

- Lab 01. \_\_\_\_\_ Find the volume of a box of soap with a length of 8.4 cm, a height of 6.6 cm, and a width of 4.7 cm
- Lab 02. \_\_\_\_\_ Find the speed of a 5.5 gm marble which rolls 31 cm in 0.9 seconds.
- Lab 03. \_\_\_\_\_ Find the acceleration of gravity for a princess inflatable ball that falls 163 cm in 0.58 seconds. Use the formula  $d = \frac{1}{2}gt^2$  to determine the acceleration of gravity g.
- Lab 04. \_\_\_\_\_ Find the momentum of a 5.5 gm marble that rolls 31 cm in 0.9 seconds.
- Lab 05. \_\_\_\_\_ Is copper a conductor of heat?
- Lab 06. \_\_\_\_\_ Determine the bounce height of bounce number 3 for a ball dropped from 100 cm with a bounce coefficient of 0.75. Note that the bounce height for a given bounce number, where the ball starts from 100 cm high, can be calculated from the formula:  
bounce height =  $100 \times (\text{bounce coefficient})^{(\text{bounce number})}$   
where the bounce coefficient is a base and the bounce number is the exponent.
- Lab 07. \_\_\_\_\_ A student walked a line of latitude at  $6^\circ 54.580'$  from longitude  $158^\circ 09.358'$  to longitude  $158^\circ 09.710'$ . The student measured a distance of 674 meters. determine the number of meters per minute of longitude based on this data.
- Lab 08. Sketch a cumulus congestus cloud. Use the back of the paper.
- Lab 09. \_\_\_\_\_ Students who are 106 meters from a building bang two boards in synch with the bang board echo. 30 claps of the wood boards takes 18.12 seconds. What is the speed of sound in meters per second based on this experiment?
- Lab 10. \_\_\_\_\_ An object is placed 12 centimeters in front of a mirror. How far behind the mirror will the image be?
- Lab 11. \_\_\_\_\_ What color is hsl(240,100%,50%)?
- Lab 12. \_\_\_\_\_ What is the resistance for a circuit with with a current of 0.29 amps and a voltage of 5.6 volts? Note that Voltage = current  $i \times$  resistance R
- Lab 13. \_\_\_\_\_ Is mineral lime (from coral) an acid or base?
- Lab 14. \_\_\_\_\_ Which should have had the larger slope in lab 14 where you graphed image depth  $i$  against object depth  $\delta$ , the graph for glass or the graph for water?
- Lab 15. What is site swap notation?

Lab one: 260.57 cm<sup>3</sup>:  $8.4 \times 6.6 \times 4.7$

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Lab two: 34.44 cm/s:  $5.5 \times 31 \div 0.9$

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Lab three: 969.08 cm/s<sup>2</sup>:

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Lab four: 189.44 g cm/s:  $5.5 \times 31 \div 0.9$

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Lab five: copper: Conductor of heat?

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Lab six: 42.19 cm:  $100 \times 0.75^3$

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Lab seven: 1914.77 m/min:  $674 \div ((710 - 358)/1000)$

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Lab eight: cumulus congestus: See back for sketch.

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Lab nine: 350.99 m/s: 106 18.12

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Lab ten: 12 cm

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Lab eleven: What color is hsl(240,100%,50%): [red green blue] [yellow cyan magenta] [120°]  
[Blue]

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Lab twelve: 19.31 Ohms ( $\Omega$ ):  $5.6 \div 0.29$

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Lab thirteen: Is mineral lime (from coral) an acid or base?

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Lab fourteen: Glass

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Lab fifteen: A notation for juggling that specifies pattern possibilities.

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