

Learning Target

Identify organisms based on how they obtain energy.

Objectives

- 1. 10 Percent Rule and 20 Smoky Mountain food web**
- 2. Collect assign (3)**
- 3. Quiz tomorrow**

Notebook Entry

Each worksheet is worth 10-20 pts.

Each quiz is 50 to 100 pts.

20 smoky mountain food web is 100

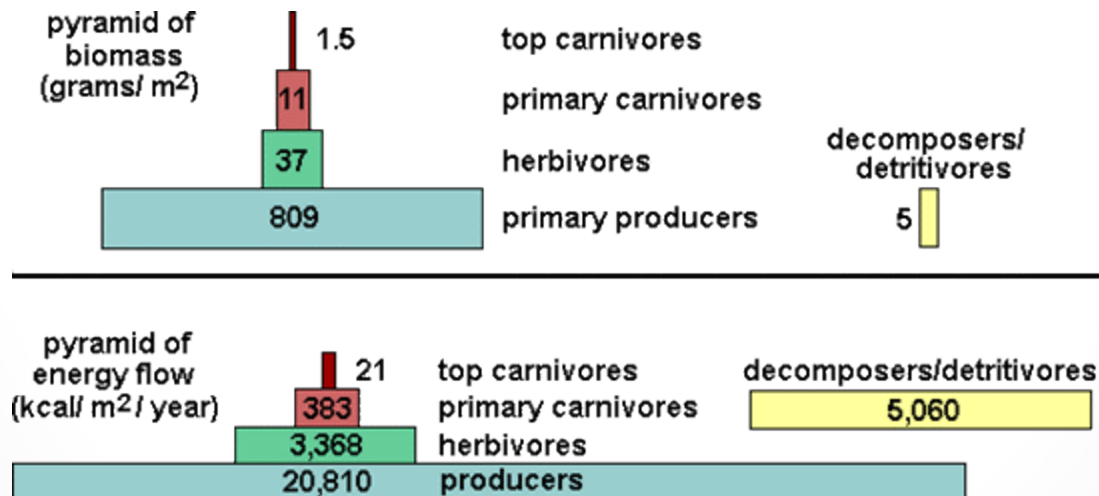
Recycling : 9/23 Alum and Plastic ; 10/7 Paper ; 10/21 Alum and Plastic

Assignments

Due Wednesday : Food Web Worksheet, Food Chain Quiz, Food Chain Quiz 2, Matching.

Rule of 10

Rule of 10's: Often the trophic structure of an ecosystem is represented as an ecological **pyramid** in which producers form a base for tiers of consumers above them. Some pyramids are based on **biomass** (the weight of all the members at each trophic level), others on **energy flow**. In general, there is roughly a 10-fold loss of energy for each level up in trophic level.

