

# The Living Puzzles



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## **The Living Puzzles**

The living puzzles are three puzzles that were manufactured out of pictures that I personally have taken. I had my pictures manufactured into three different size puzzles with varying piece counts: one is 8 inches by 10 inches with six pieces, one is ten inches by twelve inches with twelve pieces, and one is eight and a quarter inches by eleven and three quarter inches with thirty pieces. Each puzzle has also been designed to incorporate various textures, depending upon the image that is presented. These Living Puzzles can be used to address many physical, cognitive, and psychosocial components through a variety of activities. They can be used in group settings, one on one, or individually to work on problem solving and tactile exposure and adaptation. The Living Puzzles can be used by anyone who is looking for tactile or cognitive exposure, but is designed with the pediatric area of practice in mind. It is my hope that the images on these puzzles provoke interest and excitement and that they are seen as fun activities that can also be used to address so many components.

## **MATERIALS NEEDED:**

Puzzles can vary in size and piece count. The puzzles used in this project are puzzles that were made from pictures that I have taken using [jigsaw2order.com](http://jigsaw2order.com), but you can use any puzzles that you currently have or that you purchase at the store.

The textures can and will vary based upon the design on the puzzle(s), these are just the ones that I used specifically in creating my The Living Puzzles.

- 3 Puzzles
  - One with 6 pieces
  - One with 12 pieces
  - One with 30 pieces
- Sand
- Small Shells
- String
- Paper Easter “Grass”
- Felt
- Shelf/Drawer Liner
- Faux Fur
- Tissue Paper
- Popsicle Sticks
- Craft Bond

## HOW TO MAKE THE LIVING PUZZLES

1. Choose/make a puzzle that you want to use for your Living Puzzles
2. Assemble puzzle to determine the amounts, sizes, and shapes needed for your textures
  - a. This is a lot easier to do before you gather your textures, so you know how much you need and what may or may not work

3. Gather all materials needed for desired textures

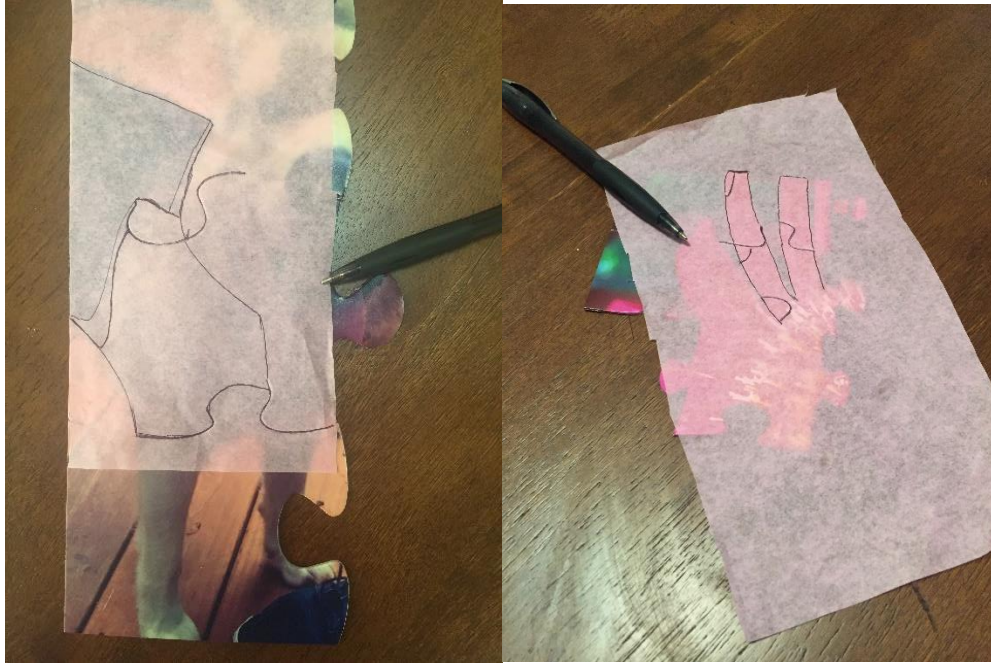
**Optional Step:** I bought a cheap puzzle and tested all of my textures on it, before on the real puzzles to make sure that they would stick and stay on

