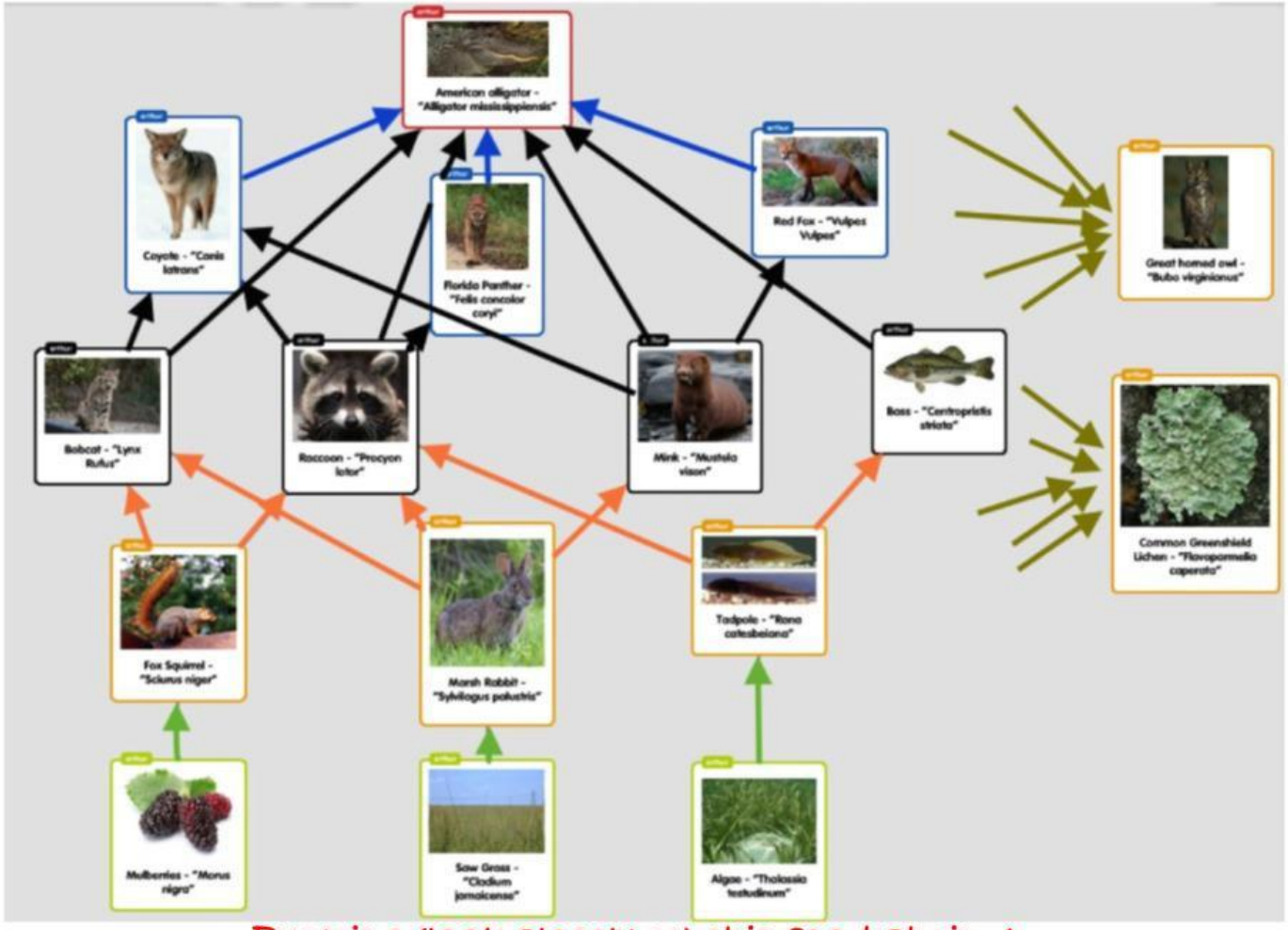
Food Chains in Ecosystems

food chain = a list, in order, of where each part of an ecosystem gets its food; who eats whom

ecosystem = a place where living and non-living things work together to keep the place healthy



Examine (look closely at) this food chain ↑.

Producers make their own food. Which parts of this ecosystem are producers? _____

The primary (level 1) consumers eat the producers. Which parts of this ecosystem are primary (level 1) consumers? _____

Secondary (level 2) consumers eat the primary consumers. Which parts of this ecosystem are secondary (level 2) consumers? _____

Tertiary (level 3) consumers eat the secondary consumers. Which parts of the ecosystem are tertiary consumers? _____

Nobody eats the apex consumer in an ecosystem. Which part of this ecosystem is the apex consumer? _____

Decomposers break down (decompose) living things that die. Which parts of the ecosystem are decomposers? _____

Decomposers turn dead bodies into soil. In this picture, which number shows decomposers? ____ Which number shows soil? ____ Which number shows producers? ____

A **consumer** is anything that **eats**. There are 3 kinds of consumers. Consumers that eat only **plants** are called **herbivores**. In the ecosystem food chain, which parts are herbivores? _____ Consumers that eat only **animals** are called **carnivores**. In the ecosystem food chain, which parts are carnivores? _____ Consumers that eat plants AND animals are called **omnivores**. How many omnivores are in this food chain? ____ Are humans herbivores, carnivores, or omnivores? _____

Another way to describe consumers is by identifying (naming) **predators** and **prey**. **Predators** are animals that eat other animals. In the ecosystem food chain, which parts are predators? _____ **Prey** are animals that are eaten **by** other animals. In the ecosystem food chain, which parts are prey? _____

Is it possible for an animal to be both predator AND prey? ____ Explain: _____ For example, _____ _____ However, herbivores are always _____.

Are humans predators or prey? _____ Explain: _____ _____

Carrying Capacity = how many living things an ecosystem can feed

Say a bass must eat 24 tadpoles every day to survive (live). The ecosystem provides about 96 tadpoles every day. What is the **Carrying Capacity** (number) of bass for that ecosystem? The ecosystem can feed about ____ bass. If the ecosystem makes about 192 tadpoles every day, what is its **Carrying Capacity** for bass? ____

Say a squirrel must eat 100 mulberries every day to survive. The ecosystem provides about 1000 mulberries every day. What is the carrying capacity (number) of squirrels for that ecosystem? ____

There is no rain for two weeks. The ecosystem only provides about 200 mulberries each day. What is the carrying capacity for squirrels? ____ What do you think happens to the rest of the squirrels? _____