

Build a Drifter

Plant and animal plankton float in the ocean and estuary, and even in Suisun Slough. Plankton don't float on the surface of the water, instead they are "neutrally buoyant", floating within the water column.

Step 1: Look at pictures of plankton. What shapes and features do you think help them avoid sinking to the bottom? What features stop them from floating all the way up to the surface?

Step 2: Using the materials provided, and what you learned from looking at the pictures, design your own plankton model.

Step 3: Test your model by lowering it gently into the aquarium filled with water.

Step 4: Evaluate your model: Did it sink? Did it float at the surface? The goal is to create a model that floats underwater or that sinks very slowly (taking more than 3 seconds to reach the bottom of the tank).

Step 5: If your model did not succeed, take it out of the tank and re-design it. Try it again, and again, until it is successful.

Step 6: Display your successful model on the table and consider the questions written there.

Supply List

- Clay and Tupperware or ziplocs to store clay
- Popsicle sticks
- Pennies
- Small Ziploc bags
- Rubber bands
- Twist ties or pipe cleaners
- Other assorted stuff
- Water*
- Aquarium*
- Instructions*
- Photos of plankton from arkive.org (you can search for “larvae” and filter by invertebrates –marine): <http://www.arkive.org/explore/species/invertebrates-marine?q=larvae>

*required, the rest can be a combination of what you have on hand