**For pieces you are texturing with items that require cutting/shaping (fabric, felt, fur, drawer liner):**

4. Place a piece of tissue paper, slightly larger than the texture or area that you hope to be covering



5. Trace the puzzle pieces and the image for where you want the texture, including the outline of the puzzle piece if it is filling the piece or continuing onto the next



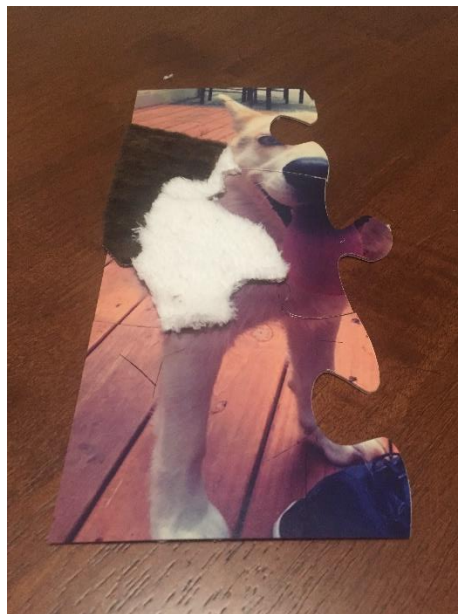
6. Tape the tissue paper onto the texture you are cutting out



7. CAREFULLY cut out the texture around the tissue paper, the tissue paper will move if you are not careful (and probably even if you are)



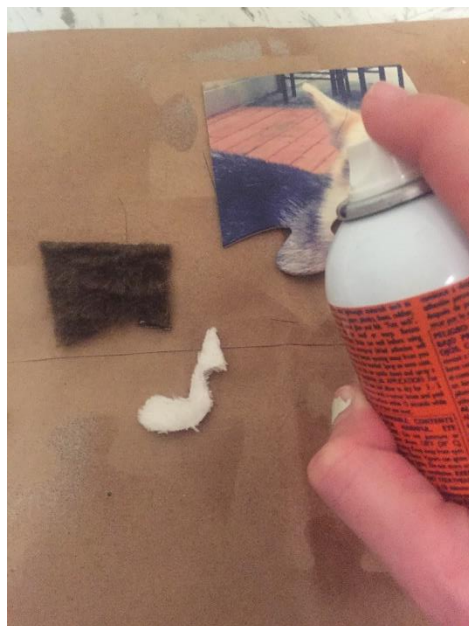
8. Lay out your textures to make sure they line up and fit the way you want them to



9. Separate any pieces and place those you are gluing to on a larger paper (I used a brown paper bag), something to keep the overspray from covering your floor



10. Spray the Craft Bond onto your puzzle piece, try not to get it where you don't need it to be, and try not to overspray, just enough to coat the area you are bonding to



11. Place your texture and apply pressure to allow it to adhere
12. Keep your pieces separated and allow them to dry for at least 24 hours
  - a. The Craft Bond says to allow it dry for at least an hour, but I found with the puzzle pieces and the nearly unavoidable overspray, that 24 hours allows for enough time for all areas to dry and the pieces to not stick to one another.



**For textures that are not flat to the puzzle pieces surface (Popsicle sticks, “grass”, and string):**

13. Separate the piece you are adhering the texture to from the other pieces and protect surrounding areas from overspray
14. Spray the Craft Bond onto the piece, limiting it as closely as possible to the area you need and not applying too much
15. Place your textures on the Craft Bond and apply pressure to stick



16. If the textures do not seem to be adhering easily place something heavy (I used an empty candle jar) on top of the texture and piece and allow to sit for a couple of hours
17. Carefully pick up the extra weight you applied, making sure it is not stuck to the piece, and your texture should be stuck
18. With any of these pieces and textures, do not pull on the textures, but once they have dried, if there is overhang I do recommend trimming it off. This seems to allow the textures less area for damage or accidental removal.
19. Now you can assemble your puzzles and/or do some of the games and activities listed below!



