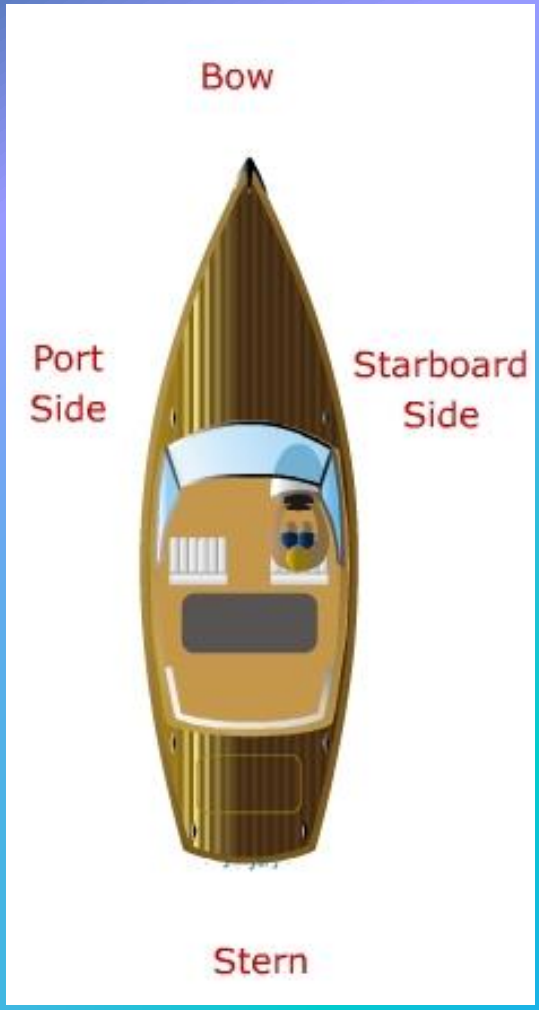
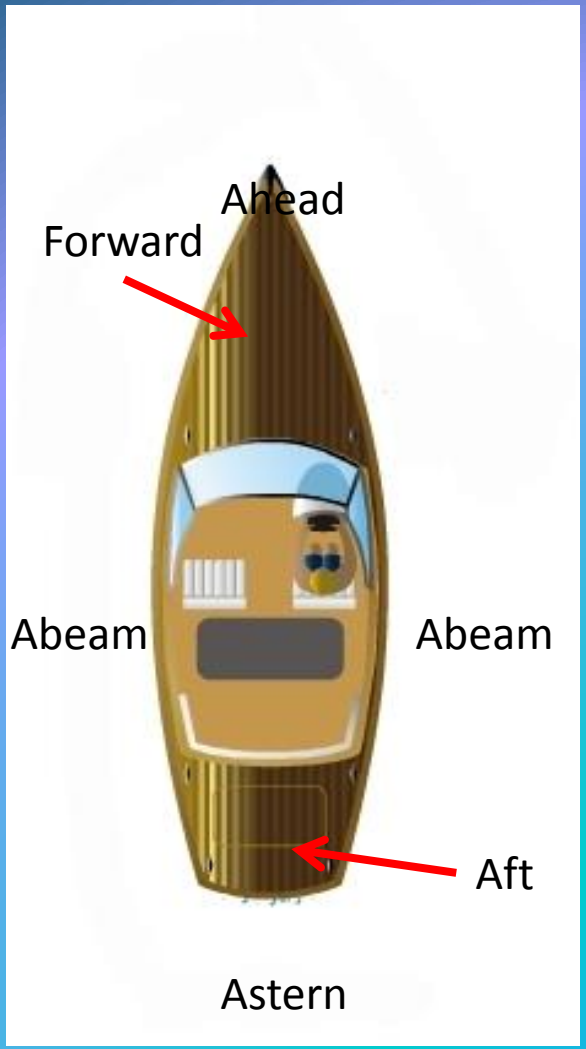
Marine Technology Terminology of a Boat

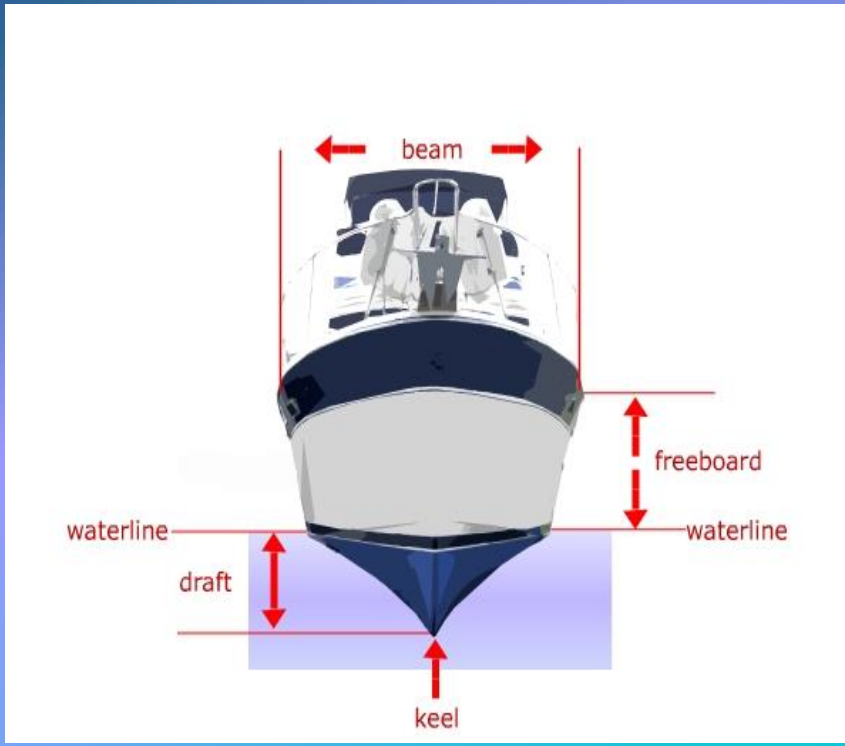
Bow	The front of the boat
Stern	The back of the boat
Port Side	The left side of a boat looking forward
Starboard Side	The right side of a boat looking forward



