

Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

## **Ecology Final “Test Yourself Study Guide”.....**

### **7<sup>th</sup> gr Mr. Pysher 2019**

What is ECOLOGY? (think “organisms” and “environment”...)?

What are the characteristics of an ORGANISM? (think “MS NERG”)

Is an all cotton tee-shirt BIOTIC or ABIOTIC? What about your cell phone?

An organism’s NICHE describes what types of things.....?

Can something’s NICHE affect other groups of organisms in the same community? How?

What is the difference between a CONSUMER and a PRODUCER...?

What is the difference between a PREDATOR and PREY?

What do DECOMPOSERS do in a food web? Give an example

Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

How do SCAVENGERS find food?

How is a FOOD WEB different from a FOOD CHAIN? Draw a picture of each:

Label these factors in an environment as BIOTIC or ABIOTIC



Name: \_\_\_\_\_

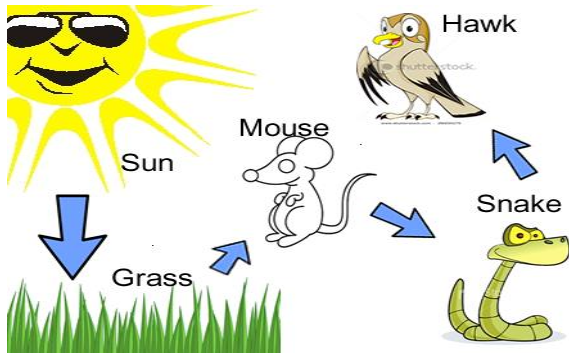
Period #: \_\_\_\_\_ #: \_\_\_\_\_

Label these organisms as PRODUCER – PRIMARY CONSUMER – SECONDARY CONSUMER and as #1, 2, 3, in a food chain



What might happen if the rabbits all die out...?

This (below) is best described as a WHAT...?



Defin/describe:

PRODUCER

HERBIVORE

Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

CARNIVORE

OMNIVORE

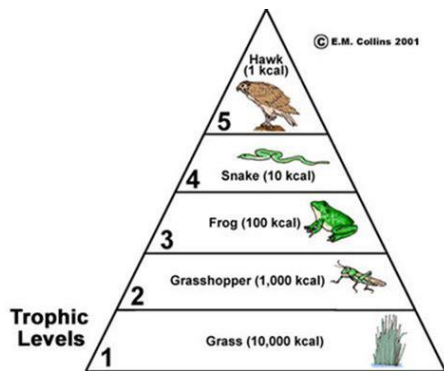
What level of an ecology pyramid uses 100% of the available energy from the sun?

*(Producers, Primary consumer, secondary consumer, tertiary consumer)*

How much energy (as a percent) is left to transfer to a third-level (tertiary) consumer in an energy pyramid? *(work it out below...)*

As a general rule, organisms 'pass along' what percent of their energy intake to the next highest trophic level in the energy pyramid?

Know what each level in an energy pyramid represents....



Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

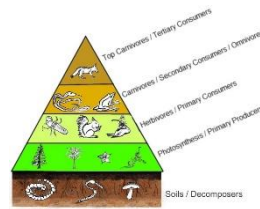
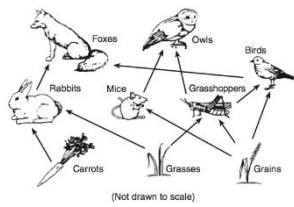
Using the “10% rule”, if an organism at the Level B (Primary consumer) acquires 2400 kCal by eating the producers, how much energy would a Level D (fourth order consumer – two more trophic levels UP) get?

Both of these pictures (below) are ways of showing a ‘what’ .....



So, what is this?

..... and this?



What is a LIMITING FACTOR in an ecosystem? In a desert ecosystem, give an example of a LIMITING FACTOR.....

Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

What is "biological accumulation"? (aka.. 'bioaccumulation')

In 'bioaccumulation' which trophic level of organisms in a food chain is MOST affected?

If 50mcg of a poison are accidentally to an ecosystem at the PRODUCER level; how much will a TERTIARY CONSUMER accidentally ingest...? (Hint: 10% rule for ACCUMULATION)

Define "LIMITING FACTOR"; define "CARRYING CAPACITY"

What could people do to try to make sure that deer do not exceed their carrying capacity in an ecosystem?  
(Hint: see your definition for CARRYING CAPACITY)

Draw a mock graph showing LINEAR population growth:

Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

Draw a mock graph showing EXPONENTIAL population growth:

Draw a mock graph that shows a pretend CARRYING CAPACITY:

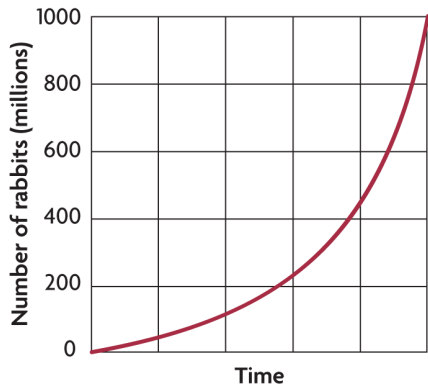
Draw a mock graph that shows NEGATIVE population growth:

What is the difference between a QUALITATIVE and QUANTITATIVE observation?

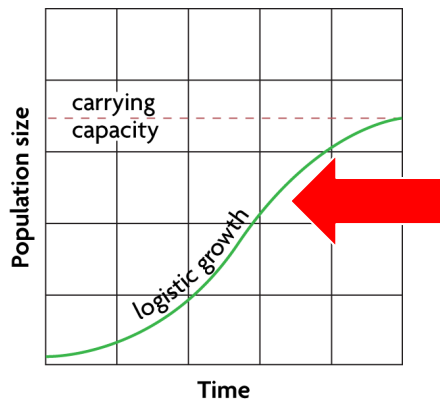
Name: \_\_\_\_\_

Period #: \_\_\_\_\_ #: \_\_\_\_\_

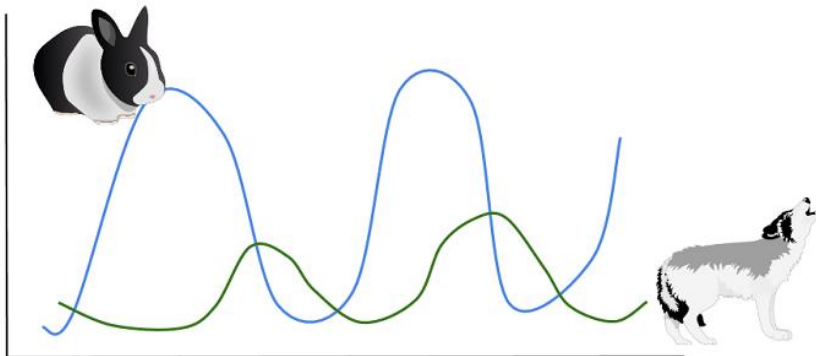
What type of growth does this graph illustrate?



What does the line (marked with arrow) refer to in this graph?



What do these TWO oscillating lines (up-and-down) probably represent in an ecosystem?



What usually happens to the PREDATOR population as the PREY decreases?