

# SHELLS & STARFISH

## Shell Transfer

*While transfer activities may seem simple, they are important for your child to develop concentration and coordination. Using the small spoon will help build up the muscles used for writing later on. The attractive shell dishes and spoon will engage their imagination.*

**Shell Transfer With Hands** - Set out the two shell dishes and fill one with tiny shells. Have your child move the tiny shells from one dish to the other, using their hands. Allow them to repeat this activity as many times as they would like.

**Shell Transfer With Spoon** - Once they have mastered transferring the shells back and forth with their hands without spilling, then you can introduce using the spoon. This is more challenging and requires additional fine motor skills. Holding the spoon correctly will work on their three finger grasp, which will help them hold a pencil correctly later on.

## One-to-One Matching

*With these simple items, you can do many math activities. The Sandpaper Numbers are official Montessori materials that teach your child the formation of the numbers even before they can actually write them.*

**Sandpaper Numbers To Cards** - This activity is simply matching the sandpaper number to the card, without naming it. It is a silent presentation, since the child has not yet been introduced to the number. They are only looking at the shapes, and matching those. Start by matching a single card and sandpaper number at a time, flipping both over and setting them to the side when you have successfully matched them together. Once your child has been able to match all of the individual cards together, you can change the level of difficulty by adding more cards and sandpaper numbers. Start with 1, then go to 3, then gradually add more until they are matching them all at the same time. Initially, you want all of the cards and numbers to be in order, then, you can mix them up to add a level of difficulty.

## One-to-One Matching, continued

**Starfish Counters To Cards** - Similar to the previous activity, this is simply a one-to-one matching activity. Since zero does not have any dots, remove that card before introducing this. Have your counters ready and your cards in order. Match the counter to the dot, beginning with 1, then putting the counter back in the bag or dish and flipping over the card to signify that we are finished with that card. Repeat this process with numbers 1 to 9. Once they've mastered matching to a single card, match 2 or 3 at a time, gradually increasing until they are doing all 9.

## Math Concepts

See video instructions for more details and Montessori theory

*The concept of "zero" as nothing can be difficult for a child to understand. Make sure to go to your resources page online to read a short and fun story of how Dr. Montessori explained zero to her students.*

**Counting Starfish** - This activity is their introduction to quantity. Start by just having enough starfish counters to count from 1 to 3, so you'll need a total of 6. You can use the little bucket or a single shell dish to hold them. Place a single starfish on the mat and say "One". Leave some space, and then count out 2 starfish, placing them next to each other and saying "One, Two" as you lay them on the mat. Repeat "Two" as you draw a line with your finger underneath the 2 starfish, indicating that 2 means both starfish together. Follow that same pattern for 3 starfish, but when you get to 3, make sure to place it below the first starfish in that group. This will be important for them later on to see the difference between even and odd numbers. At this point, you can check their comprehension by using a 3 period lesson, which is explained in the instruction videos. Once they have mastered counting to three, add an additional 3, then more, gradually increasing until they are counting from 1 to 9.

## Math Concepts, continued

**Tracing Sandpaper Numbers** - Now that your child has been introduced to quantity, we are going to use the sandpaper numbers to introduce the written representation of quantities. As with matching activities, we will begin by using one at a time and then flipping it over, signifying that we are finished with it. The video shows beginning with zero, but we recommend starting with 1, since that is what they've been introduced to. Remove the top number and place it in the center of the mat, saying "This is how we write one". Trace it slowly, repeating the name 3 times. This repetition will help the child to remember the name when they trace it themselves. Have your child trace it 3 times using their dominant hand, before you flip it over and move on to the next one. As with the previous activities, do one card at a time, then add more in as they master the numbers. You can also use the 3 period lesson [in the video instructions] to check for comprehension and mastery.

**Connecting Quantity & Number With Cards** - Connecting quantity with the written symbol can be a big jump for a child. Use the number cards and sandpaper numbers for 1-3, and 6 starfish counters in the bucket or shell dish. Lay out the number cards on the mat, then match the first starfish counter to the dot, saying "one" as you place it down. Then, match the sandpaper number to the card, saying "This is how we write one" as you lay it down and then trace it. Repeat with 2 and 3. At this point, remove just the starfish and then ask questions to check for comprehension. Ask "Which card shows me how to write one?" "Can you put one starfish down?", then repeat those same questions for 2 and 3. The online videos give you a visual as well as more details on how to introduce this concept.

For all of the activities that use starfish counters, you can also use the tiny shells, or another type of counter. Changing up what they use to count will keep them engaged in that activity longer. Of course, because these items are very small and a choking hazard, be sure to carefully supervise your child, and do not give these items to a child under the age of 3.

Please see the insert for more Math Concepts and Bonus activities.