Forward	Toward the front of the boat
Aft	Towards the rear of the boat
Ahead	In the direction beyond the front of the boat
Astern	In the direction beyond the back of the boat
Abeam	A direction at right angles to the side of the boat



Beam	The width of a boat
Freeboard	The minimum vertical distance measured from the water to the boats upper edge
Draft	Minimum depth of water needed to float a boat
Keel	On a sailing vessel, the underwater member designed to resist lateral movement. On other vessels, the main front-to-back structural member of a framed hull (Backbone).



Marine Technology
Parts of a Boat

Hull	A boats shell
Gunwale	The upper edge of a boats side
Transom	The outside part of a boats stern
Cleats	A T-shaped fitting used to tie lines to.

Chock	An open metal fitting which a line is fed through to a cleat
Rudder	The underwater portion of a steering system
Leg	Lower portion of an outboard motor
Propeller	used to push the boat

Boat Hull Designs

Displacement Hull

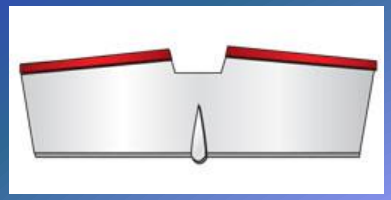
Boat meant to move through the water, NOT over it with a minimum of propulsion

Planning Hull

Boat whose hull is designed to skim over the water

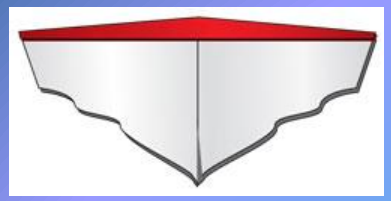
Flat Bottom

- Inexpensive
- Shallow draft
- Plane easy
- Rough water pound



V or Deep V

- Smoother ride, cuts through waves
- Common for runabout boats



Round Bottom

- Moves easily through the water but can be unstable: canoes, kayaks
- Like to roll unless there is a deep keel or stabilizer

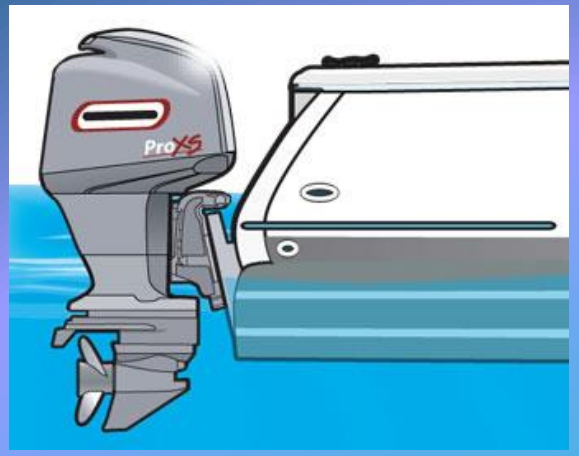
Multi-hull

- Catamarans, House boats
- Great stability

Engine Types

Outboards

- Popular on small boats
- Powerful for size
- can be portable, Easy to steer
- 2 stroke vs. 4 stroke
- Can tilt up out of the water



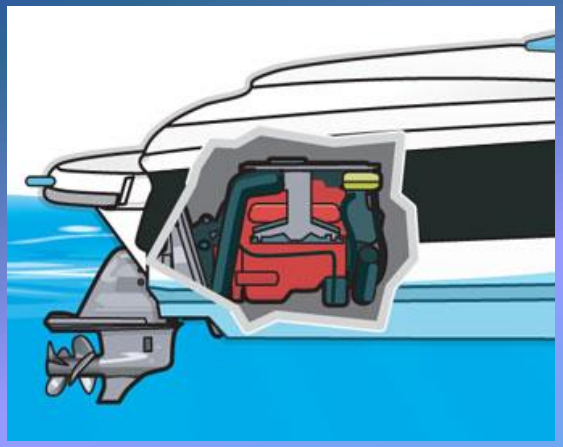
Inboards

- Car engine inside the hull
- Has a shaft that goes through the hull to the propeller
- Rudder mounted behind the propeller

Stern Drive

Inboard/Outboard

- Car engine mounted inside
- Have a “leg” that swivels side to side and tilts up and down outside on the transom



PWC/Jet boats

- Engine inside
- No propeller, just a nozzle
- Sucks water in, forces water out
- No rudder
- Must have power to be able to steer