SAND AND WATER PLAY

Why sand and water play is important:

Sand and water activities are relaxing and stress reducing which make it a valuable activity in preschool to counteract the pressure of attending programs with many other young children. Sand and water play also helps children learn about experimentation, measurement, natural science, cause and effect, principles of math, how properties of sand and water can change, and improvement of physical dexterity. Remember that sand play does not mean only “sand” can be used, there are a variety of items that can be used instead to give children sensory experiences that they might not get at any other time. For example, coffee grounds, noodles, beans, birdseed, rice, feathers, packing peanuts, confetti, scraps of materials, small pebbles, ice cubes.

What Children Learn:

- How to exercise our imagination
- Concepts of size, shape and volume; empty and full
- How to use tools
- How to solve problems
- Concepts of warm/cool, wet, damp/dry, heavy/light
- How to play socially with others
- To create patterns and symbols
- To observe changes
- To see a task through to completion
- Understanding cause and effect relationships (predicting what will happen when you add water to sand)
- Improving coordination skills
- Strengthen fine motor control
- Observe conservation of volume (pouring different mediums into different containers and comparing them)
- Developing problem-solving skills (how to dig a tunnel in wet sand so that it won’t collapse)

What materials should be available (This list is just to give you ideas of the many materials that can be use at this center):

- Measuring cups/spoons
- Small brooms/rakes
- Funnels
- Toy cars/dump trucks
- Buckets/shovels/scoops
- Seeds
- Sticks
- Coffee grounds
- Colanders/sifters
- Magnifying glasses
- Sponges
- Gelatin molds
- Boats
- Eye droppers
- Corks
When you comment on or ask children about their work, you are conveying the following to them:

- I am aware of what you are doing
- I am interested in your efforts and therefore in you
- I will help you look closely at your own work
- I am aware of your growing confidence

All of these interactions are very important in helping children develop self-confidence and self-esteem.

ECERS:

In order to achieve a score of 5 or above in sand and water play, materials need to be accessible a substantial portion of the day and be available both indoors and outdoors (weather permitting). A variety of toys and different activities need to be available for at least one hour daily.

How to expand on sand and water play through conversation:

- Ask open-ended questions (that require children to think and respond): “Can you tell me about what you made?” “Why do you think those mud pies will not hold their shape?” “I see you trying to pour the sand into that bottle, what could you use to get the sand inside the bottle?” “Can you tell me how the sand feels?”

- Expand vocabulary: sift, cause and effect, measure, experiment, volume, explore, construction, scooping, cooperation, change, fossil, magnet, magnifying glass

- Ask questions that encourage children to use information: “Do your two pails hold the same amount of sand?” “What did you find out when you used the water wheel?” “What does the sand/water feel like when you sift it through your fingers?” “What will happen when we add water to the sand?” “How many cups of water do you think it will take to fill up the bucket?”

- Encourage emergent scientific thinking: Sand and water play is one of the most natural linkages to science, it helps children look at how science is used everyday. “How does water change things?” “What will sink and what will float?” Look through a magnifying glass at grains of sand. Use a magnet over sand to gather metal shavings. Make your own “fossils”.

- Reinforce the play using descriptive comments: “I see you using the magnifying glass to look at the sand; do you see any differences in the grains?” “You are so busy with all of the water wheels, what a great way to put them all together.”

- Water wheels
- Rubber animals and people
- Egg beaters
- Soap
- Scales