

12. I put a rock into a beaker with 150 ml of water and the water goes up to 190 ml. If the rock has a mass of 110g, what is the density of the rock? Show your work _____

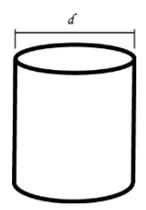
13. I have a boat that just barely floats in the ocean when fully loaded. I take the boat to the river and notice a difference in the way that it floats. Tell me what the difference is and **why** it is different.

14. When you have an item made from two different metals bonded together, and they curve when heated, what is that material called? _____

15. How does a bi-metallic strip work?

16. What are the units for liquid volume? _____ What are the units for solid volume? _____

17. What is the volume of the cylinder? diameter is 8 cm and the height is 12 cm _____

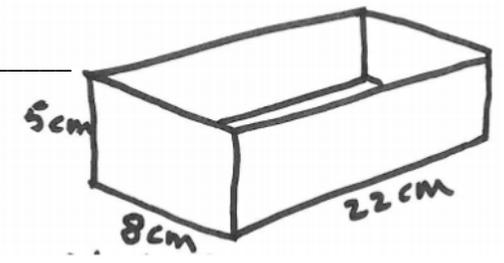


18. Heron of Alexandria hired _____ to find out if he had been cheated by the goldsmith.

19. A 200 g rock (hanging on a gram scale) is placed into an overflow can and 70 ml of water comes out. What would the scale read now that the rock is in the water? _____

The waterproof box shown has a mass of 200 g.

20. While floating, how many cm will be under water while empty? _____



21. How much more can it hold before it sinks? _____g

22. What is the buoyant force?

23. How can we know what the buoyant force will be without using a scale?

24. Describe Positive, Negative, and Neutral buoyancy.