Ecology

To answer the question, we must first define..

POPULATION =

COMMUNITY =

ECOLOGY -.

Quick Check

1. All the different populations in an area make up the

 a) biosphere b) ecosystem c) community

2. Ecology is the study of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of organisms with the environment.

3. The part of the earth that can support life is the \_\_\_\_\_\_\_\_\_.

4. All the living and non-living factors in an area make up the:

 a) population b) ecosystem c) community

5. A desert, rain forest, tundra and grassland are all different kinds of:

 a) biospheres b. biomes c) biotics

**Energy Flow**

Autotrophs (producers) -

Heterotrophs (consumers) –

Types of Consumers

1.) Ex.

2.) EX.

3.) EX.

4.) EX.

 is the main source of energy\*

 - uses light energy to make "food"

FOOD CHAINS AND FOOD WEBS

 -

\*Note the direction of the arrows, they indicate where the energy is going when one organism consumes another.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_

the rate at which organic matter is created by producers

More plants = more productivity.

Which of the following ecosystems has the greatest primary productivity?

 a) rain forest b) desert c) tundra

Primary Consumers ( )

Secondary Consumers ( )

Tertiary Consumers ( )

Practice Another Food Web - Draw a lake ecosystem

**Ecological Pyramids**

\_\_\_\_\_\_\_\_\_\_\_\_\_- shows how much energy is produced at each level.

Draw an energy pyramid for a prairie.

Pyramid of Numbers-

*Consider the kelp forest ecosystem to answer these questions.*

 *What determines how many species live in a given place?*

 *And, what determines how large each population can grow?*