**EOG REVIEW ON POPULATIONS & BIOTIC/ABIOTIC COMPONENTS**:

USE THE FOLLOWING WORDS FOR BLANKS BELOW:**TROPHIC CLUMPED FOOD CHAIN BIOTIC**

**POPULATION MOST (2) 10% UNIFORM FOOD WEB NICHE ABIOTIC**

**LEAST PRIMARY CONSUMERS RANDOM PRODUCERS COMMUNITY SUN**

**AUTOTROPHS ECOSYSTEM HERBIVORES TERTIARY CONSUMERS CHEMOSYNTHESIS**

A non-living factor in an ecosystem is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and a living (or once living) factor \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

A single group of species that lives together is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_. Multiple groups of different species becomes a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, and multiples of those combine together to form a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The role of an organism its environment is known as a \_\_\_\_\_\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_ populations are clustered around resources, \_\_\_\_\_\_\_\_\_\_\_\_\_\_ populations are evenly spread out to maximize resources, and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ populations are scattered and not concerned about resources.

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is a linear path of energy transfer; multiples of these can form a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Ultimately, all food gets its energy from the \_\_\_\_\_\_.

A ecological pyramid consists of several \_\_\_\_\_\_\_\_\_\_ levels. The largest group and \_\_\_\_\_\_\_ energy is found on the bottom layer which are the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. Most here perform photosynthesis, but in the benthic zone, some make their own sugar from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The organisms that eat this bottom layer get \_\_\_\_\_ of their energy and are called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. The organisms at the top of the pyramid have the \_\_\_\_\_\_\_ energy available, yet need the \_\_\_\_\_\_\_\_\_ energy and can be called \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

**ECOSYSTEMS**

* **PRODUCERS include P \_ \_ NTS, PH\_ \_ O\_ \_ \_ NKTON, A\_GA\_ .**
  + They make their own \_ \_ \_ \_ \_ through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ so we call them

\_ \_ \_ \_ trophs!

* + They are the base of most food webs or \_ \_ \_ \_ \_ \_, because they provide the MOST E \_ \_ \_ \_ \_.
* **CONSUMERS include H\_ RB\_ \_ \_ \_ \_ \_ & C \_ R \_ \_ V\_ \_ \_ S.** 
  + Primary consumers eat \_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + Consumers are known as H\_T \_ R\_ TR\_ \_HS. They include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
  + **Consumers at the top TR \_ \_ \_ IC levels NEED \_ \_ \_ \_ energy to hunt, compete, build homes.**
  + **But, LESS \_ \_ \_ \_ \_ Y is available at the higher TR\_ \_ \_ IC levels because it is lost as H \_ \_ T.**
* **DECOMPOSERS include B\_ \_ \_ \_ \_ \_ A & \_ U \_ G \_.** 
  + D\_ COM \_ \_ \_ ERS are also known as H\_T \_ R\_ TR\_ \_HS, but they eat \_ \_ \_ \_ stuff….DET \_ \_ \_ \_ \_ \_ \_.
  + **Because plants love N \_ T \_ \_ \_ \_ S, decomposers help turn nitrogen in the air into these N \_ \_ \_ \_ \_ \_ compounds so plants canget the P R \_ T\_ \_ N we all need to build cell tissues.**
* **4 types of SYMBIOTIC RELATIONSHIPS between biotic factors:**
  + 1. **CO\_ \_ ENSALISM aka coexistence or cooperation**
       - one species doesn’t really care the other is benefitting from them
    2. **C\_ MP\_ \_ IT\_ \_ \_ --**fighting over space, light (if a pl\_ nt), mate, nutrients…
       - eat or be eaten-P\_ \_ DAT\_ \_ /P\_ \_ \_ **(not a symbiotic relationship)**
    3. **P\_ R\_SIT\_ \_ \_--** lives on or in a \_ \_ \_ T, trying best not to kill or harm them too much.
    4. **M \_ \_ UA \_ \_ \_ M –** both parties help each other survive.

**(Draw faces next to 3/4 types of relationship indicating how each party feels about this relationship.)**

* **DENSITY-DEPENDENT factors are mostly \_ IOT \_ \_. (name 2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
* **DENSITY-INDEPENDENT factors are mostly\_ \_ \_ \_ TIC. (name 2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
* **Reducing population SPACE \_ \_ CREASES competition but**

**\_ \_ CREASES population size.**

**DRAW THE CARBON CYCLE: DRAW THE NIROGEN CYCLE:**