

MPH AP Biology  
2018-2019  
Summer Assignments

There are three activities for you to do this summer. Two are required, and the third is optional for extra credit. Please email [ayeager@mphschool.org](mailto:ayeager@mphschool.org) with questions.

1. Read “The Immortal Life of Henrietta Lacks” by Rebecca Skloot. After you have finished, answer the questions and write a summary that can be found in this document [HERE](#). Books are available at school (ask in the Upper School office). If you annotate in them, you will be charged for the book (which is fine), but if you don’t want to keep the book, please don’t annotate. If you would like to purchase the book on your own, that is totally fine, too.
2. Watch the 5 Bozeman Science Videos on Ecology below and answer the questions on each worksheet. Please copy each worksheet into a new Google Doc for yourself with your name on it. There will be a short, open notes quiz the first week of school.
  - a. [Video 1](#)-Biotic and Abiotic Factors; Worksheet 1
  - b. [Video 2](#)- Communities; Worksheet 2
  - c. [Video 3](#)- Ecosystems; Worksheet 3
  - d. [Video 4](#)- Ecosystem Change; Worksheet 4
  - e. [Video 5](#)- Populations; [Worksheet 5](#)
3. OPTIONAL for Extra Credit: Ecology Scavenger Hunt - you must share your work on Google Drive with me by the first day of school. Create a Google Doc or Google Slide file and share your document with me at [ayeager@mphschool.org](mailto:ayeager@mphschool.org)

Find and take a “selfie” with each item below. Write a brief description to go with the selfie. Create a doc or a ppt with the images and descriptions. **You need to be in the shot!** No taking images off the internet! Each object can only count for one item on the list. Each item is worth 2 points and you must have a minimum of 40 points to get ANY extra credit. After 40 points, the more items you have, the more credit you will get! Feel free to work on this with some friends! Bonus points if you get photos with other MPH teachers in them! ;)



**The Task:** Take a selfie and write appropriate description for **EACH** item on the list below. REMEMBER each object (selfie) can count only for one item on the list! (for example, you can not use the same plant with “dicot leaves” for “producer”).

Example of description to go with selfie:

The bee in the photo below is serving as a **(41) pollinator**. The bee will move from flower to flower feeding on the nectar the plant has to offer. As the bee feeds on the nectar it will rub up against the pollen produced by the flower's stamen. Some of the pollen will adhere to the bee's body. When the bee moves to a new flower, some of the pollen attached to its body will stick to the sticky 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.

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. C3 plant
37. C4 plant
38. CAM plant
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. a reptile