

Objective

Rationale: We have been working on the shoreline and after doing an activity with the ocean tub the children got to experience the sand moving after a wave washed ashore.

Objective: To introduce erosion and learn why shorelines are different or change.

Preschool Standards

Standard 2: Engage in scientific theory-*show curiosity & inquiry in play through exploration (Will explore to see how the water moves sand), ask scientific questions (where does the sand come from and where does the sand go and how does it get from one shore to another shore), make observations in making predictions (if more water or a bigger wave comes ashore what might happen to the sand or shore).*

Standard 3: Explore physical properties of the world-*experiment with the effect of his/her own actions on objects*

# of children	Materials
5	<ul style="list-style-type: none"> • Plastic tub • Sand • Water • Flat object like a ruler or piece of wood (to generate waves) • Picture or erosion

Description of Activity

I would have the children create a shoreline in the tub. I would ask the children what they think will happen when I start to move the water and create waves. We would create a prediction chart and then we would test each prediction. I would add water and then create waves. I would ask the children to observe what is happening to the sand on the shore and where the sand is going after I create the waves. I would then ask them to predict what would happen if I made a bigger wave or a smaller wave and chart their answers. We could then test out their predictions.

	CREDE Standards
CREDE Standard	How will it be used
JPA Joint Productive Activity	Create shoreline in ocean tub. Creating a prediction chart.

LLD Language & Literacy Development	Erosion, observe, prediction, waves, shore, test, force/gravity (with the pushing and pulling of the water).
CTX Contextualization	Relate to when they go to the beach and are on the shore. Relate to wave bottles that they created .Relate to other things that push and pull (swinging) and things that erode
COT Complex Thinking	Does sand move? Where does the sand go? What happens if a big wave washes ashore?
IC Instructional Conversation	This will come with the teacher asking questions and children providing answers or guesses. Instruction will come with the teacher providing directions to the activity. Teacher will support children's answers with more questions and answers. Experience the activity as the children do.
MOD Modeling	How to use motions to make the water move.
CDA Child Directed Activity	Children can generate their own waves.

Assessment

Assessment will be made when children use language for erosion. Also using the motion/force to create waves.

Notes