

Science 8 Mr. Wessner
Unit 1 Topic 6 Research Questions

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Name:

Date:

1.) Define the following terms:

a.) Buoyancy:

b.) Buoyancy force:

c.) Floating:

d.) Average density:

e.) Archimedes' Principle:

f.) Neutral buoyancy:

g.) hydrometer:

2.) What unit is buoyancy force measured in? 1 mark page 59

3.) Complete the sentence.

Water can support objects that have densities greater than water as long as..... 1 mark

4.) _____ is as important as density of material used when it comes to floating an object in a fluid. 1mark

5.) How is it that steel ships (steel density 9.0 g/cm^3) can float in water with a density on 1 g/cm^3 . 1 mark

6.) How do fish control their depth in water? 1 mark

7.) Two boats have the same design. Boat #1 has a mass of 500 kg and a volume of 470 litres. Boat #2 has a mass of 600 kg and a volume of 602 litres. Show mathematically which boat you would sail on across the great lakes and why? 7 marks

8.) (think) Would a hydrometer float higher or lower in water compared to wine? 1 mark explain why or why not?

9.) Do review questions Page 69q 1, 4, 5