



Offshore Floating Turbine Design

Objectives: As a result of this activity, students will better understand the engineering challenges that come with creating floating wind turbines for offshore wind farms and hone their budgeting skills at the same time.

Students are given a problem-solving activity in which they must design an object resembling a wind turbine platform that will float in water and remain stationary under turbulence. Students will work in groups and create one object to test. Each group's object will be tested in a "Wind-Wave Tank". The inventions will be evaluated based on performance and manufacturing material.

The kit includes:

- Desktop mini-turbines
- Rubber bands
- Duct tape
- Foam cube
- Plastic water bottle
- Paper clips
- Balloons
- Washers
- Dowels
- Coroplast boards for making waves
- Pocketlab



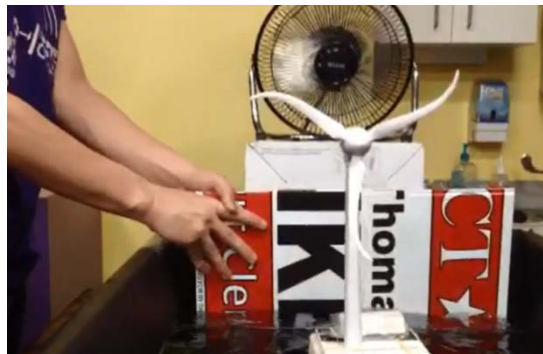
*To learn more about Pocketlab and to access other lesson plans go to: <http://support.thepocketlab.com>

NOT included in the kit:

- Water to fill the wave tank
- Device with Pocketlab app

Additional Equipment Needed:

- Fan
- Containers for testing in



*Any materials that are lost or broken during classroom use must be replenished before being returned.