SC 130 Physical Science fall 2008

Lab 01. _____ Find the density of a 20.9 gram rectangular slab of soap with a length of 4.3 cm, a height of 2.8 cm, and a width of 1.6 cm.

Lab 02. _____ Find the speed of a 4.7 gm marble which rolls 41.6 cm in 0.6 seconds.

Lab 03. _____ Find the acceleration of gravity for a princess inflatable ball that falls 80 cm in 0.4 seconds. Use the formula $d = \frac{1}{2} g t^2$ to determine the acceleration of gravity g.

Lab 04. _____ Find the momentum of a 4.7 gm marble that rolls 41.6 cm in 0.6 seconds.

Lab 05. _____ Is lead a conductor of heat?

Lab 06. _____ Calculate the volume of a golf ball with a radius of 1.92 cm. Use the formula $\frac{4 \pi r^3}{3}$ to calculate the volume.

Lab 07. _____ A student walked a line of latitude at 6° 54.580' from longitude 158° 09.358' to longitude 158° 09.708'. The student measured a distance of 722 meters. determine the number of meters per minute of longitude based on this data.

Lab 08. Sketch a cumulus humilis cloud. Use the back of the paper.

Lab 09. _____ A student banged two boards in synch with the echo off of a building. The time for 30 claps was 21 seconds. Another student measured the echo flight distance that the echo traveled to the building and back. The echo flight distance was 250 meters. What is the speed of sound in meters per second based on this experiment?

Lab 10. _____ An object is placed 95 centimeters in front of a mirror. How far behind the mirror will the image be?

Lab 11. _____ What color is produced by the HTML style sheet command BODY (BACKGROUND:#000)?

Lab 12. _____ What is the resistance for a circuit with with a current of 0.3 amps and a voltage of 4.5 volts? Note that Voltage = current i × resistance R

Lab 13. _____ Is vinegar an acid or base?

Lab 14. Describe the nature of the mathematical relationship between the magnification and the focal length for a magnifying glass lens.

Lab 15. Is 342 a valid site swap pattern, and, if so, how many balls are used in the pattern?