**Pyramids of Biomass**

**Name: \_\_\_\_\_\_\_\_ANSWER KEY\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Producer

100% of the energy

Primary

 10% of the energy

Secondary

1% of the energy

Tertiary

 0.1%

4

3

2

1

**Solve the following questions using your knowledge that only 10% of the energy is passed on through each trophic level as they move up. You may use a calculator if you need to. Write your answers on loose-leaf and please show your thinking process and mathematical steps. (They are either multiplying by ten to go down a level or dividing by ten to go up a level)**

1. If there is 500kg of mass in the first trophic level (producers), what will the amounts of mass be in the other three levels? **50kg, 5kg, 0.5kg**
2. If there is 250kg of mass in the second trophic level (primary consumers), what amounts of mass will be in the other three trophic levels? **2500kg, 25kg, 2.5kg**
3. If there is 0.7g of mass in the fourth trophic level, what will the amount of mass be in the three other trophic levels? **7g, 70g, 700g**
4. If there is 85g of mass in the third trophic level (secondary consumers), what will the amounts of mass be in the other three trophic levels? **8.5g, 850g, 8500g**
5. If there is 7650g of mass in the second trophic level, what will the amounts of mass be in the other three levels? **76500g, 765g, 76.5g**
6. If there is 9300g of mass in the first trophic level, what will the amounts of mass be in the other three levels? **930g, 93g, 9.3g**