

Rachel Carson Environmental Science
HW #9: Salmon & Ecology Unit Review
Due Friday _____

Worth 5 extra credit points if turned in at test time!

You should review class notes, assignments and reading material and be ready to answer questions in short answer format for the test.

As an assignment this week, answer the following 10 questions. If you do this assignment before your class takes the test, it is worth 5 extra credit points to you!

1. (a)What is meant by the term **keystone species**? (b) Describe TWO reasons why salmon are considered keystone species? (c) List and describe three other reasons why salmon are important
2. What are the names of the FIVE main **fins** of a salmon and what purpose does each serve?
3. Describe the TEN main stages of a typical **salmon life cycle**.
4. What are THREE characteristics of ideal **spawning habitat**?
5. What is meant by the term **anadromous** and what are TWO advantages to being **anadromous**?
6. (a)Draw a typical food web in a freshwater, salmon-bearing stream. Include the **sun**, a **producer**, a **decomposer**, and three levels of **consumers** (herbivore, omnivore and carnivore). (b) What are the **trophic levels** of the producer and each consumer?
7. Name and describe THREE of the human impacts and/or natural influences depleting salmon populations this century (in-class activity; see powerpoints on web page). Include a brief description of the problem and proposed solutions.
8. (a) In what ways do/did salmon play a key role in the lives of Pacific Northwest Native Americans? (b) How is **Celilo Falls** significant?
9. (a) How do plants make the sun's energy available to **consumers**? (b) What is the chemical equation for **photosynthesis**?
10. (a) How does energy move from one **trophic level** to another? (b) Why are there more **producers** than **consumers** in any given ecosystem?
(c) Describe the **10% rule**.