the tray or table.
- Direct the child to track along the strand and locate the segment that is different from the other segments.
- As the child progresses in locating one texture at the end, add a second texture.
- Create a strand with X-X-X-A-A-A-B-A-X-X and direct the child to locate the B segment.

 Give the child a 4-segment circle and let him or her drag or move the circle along the line. If the line ends at the edge of the wheelchair tray, let the child push the circle over the edge so that it drops into a metal container on the floor.



Thread and Count

Target Population

Low vision, blind, special needs

Segments and Combination

Three rings, each one texture; strand of 10 smooth segments (X)

Skill Areas

Motor skills, cognitive skills

- Attach the Tangle Stand to the wheelchair tray or table.
- Thread the strand through the Tangle Stand so it stays in place and has a long section on one side.
- Direct the child to thread the textured rings onto the long section of the strand; when completed, connect the ends to form a loop.
- Help the child count the number of rings on the loop.
- Direct the child to count pieces of a specific texture as he or she tracks through the loop.



Treasure Hunt

Target Population

Low vision, blind, special needs, toddlers

Segments and Combination

Several smooth rings and one textured ring (or reversed to have several textured rings and one smooth)

Skill Areas

Motor skills, tactile attention, social skills, cognitive skills

- Attach one of the Tube Stands to the wheelchair tray or table and insert the short, medium, or tall tube in the stand.
- Place rings on the tube in a random order.
- Instruct the child to find the "treasure"—the ring that is different from the others or that is the same as a model placed in the Tangle Stand.
- If the "treasure hunt" is presented as a task to match one ring to a model, attach the Tangle Stand to the wheelchair tray or table in front of the child and push the "model" ring into the cradle of the stand.
- Vary the number of alternate rings to sort through to find the treasure.



Twist and Shape

Target Population

Low vision, blind, special needs

Segments and Combination

Smooth ring; Strand of 14 segments, mixture of smooth and textured

Skill Areas

Motor skills, tactile attention, creativity

- Attach the Tangle Stand to the wheelchair tray or table.
- Push the smooth ring down into the cradle of the Tangle Stand. Thread the strand through the ring three times and connect the ends.
- Direct the child to use both hands to twist and shape the coil.
 - Allow the child to explore and name the shapes that result from twisting the loop in various ways.
 - Encourage the child to create a coil or three separate loops around the ring.
 - Challenge the child to twist and shape the coil so that a specific texture is at the top.

 For children with low vision or CVI: Place one or two segments of the child's preferred color from the APH Tangle Toy in the coil; target the color instead of the texture.





Twist and Tangle Reflections

Target Population

Low vision, blind, special needs

Segments and Combination

Strand of 18 segments, 16 X and 2 B

Skill Areas

Motor skills, tactile attention, visual attention, exercise

- Attach the Tangle Stand to the wheelchair tray or table in front of the child.
- Place the textured segments in a position where the child can grasp them with both hands.
- Encourage the child to hold, twist, and move the loop.
- Create arm exercise routines, e.g., stationary bicycle arms, in-and-out accordion arms, single arm extension, biceps curls, etc.



Bibliography

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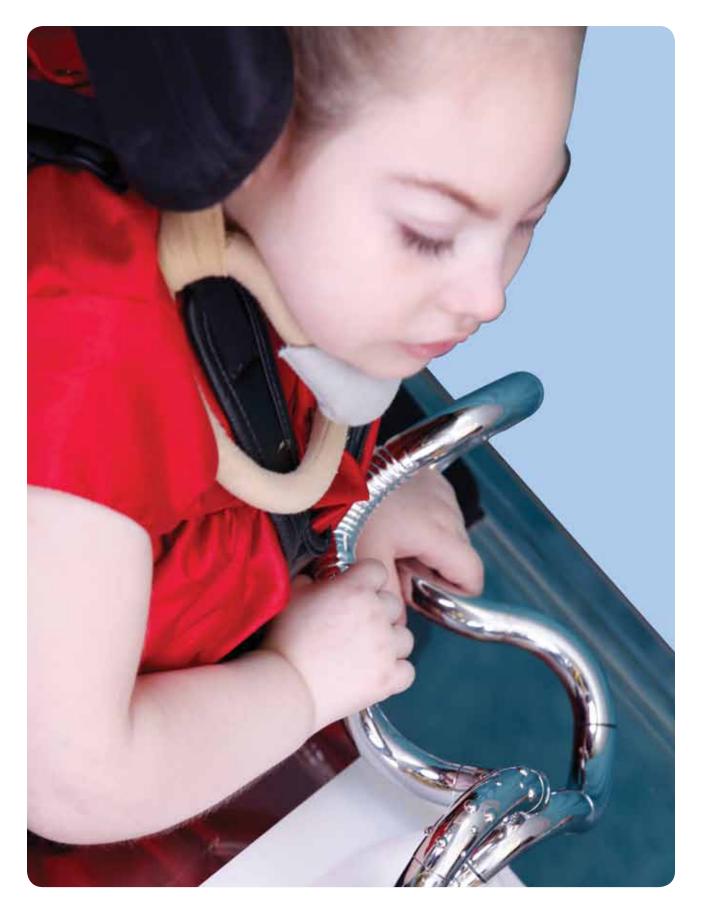
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A girl plays Twist and Tangle Reflections.



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