# **Ecosystems**

# 1. Interdependence

#### **CONCEPT 2**

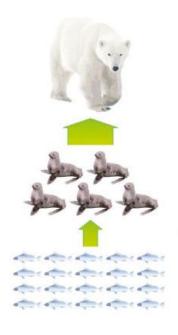
### **LESSON GUIDE**

### **BIOACCUMULATION**

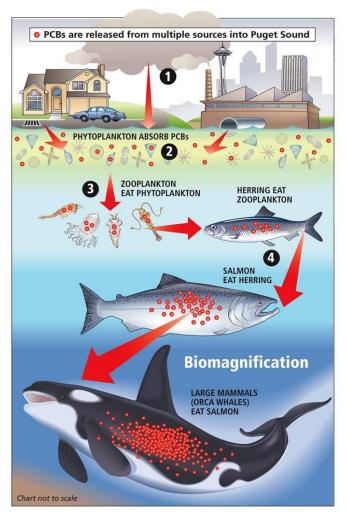
#### **NOTES**

Increase in human population means that more food needs to be produced. One way to increase crop production is to use Fertilizers, Pesticides and Insecticides. These chemicals can enter the food chain in several ways:

- Fertilizers dissolve in water and are washed into rivers and reservoirs.
- Insecticides contaminate small creatures that are eaten or washed into waterways.
- Water runs off urban streets into waterways
- Soft mud acts like a sponge that slowly soaks up the toxins. Plants absorb these through their roots.
- Some Chemicals fall from the air, such as mercury released by coal-burning power plants.



This section of a food chain shows how an insecticide, absorbed into the bodies of fish directly from the water, can eventually become concentrated in the body of the polar bear.



Consumers may eat plants and other consumers so that toxins pass up the food chain.