

AP Biology 046 – Communities

Video Review Sheet

www.bozemanscience.com/046-communities

1. What does BBECPO stand for?
2. What is community structure built on? (2x)
3. What is the key term for community interactions?
4. Growth: all populations start with what type of growth?
5. What is a community made of?
6. What is symbiosis and what are the three types?
7. Explain the Leaf-Cutter ant symbiotic relationship with the fungus
8. Concerning population growth: what are the two limiting factors and examples for each?
9. What is the carrying capacity?
10. Draw a simple age-structure diagram:
11. What happens when most of the population is very young?
12. How is the United State's age-structure diagram different from Angola's?

Review Sheet for AP Biology 046 – Communities

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AP Biology 20- Biotic and Abiotic Factors

Video Review Sheet

<http://www.bozemanscience.com/020-biotic-and-abiotic-factors>

1. Define biotic factors and give an example not given in the video.

2. Define abiotic factors and give an example not given in the video.

➤ Example: factors affecting cells:

3. What is a biofilm?

4. Do biofilms form due to changes in biotic or abiotic factors?

➤ Example: factors affecting organisms:

5. What is special about the lynx and snowshoe hare relationship?

6. Explain why, when the hare population increases, the lynx population increases shortly thereafter.

7. Are these fluctuations in population due to changes in biotic or abiotic factors?

➤ Example: factors affecting populations and ecosystems:

8. When the wolves were eradicated, what happened to the following populations and why?

Elk

Aspen and willow

Beavers

Coyotes

Red fox

9. Which species is the keystone species in Yellowstone National Park?

It's the "Summer of Biology" 2018

AP Biology Summer Assignment! This summer you will delve into the world of biology like you never thought you would in these hot months! We will explore topics to get you ready for the coming year of hard work.



This summer assignment has been designed for several purposes:

- to get you to think during those summer months to keep your mind sharp, because we will expect a lot out of it come August!
- to expand your vocabulary by familiarizing you with terms that we will be using in class.
- to introduce you to major concepts from AP Biology through non-classroom methods of learning.

ASSIGNMENTS:

1. Read Chapters **52** and **54** of your Campbell Biology textbook and take Cornell Notes over them following the enclosed guidelines. Notes are due the first day of school- **August 9th!**

2. Watch several short videos and fill out the video worksheets (due August 9th) - there will be a short quiz on the videos on the first day of school!

- <http://www.bozemanscience.com/020-biotic-and-abiotic-factors>
- <http://www.bozemanscience.com/046-communities>
- <http://www.bozemanscience.com/047-ecosystems>
- <http://www.bozemanscience.com/051-ecosystem-change>
- <http://www.bozemanscience.com/050-populations>

3. **Ecology Scavenger Hunt - you must share your work on Google Drive with me - cnestor@flintriveracademy.com by August 8th- the day before school starts.**

Find and take a "**selfie**" with each item. You need to be in the shot! No taking images off the internet! Write a brief **description** to go with the selfie. Create a **PPT** with the images and descriptions. Each object can only count for one item on the list, but you have choices. Items 1-50 are worth 2 points, an ecosystem is worth 8 points. You need to get a total of 100 points and you have two options to earn them.

Option A:

a) Take a selfie - you in an ecosystem. Description should include: type of ecosystem; type of biome ecosystem is part of; location of ecosystem; 3 abiotic factors and 3 biotic factors.

AND

b) Choose any 46 items from the list, REMEMBER each object (selfie) can count only for one item on the list! You **cannot** use items from your ecosystem as any of the 46 items!

Option B: Take a selfie and write an appropriate description for **EACH** item on the list below. REMEMBER each object (selfie) can count only for one item on the list!

Example of description to go with selfie:

The bee is serving as a **(41) pollinator**. Bees move from flower to flower feeding on the nectar of plants. As the bee feeds on the nectar it rubs against the pollen produced by the flower's stamen. Some of the pollen adheres to the bee's body, and when the bee moves to a new flower, some of the pollen will stick to the stigma of the female's pistil on the new flower. This is known as cross pollination, where the pollen of one flower is used to fertilize the egg of a different flower.

BUT No photoshopping!
Take a true selfie with
your subject.



Scavenger Hunt List:

1. commensalism
2. phototropism
3. parasitism
4. predator-prey relationship
5. a primary consumer
6. mimicry
7. secondary succession
8. a secondary consumer
9. a decomposer
10. a simple food chain
11. an abiotic factor
12. evidence of decomposition
13. evidence of human impact on an ecosystem
14. an example of cryptic coloration
15. a community
16. a gymnosperm
17. an angiosperm
18. evidence for artificial selection
19. a plant adaptation
20. an animal adaptation
21. genetic variation within a population
22. genetically modified organism
23. an autotroph
24. cuticle layer of a plant
25. a wind dispersed seed
26. a scavenger
27. a lichen
28. a producer
29. an amphibian
30. an animal track
31. a sporophyte
32. a reptile
33. tree rings
34. a dicot leaf
35. mutualism
36. the photic zone
37. an herbivore
38. an arthropod
39. a flower
40. a fungus
41. a pollinator
42. moss
43. a monocot leaf
44. a heterotroph
45. a population
46. exoskeleton
47. a biome
48. meristem
49. gametophyte
50. an ecotone

Every bit of the summer assignment is meant to be individual work. No sharing, no copying, no cutting and pasting from the web. Plagiarism of any kind will not be tolerated and will result in a zero for the work and a write-up.