**Test #2 Review – General Chemistry**

1) The property of flammability is both a chemical and intensive property:

a) Explain why flammability is a chemical property.

b) Explain why flammability is an intensive property.

2) I want to find something to eat in my office at work. Use the six steps of the scientific to imagine how I might find food:

3) What are independent and dependent variables?

4) Are there any processes that violate the law of conservation of mass? If so, explain why they violate the law of conservation of mass. If not, explain why they don’t exist.

5) List Dalton’s five laws. Indicate whether each is true:

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| --- | --- |
| Law | Is it true? |
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6) What is an isotope? How does it differ from other atoms?

7) How many protons are there in copper-64?

8) How many neutrons are there in selenium-80?

9) What is the atomic mass of the isotope of zinc with an atomic mass of 66 amu?

10) Element X has two isotopes: 235X has an abundance of 37% and 236X has an abundance of 63%. Given this information, what is the average atomic mass of element X?

11) What is spectroscopy, and what is it used for?

12) By what processes in the atom are line spectra generated?

13) Where in the atom can you find protons, neutrons, and electrons?