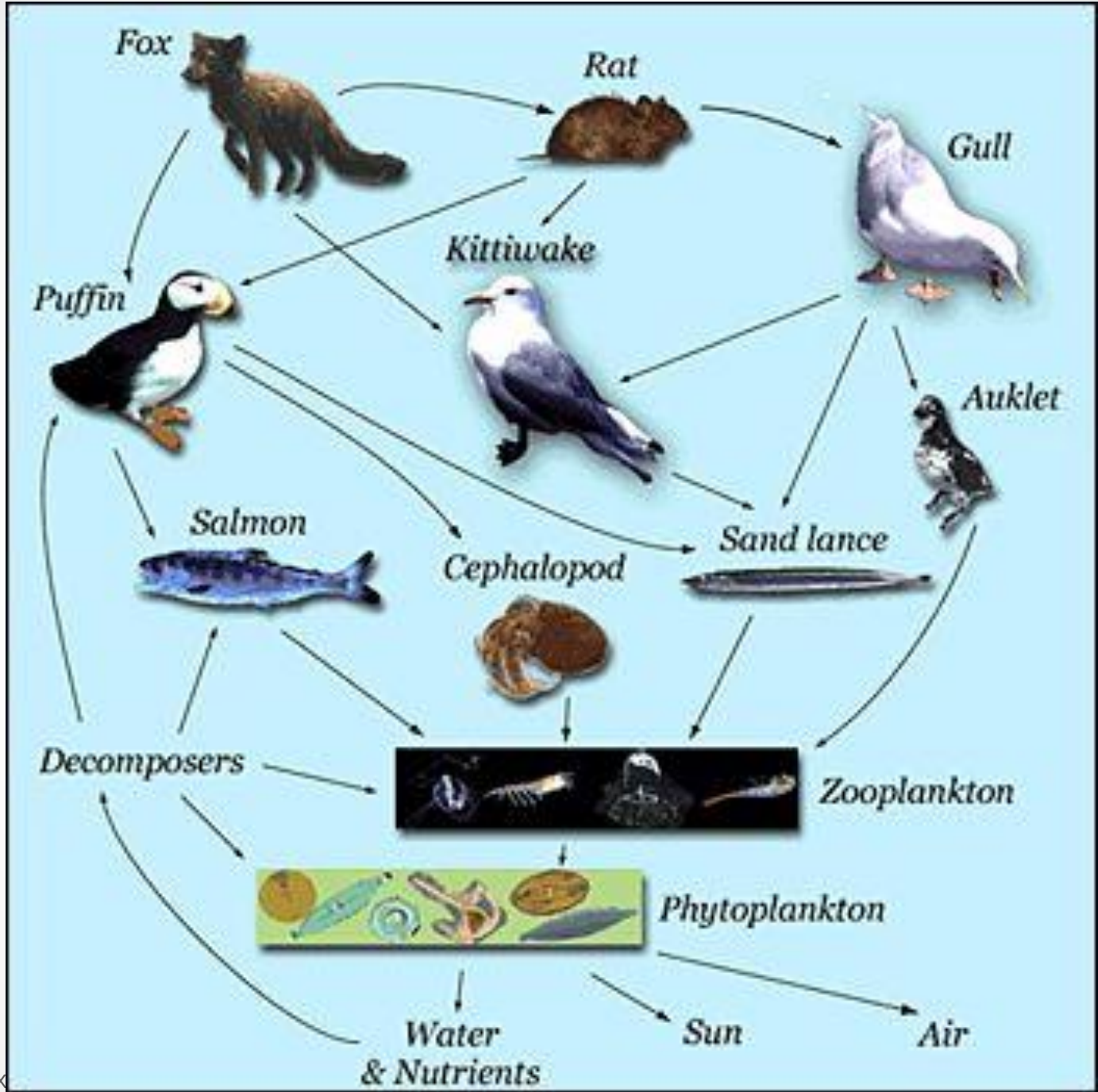


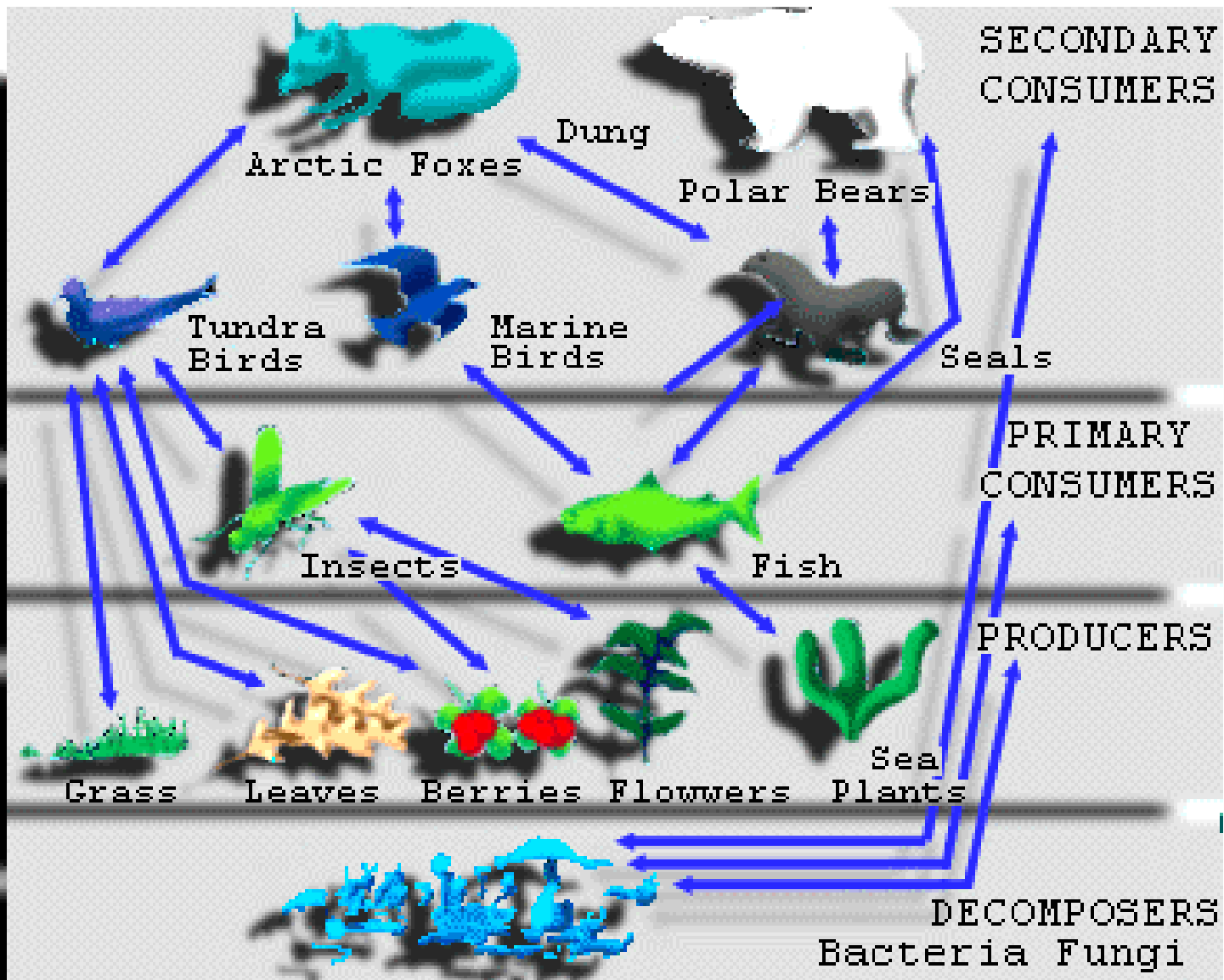
What is the ten percent rule in trophic levels

everytime something's eaten only ten percent of the energy make it to the consumer. for example. a plant uses photosynthesis and would be able to use 10% of the energy, then a cow eats the plant and gets 10% of the plants energy, which is 1% of the original suns energy. next a person eats the cow and only gets .1% of the original energy from the sun.

Rule of 10

The "**Ten Percent Rule**" is a general rule of thumb that says of all non-native species that are released into new ecosystems, about 10% survive at all, and of these survivors, about 10% (or 1% of the original number of species released) become invasive. Nevertheless, there are still hundreds of invasive species established in the US.





20 Smoky Mountain Food Web – due not later than Monday at the start of class.

A chart (Poster board) showing a food web consisting of 20 or more organisms using appropriate common names.

<http://www.nps.gov/grsm/naturescience/amphibian-checklist.htm>

Instead of doing the 20 Smoky Mountain Food Web you could do a powerpoint or animated food chain. Must show the five trophic levels. The sun isn't a level.

<http://www.youtube.com/watch?v=Ek5SDKleoRQ>

<http://www.youtube.com/watch?v=z33LV0XF1tc>

