

Primary Stability: Primary stability relates to the boat's ability to stay upright and level in flat water. A kayak with good primary stability will resist feeling "tippy" while sitting flat.

Secondary Stability: Secondary stability comes into play when the boat is placed on its edge (at an angle) in the water. A boat with good secondary stability will want to stay upright even when the paddler leans past the point of primary stability.

Planing Hull: Planing hulls have flat bottoms. This flat surface allows the boat to skim over the surface of the water, rather than push through it. Planing hulls have the most primary (upright) stability because of this flat-bottom design.

Displacement Hull: Unlike a planing hull, displacement hulls feature a fully or semi-curved bottom that push their way through the water, rather than skimming over the surface. Displacement hulls generally have a higher secondary stability than planing hulls, but less primary stability due to the bottom's rounded shape.

[Prefer a displacement hull due to increased secondary stability.](#)

Chines: Chines are synonymous with the edges of the boat that run below the water line, in varying degrees from bow to stern. The harder (sharper) the chines, the easier it is to make quick, powerful turns by leaning the boat onto its edge. These sharp chines, however, can be extremely "catchy" in currents if the paddler misjudges the amount of leaning required to maneuver the boat, generally forcing the paddler to brace to prevent a roll.

Boats with softer chines are more forgiving, but are a little less responsive to leaning into a turn. As a result, less pronounced edges require a little more paddle work to get pointed where you want to go. Although kayaks with softer chines may seem a little less responsive than boats with sharp edges, they excel in shallower water with lots of rock features.

[Sharper chines are preferred for better maneuverability.](#)

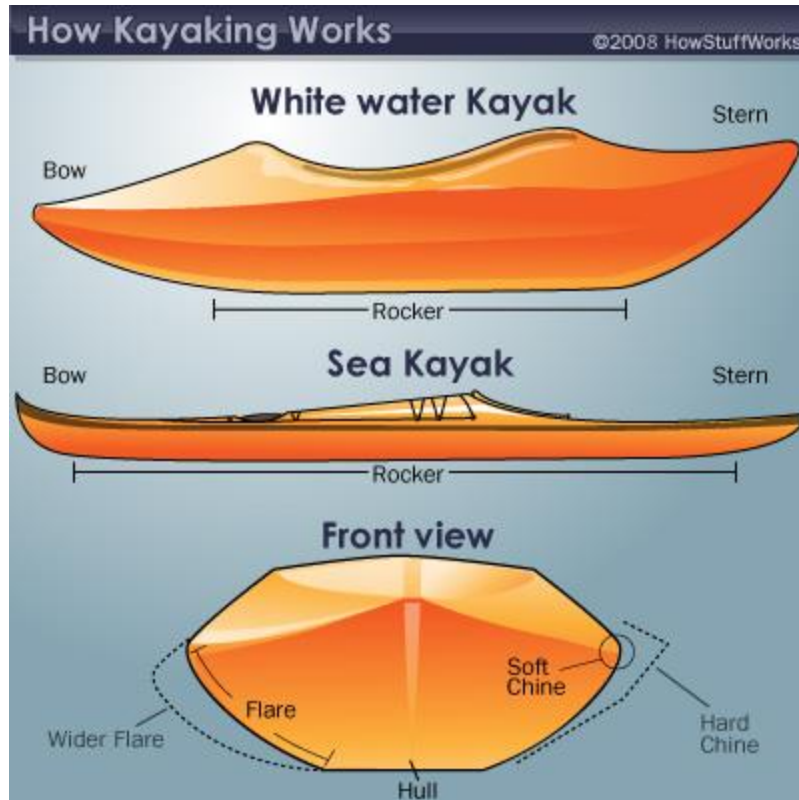
Rocker: Rocker is the curve of the boat that raises the bow and stern out of the water.

The amount of rocker on both the bow and stern can vary widely from boat to boat but it's possible to make generalizations about what a certain amount of rocker will do to a kayak's handling characteristics:

- More bow rocker: Allows the boat to ride over large waves and helps to keep the bow above water when landing from a drop
- Less bow rocker: Allows the boat to punch through large waves but can stuff the bow underwater upon landing from a drop
- More stern rocker: Allows for easier boofs off of drops
- Less stern rocker: Makes the boat hold speed and track better, but does not boof as well

Overall, a kayak with pronounced bow and stern rocker will offer considerable maneuverability despite the boat's length, while a boat with overall less bow and stern rocker will move faster downriver.

Pronounced bow and rocker preferable.



	BRAAAP 69
LENGTH	8' 11" / 271.8 CM
WIDTH	24.5" / 62.2 CM
COCKPIT LENGTH	34.5" / 87.6 CM
COCKPIT WIDTH	21" / 53.3 CM
WEIGHT	44 LBS / 20 KG
ROCKER BOW	12" / 30.5 CM
ROCKER STERN	10" / 25.4 CM
VOLUME	69 GAL / 261 L
PADDLER WEIGHT	100-220 LBS / 45 - 100 KG

