

WINDSURFING FORCES

NAME _____ HOUR _____

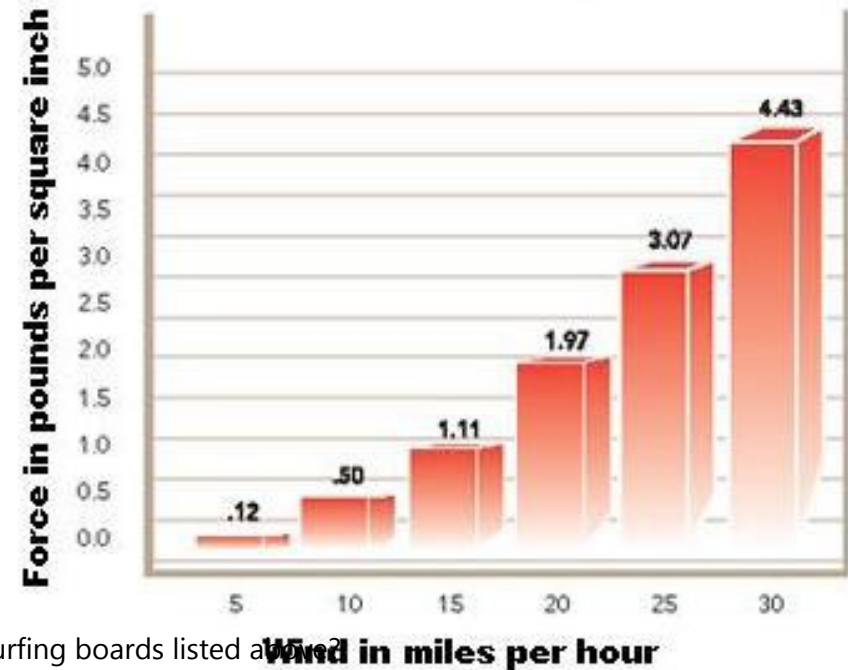
In order to go windsurfing, there must be enough force from the wind to inflate your sail. Use the information from the charts to answer the questions below.

Wind surf board model	Board Size	Force needed to fill the sail	Maximum force the sail can handle	Cost
Pacer Sport 225	56 inches	1 pound/in ²	10 pound/in ²	\$799.95
Bic Beach	59 inches	1.5 pound/in ²	10 pound/in ²	\$899.95
Bic Techno	59 inches	1.5 pound/in ²	10 pound/in ²	\$850.00
Stormforce 3000	64 inches	2 pound/in ²	11 pound/in ²	\$1299.99

BEACHES	TYPICAL WIND SPEEDS	MILES AWAY
Sandy Shore Beach	20-25 mph	30
Cliff Rock Beach	15-20 mph	5
Paradise Beach	5-10 mph	10



The force exerted by Wind



- How fast must the wind be going in order for you to use ANY of the windsurfing boards listed above?
 A] 10 mph B] 15mph C] 20 mph D] 25 mph
- If the wind was blowing 25 mph, could the Bic Techno windsurfing board handle it?
- 10 mph is exactly twice as fast as 5 mph. Is the force twice as much also?
- Which beach would be the worst one to travel to?
 A] Sandy shore because its farthest B] Cliff rock because the winds are too fast
 C] Paradise because the winds are too slow D] Sandy shore because the winds would ruin the board
- Which board is best for a beach that's not very windy?
 A] Pacer sport B] Bic Beach C] Bic Techno D] Stormforce 3000