

## Ecology Study Guide



Nam	Name: Date:		Block:
Ecol	ogical Hierarchy:		Individual
1.	What is the <b>biosphere</b> ?		Population
2.	What is a <b>biome</b> ?		Community
3.	What are <b>two</b> things that define a biom	e?	
4.	What is an <b>ecosystem</b> ?		<u>Ecosystem</u>
	a. What are <b>biotic</b> factors?		Biome(s)
	b. What are <b>abiotic</b> factors?		
5.	What is a <b>community</b> ?		Biosphere

7. Know basic characteristics of all biomes. Tundra vs. Desert & Tundra vs. Rain Forest

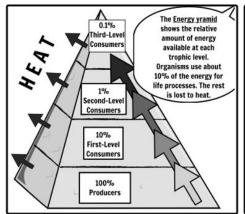
## Introduction to Ecology:

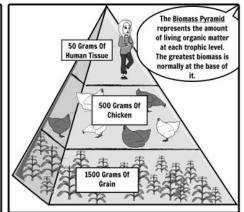
1. What are autotrophs?\_\_\_\_\_\_

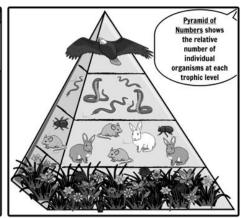
6. What is a **population**?

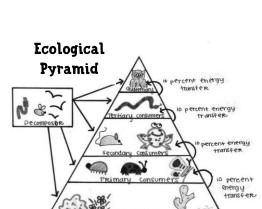
- a. Another name for autotrophs are? \_\_\_\_\_
- b. Name a couple of examples. \_\_\_\_\_\_
- 2. What are heterotrophs?
  - a. Another name for heterotrophs are? \_\_\_\_\_\_
  - b. Name a couple of examples. \_\_\_\_\_
- 3. What are **trophic levels?**
- 4. What is an **ecological pyramid**?











<ol><li>What is a <b>food chain</b>?</li></ol>				
	ondary tertiary nsumer consumer		s Sul	Grasshoper
sun → grass → grasshopper →	shrew — owl		*\	Rabbit
, ,			Grass	Mouse
7. What is a <b>food web?</b>				Mouse
8. What is the <b>10% rule?</b>				
9. What happens to the rest of	of the energy?			
Symbiotic Relationships:				
1. What is <b>symbiosis</b> ?				
2. What is <b>competition</b> ?				
3. What is <b>predation?</b>				
a. Give an example:				
Amoeba Sisters Symbiosis #AmoebaGITs 4. Wha	it is mutualism?			
	te in the	Organism 1	Organism 2	
	now the ns benefit			
Mutualism	ns benen It is commensalism	?		
	te in the	Organism 1	Organism 2	
	now the			
,	ns benefit			
	it is parasitism? ate in the	Organism 1	Organism 2	
	s how the	Organism i	or gar ion 2	
organis	ems benefit			
Ecological Succession:			Primary Succession	
1. What is <b>succession?</b>	_		Pioneer Species	Intermediate Species Climax Community
2. What is <b>Primary successio</b>	n?			
a. What does it begin	with?		Bare rock Lichens Small anni plants and lic	ral Grasses and hens perennials such as pines such as oak and hickorn hundreds of years
b. What are <b>pioneer s</b>				
c. Give some example	s of pioneer species	:		

3.	What	is <b>Secondary Succession?</b>					
	a.	What is already established in secondary succession?	Secondary Succession  Pioneer Species	Intermediate Species Climax Community			
	b.	When is secondary succession happen?	Fire Annual plants perennia 0 years 1-2 years 3-4 year	ils young oak and hickory hickory forest			
•		Growth, Dispersion & Survivorshi					
1.		is <b>population density?</b>					
2.		are three factors define population growth?					
3.	How c	do you know when the population is growing	g?				
4.	What	are <b>K species?</b>	Give an example:				
5.	What	are <b>R species?</b>	Give an example:				
6.	What	is <b>exponential growth?</b>					
	a.	Is this a stable, sustainable growth?		Carrying Capacity			
	b.	What shape does this growth make?					
7.	What	is <b>logistical growth?</b>	ber of Individuals	Growth rate decreasing			
	a.	Is this a stable, sustainable growth?	Grow incres				
	b.	What shape does this growth make?		Time			
	C.	This growth will continue until what is met	.?				
	d.	What is carrying capacity?					
8.	In the graphs to the below, draw what <b>exponential growth</b> and <b>logistic growth</b> look like.						
		Exponential Growth	Logistical Gro	owth			

9.	What are <b>Density-Dependent factors?</b>				6	1		
	а.	What do these factors include?			27 (val.) estino.29		No.	
10.	10. What are <b>Density-Independent factors?</b>							
	<u>а</u> .	This characteristically causes what?						
	b.	What factors do these include?						
11.	What	is <b>population dispersion?</b>						
12.	What	is <b>clumped dispersion?</b>						
	a.	What is it good for?	-	•	• •	•		
			_ CI	 umped	Unifor	 m	Random	
13.	What	is <b>uniform dispersion?</b>						
	a.	What is this good for?						
14.	What	is <b>random dispersion?</b>						
	a.	How does this typically happen?						
15.	What	are survivorship curves?						
16.	Write	a few facts about <b>Type I Survivorship Curves:</b>						
	a.		_					
	b.		1,000		Type I			
	C.		-	0				
17.	Write	a few facts about Type II Survivorship Curves:	100- (aje)	T)	ype II			
	a.		s (log suc			11/1		
	b.		number of survivors (log scale)	Type III				
	C.		nequinu		E THE	3	The state of the s	
18.	Write	a few facts about <b>Type III Survivorship Curves:</b>	o		age in relative u	ınits		
	a.		_					
	b.		_					
	C.		_					