## ACTIVITIES AND GAMES

- Obstacle Course: Puzzle pieces can be placed throughout and obstacle course and be picked up and put together. Puzzle pieces can also be spread out at one end of the obstacle course and one has to go through the course, get a piece, and go back through the course to put it together until the puzzle is completed.
- Scavenger Hunt: The pieces of the puzzle will be scattered and hid throughout the area and one must find and gather all of the pieces and place them in a designated spot in order to assemble the puzzle.
- Timed/Race: A stopwatch can be used to time how long it takes to put a puzzle together, this time can then be compared to other trials by the same person or if there are multiple people in a session, the times can be compared to one another.
- Mix and Match: All of the pieces of these three puzzles can be placed in the same bag/box and mixed up. The pieces can then be emptied onto the floor or table surface and be sorted through and put together in the puzzles in which they belong.
- Sort by Number: Each puzzle is labelled by a number and the corresponding pieces have that number. Puzzles will be mixed up and flipped over, allowing the client to match the numbers.
- Vocabulary: There are various textures on each puzzle, none of which are the same, the client will verbalize what they feel when they touch each texture. They will be asked to describe what they feel (soft, rough, spongy, etc.).

## PERFORMANCE COMPONENTS

The Living Puzzles are used to address multiple performance components in the individuals who use them. The different textures help with sensory integration and tactile discrimination. The differing sizes, shapes, and images of each puzzle allow individuals to incorporate recognition and decision-making skills. Putting the puzzles together and taking them a part helps with fine motor skills, grasp patterns, finger dexterity, and in-hand manipulation.

- Cognitive
  - Categorization: The client will address this component in categorizing the pieces by corners, edges, and center pieces.
  - Recognition: The client will address this component by recognizing what pieces/textures go together and how the puzzle is assembled.
  - Decision Making: The client will address this component by deciding what piece goes where, what each texture feels like, and which pieces belong to which puzzle.
  - Problem Solving: The client will address this component by problem solving on which way they need to turn each piece and how they get the pieces of the puzzles to fit with one another.
  - Concentration: The client will address this component by concentrating on the task or activity and following the directions they are given for completing them
  - Attention: The client will address this component in all activities, especially while listening to and following the directions they are given.
- Physical
  - Fine Motor Coordination/Finger Dexterity: The client will address this component in picking up and manipulating the puzzle pieces and in placing/attaching them to the pieces they belong.
  - Grasp Patterns: The client will address this component when picking up the puzzle pieces or holding onto the puzzle pieces.

- In-hand Manipulation: The client will address this component in picking up the puzzle pieces and manipulating them to the proper when that they need to be turned on angled to be attached to the next piece.
- Reach: The client will address this component in various activities where they are reaching to get the puzzle pieces or reaching to assemble the puzzle.
- Gross Motor Movements: The client will address this component in completing the scavenger hunt and climbing through the obstacle course.
- Psychosocial
  - Conscientiousness: The client will address this component while thinking about and considering the directions they are given for each activity and how they are going to respond.
  - Frustration Tolerance: The client will address this component when trying to put together the puzzle pieces, seeing what pieces fit where and what pieces do not.
  - Confidence: The client will address this component in independently completing each puzzle, or in using the backward chaining method. The client will feel a sense of pride and accomplishment upon completion.
  - Self-efficacy: The client will address this component in independently completing each puzzle, or in using the backward chaining method. The client will feel a sense of pride and accomplishment upon completion.
  - Motivation: The client will address this component in finding the motivation and desire to complete the puzzles or activities they are presented with.
  - Delay of Gratification: The client will address this component while working through the puzzles and activities and waiting until the end to achieve their goal of completing the puzzle.
  - Interests: The client will address this component when choosing a puzzle to complete that interests them.

- Sensory
  - Sensory Processing: The client will address this component by touching and feeling the various textures presented in the puzzles.
  - Sensory Awareness: The client will address this component by touching and feeling the various textures presented in the puzzles.
  - Vision: The client will address this component when looking at each puzzle, visual discrimination will be addressed in differing between the various textures and colors that are incorporated into the puzzles.
  - Touch/Tactile: The client will address this component by feeling the various textures that are associated with each puzzle.
  - Self-regulation: The client will address this component in completing activities and putting the puzzles together and addressing any problems or difficulties that may arise.
- Perceptual
  - Stereognosis: The client will address this component while they are touching the various incorporated textures and in identifying what each texture feels like to them or what it reminds them of.
  - Figure Ground: The client will address this component by finding specific/designated/required pieces of the puzzle from within a pile of pieces.
  - Visual Closure: The client will address this component by completing each puzzle, by visualizing which piece comes next in order to assemble.