

Create an Ocean in a Bottle

Watching the waves move back and forth, splashing and tumbling shells along the beach, can be mesmerizing. The natural sway of the water is soothing and exciting at the same time. Waves are energy in motion. The tides are caused by the pull of the moon's gravity on the earth's water as the earth turns.

Every person who has walked along the beach wonders what will wash up on the shore with the next wave? This activity creates an ocean in a jar complete with waves, and will entrance your kindergarten child with the magic of the ocean.

What You Need:

- Jar or glass bottle
- Hot glue gun
- Water
- Vegetable oil
- Blue food coloring
- Sand
- Seashells

What You Do:

1. Make sure your jar is washed out and clean. Spoon some sand into the jar.
2. Add water until $\frac{1}{2}$ full. Add 1 drop of blue food coloring or more until you get a color you like.
3. Add a few shells for your "ocean".
4. Add vegetable oil until almost full. Leave a small space for air at the top.
5. Take your hot glue gun and put glue around the lid of the bottle and then place the lid on the bottle.

Turn your ocean on its side and watch the waves go back and forth. Watch the sand gently move as the waves go by. Shake up the bottle. What happens to the sand? What happens to the shells? Does all the sand move as the waves move or just a little at a time? Your ocean in a jar is too small to mimic the tidal patterns of the real ocean but will offer a great opportunity to see the effects of energy in motion.

