**Chapter 2: Cycles in Ecosystems**

**Section 2.2 Cycles of Matter**

**Pollution in the Environment**

* **Pollution** occurs when a substance is added to the environment at such a fast rate that it cannot be broken down, stored or recycled in the air, land, or water in a non-damaging form.
* Pollution can also cycle through the ecosystems.
* **Pollutants** are substances that cause pollution.
* Pollutants cannot be broken down, stored, or recycled in the environment in a way that is not damaging.
* **Bioaccumulation** is the process in which a substance builds up in a living organism from the surrounding air or water, or through the consumption of organisms that already have the substance that is being accumulated.
* Killer whales are the top consumer in a food chain that usually includes phytoplankton, zooplankton, and salmon.
* The top consumers in food chains are affected most by bioaccumulation.

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Using the handout with information from page 49 of the science textbook please complete the following sentences.

The killer whale lives in the ocean off the coast of

southern \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

It is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ consumer in the food chain. Pollutants in the water can enter the food chain at any \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ but they often enter through organism that are \_\_\_\_\_\_\_\_\_\_\_\_\_ on the food chain.

The pollutant is passed along and concentrated in the tissues of the next organism in the food chain. Therefore the amount of pollutant \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ at each level in the food chain. As a result the \_\_\_\_\_\_\_\_\_\_ consumer in the food chain ends up with a very \_\_\_\_\_\_\_\_\_ amount of pollutant in its body.

