CW #4 – Nuclear Chemistry

**Directions**: Identify each as a **fusion** , **fission** , or **both** kinds of reactions:

1. Used in nuclear power plants:

2. Occurs on the sun:

3. More power per gram:

4. A larger nucleus divides to make­­ a smaller nucleus:

5. Two hydrogen atoms fuse to make a helium atom: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. A critical mass is necessary to explode: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7.  ­­­­­­­­­­:

8. An atomic bomb: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

9. are used in nuclear power plants to keep the reaction under control.

10. Why can’t we use fusion reaction in a nuclear power plant? \_\_\_\_\_\_\_\_\_\_\_\_\_

11. What is the downside to fission reactions used in power plants? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

12. How is electricity generated from nuclear power plants? \_\_\_\_\_\_\_\_