



Using Sandpaper Numbers

Set-up: Place your numbers in a container so that they fit with ample room (not too crowded). Place a sensitizing brush to the left of the box and leave space on the shelf for children to set a number down so they can use two hands to make room for it in the box.

Presentation:

1. Begin the lesson. Wash your hands and sensitize your fingertips.
2. Show the child how to carry the box of numbers (securing the number cards so they don't slide while walking) to a table.
3. Sit down next to the child's dominant side (usually the right).
4. Select the first three numbers (one at a time) and place them face down on the work area.
5. Turn the one card face up and place it in front of the child. Secure it with your left hand, trace it with the first two fingers of your right hand, and say its name, "One." Repeat the trace and naming a few times before giving the child a turn (show them you love to trace it, just as with the sandpaper letters).
6. Move the one card to the left of the table, face-down (to isolate the stimuli).
7. Continue as above until all three numbers are presented.
8. Turn all number cards face-up and complete the three-period lesson (at the child's pace, ending with period two is common in the beginning).
 - The first period occurred when you named each number. Rename each number now and point to each one as you say its name.
 - Next, in the second period, say a number and ask the child to find that number. For example, you might say, "Show me the three." Keep it lively by varying the action in the second period (e.g., point to the, trace the, move the, pick up the...). The second period is where most learning takes place. When they are accurate most of the time, add distance to increase the challenge. Leave the cards on the table and move to a different place in the room. Ask the child to bring you a number. Match your challenge to the child's ability; better too easy than too hard. If they make an error, do not correct them. Instead, move back to the first period. For example, if they bring you the two and you asked for the three just say, "You brought me the two." Then, walk together back to the table and repeat the first period.
 - When you are 100% sure they know the number, move on to the third period. Point to a card and say, "What is this?" This is the final test of

their knowledge. It may take a day or weeks before they succeed at the third period. Don't go here too soon.

- This entire three-period lesson should only take a few minutes. Do not belabor it. Continue for as long as the child is interested; leave them wanting more!

Control of error:

- The sensation of sandpaper under the fingers controls error. (If the child's fingers slip off the sandpaper, the child immediately receives a different feeling from the surface.)

Accommodations:

- If the child has tactile resistance to sandpaper, create an alternate set of numerals cut out of felt.
- If the child is 5 or older and they do not yet know their numbers, they may be less interested in tracing the sandpaper numbers.
 - o Option 1: Introduce the blindfold and have the child find each number without looking.
 - o Option 2: Introduce a tray of sand and guide the child to trace the number and then draw it in the sand tray.
 - o Option 3: If the child can write, guide them to trace the sandpaper number with their fingers and then draw it repeatedly on a chalkboard.

Notes:

- Go in order through the numbers when presenting them to reinforce the proper sequence. Add additional numbers that day or a different day to match the ability and pace of the child. Always review the ones you've already presented to ensure mastery. Go at the child's pace.
- Remember to save the zero until after the child receives the Spindle Box presentation (where the concept of zero is introduced).