

# Community Boating Center STEM Sailing Modules

## Sailing Through Science

Science, Technology, Engineering, Math (STEM) programs at CBC are a national model for US Sailing's "Reach" Initiative. Ten core Reach modules (and more!) use sailing as an engaging medium to foster an interest in STEM learning and career paths. Learn more at: 401-454-SAIL (7245) or www.communityboating.com





#### Measuring Wind

Wind Clues Anemometers Beaufort Scale



# **Buoyancy Testing**

Sink or Float? Building Clay Boats Design Challenge



#### Sail Area/ Perimeter

Sails as Triangles Measuring Area Pythagorean's Theorem



#### Simple Machines

Machines on Boats Load & Effort Purchase Systems



### Water Quality Testing

Scientfic Thinking Water Testing Comparing Data



#### Marine Debris

Prior Knowledge? Tides & Currents Decomposition



### Sailing Angles

Upwind Sailing Measuring Tacks Race Courses



#### Land/Sea Breezes

Temperature NOAA Buoy Data Surface Wind



# Wind Power

Uses of Wind Wind Turbines Air Foils



# **Underwater Exploration**

Underwater Science Multi-beam Mapping Building an ROV



### Microsopic Mysteries

Using Microscopes Collecting Samples Recording Data



#### Student Elective

Inquiry-Based Project-Based Active Learning

powered by

