

Topic: Introduction to Sailboats

Primary Goal:

A basic introduction to the sailboat. Students should be able to identify the parts of a sailboat and familiarize themselves with some of the terminology that will be used throughout the course.

Lesson Objectives:

- Ability to identify fundamental parts of a sailboat
- Introduction to boat terminology used throughout the course
- Introduction to some of the math and physics concepts that will be covered throughout the course

Lesson Outline:

- I. Establishing a Foundation: Parts of a Sailboat**
 - a.** When looking at the many pictures of all the different types of sailboats, students may become overwhelmed
 - b.** It is important to emphasize that although boat designs may differ greatly, most of the fundamental elements are the same
 - c.** Show the slide with the 7 boats and ask the students to identify the similarities/differences
 - i.** Not only will this get the students engaged, but it will make them aware that they don't know the boat terminology
 - d.** Learning boat terminology is like learning a new language → critical for communication
- II. Identify the Parts of a Sailboat**
 - a.** Hull – the foundation of the boat that makes it a seagoing vessel
 - i.** Bow, Stern, Port, Starboard
 - ii.** Fiberglass, wood, metal
 - b.** The Rig – the structures coming up from the hull that support the sails
 - i.** Mast, Boom, Forestay, Backstay, Shrouds
 - ii.** Explain the importance of supporting the mast
 - c.** Running Rigging – all the gear and lines used to raise and trim the sails
 - i.** Halyards, Sheets
 - d.** Sails – how a boat generates speed
 - i.** Mainsail, Jib, Spinnaker
 - ii.** Parts of the Sail: Luff, Leech, Foot
 - e.** Underwater Appendages
 - i.** Rudder, Keel

Supplemental Resources:

School of Sailing Glossary: <http://www.schoolofsailing.net/terminology.html>

US Sailing Video: Parts of a Boat : <https://www.youtube.com/watch?v=vZ6O8lB0cII>

Exercises/Activities:

If you have access to boat models, bring in and allow the students to take turns identifying the parts of the sailboat. It will be good to provide them with a list of all the items covered during the course.

Separate the students into groups and create a competition using both the sailboat part identification and definitions (Sailboat Jeopardy works well).