Unit 1 Review

Topics:
Safety
Observation
Inference
Graphic Relationships
Density
Rate of Change
Rounding
Subtracting Time
Scientific Notation

Questions:

1. A student breaks a glass beaker in class. What should you do?
   a) Pick up the broken pieces b) get the teacher
   c) ignore it d) throw out the broken pieces

2. Which one of the following is an inference?
   a) Roses are red b) the candle wick is burning
   c) the sky is blue due to refraction d) Apple pie is sweet

3. As amount of sunlight increases, the temperature increases. What graphic relationship is represented?
   a) Direct b) Indirect c) Cyclic d) Constant

4. As time of day increases, the tide height changes in a repeating, predictable pattern. What graphic relationship is represented?
   a) Direct b) Indirect c) Cyclic d) Constant

5. A golden bar has a density of $2.0g/cm^3$. If the bar is cut into 4 pieces, what is the density of each of the pieces?
   a) $4.0g/cm^3$ b) $2.0g/cm^3$ c) $0.5g/cm^3$ d) $0.25g/cm^3$

For the following questions – Show ALL work (formula, plug in, answer with units). Round to the nearest tenth.

6. The wooden block has a mass of 10g and a volume of $14cm^3$. Calculate the density.

7. The television has a density of $125gcm^3$ with a volume of $25cm^3$, what is the mass of the television?

8. The textbook has a mass of 32g and a density of 76gcm^3, what is the volume of the textbook?

9. A hot air balloon rose from a height of 100m to 400m in 3 minutes. What was the balloons rate of change?

10. A missile flies 20miles in 10 minutes. Calculate the missile's rate of change.

11. A glacier advanced down a mountain from an elevation of 2010m to 1780m in 5 years. What was the glaciers rate of change?

12. A student's grade goes from a 95 to a 60 in 3 weeks because they didn't do their homework. Calculate the student's grade rate of change.

Subtract the following times:

13. 4:10:25 − 4:09:48	14. 10:27:58 − 8:46:59	15. 3:02:23 − 1:10:17
16. 12:46:56 − 2:39:40	17. 5:39:02 − 1:20:00	18. 9:44:03 − 7:52:10