**Honors – Periodic Trends Quiz Review**

This review sheet is going to be kind of a “make your own review sheet” sort of thing. Instead of me asking you a lot of questions about periodic trends, I want you guys to come up with your own review questions using the following methods:

**Question** **type 1**:

Why is the [some periodic trend] or [some element] [larger or smaller] than that of [another element in the same group or period]?

For example, using this formula, you could come up with the questions asking:

“Why is the atomic radius of ­­sulfur smaller than that of tellurium?”

When you ask these questions, you’ll come up with one of the following:

* An answer (which will presumably be correct)
* A confused look because the word “smaller” should be replaced with “larger” so the question doesn’t have a good answer – you can tell if this is the case by looking up a table showing this trend around the periodic table.
* A completely blank mind, which indicates it’s time to study some more.

**Question type 2:**

Why does the trend for [name of trend] [increase or decrease] as you move [across a period, down a group]?

Example: Why does the trend for electronegativity increase as you move down a group?

Again, in problems like this you’ll either answer the question, get confused, or not have any idea what to do. In this case, getting confused is the right answer, because electronegativity *decreases* as you move down a group.

**Question type 3:**

Define: [literally anything we’ve discussed in class]. Answers can be found in charts online.

**Additional questions that might not be so obvious:**

1. Explain how the shielding effect works.
2. Explain why lithium wants to lose electrons and fluorine wants to gain electrons.
3. What are multiple ionization energies?
4. What is the octet rule and why does it work?
5. Why does the atomic radius of an element have to be determined by finding ½ the distance between the nuclei of two atoms of this element that have bonded?
6. And many others…