

[illegible]

BIO

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,
- ☒ To get you out of your house and neighborhood to enjoy nature.

1. Ecology Scavenger Hunt – you must share your work on your IUSD Google Drive account with me by midnight August 18th (day before school begins) using our AP Biology Summer Google Classroom Code [**dud6ge7**]. Questions? Email Mr Knight or Mr Shrake

Find and take a “selfie” with each item. Write a **4-5** sentence description to go with the selfie that includes a definition of the term represented by your image, but is not solely a definition. Explain ***how your image represents the term*** or concept. Image must actually show term, not just the possibility of the term. Create a **Google doc or Google slide, doc.**, or a **ppt.** with the images and descriptions. **You need to be in the shot—if you cannot be in the photo due to the angle, put your UNI ID in the frame** No taking images off the internet! Each photo can only count for one item on the list but you have choices (see example).

Ecosystem. Description should include: type of ecosystem; type of biome the ecosystem is part of; location of ecosystem; 3 abiotic factors and 3 biotic factors of this ecosystem. Any interesting or relevant facts about the picture or location. This should be one or two paragraphs.

Selfies. Choose any **50** 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 50 items! **Give number and term for each photo.**

Take a selfie and write appropriate description for 60 of the items on the list below. **Remember**, each object (selfie) can count only for one item on the list! **Give number and term for each photo.**

Example of photo & description to go with selfie:



[20] Animal Adaptation. This is a fish known as a Remora. Remora are a type of bony fish that can be seen attached to sharks and whales (this one was found in a trap with other fish). This fish is uniquely adapted to stick to other animals using a highly modified dorsal fin on the top of its head. This fin creates a strong suction enabling the remora to stick to its host animal. It is thought that the remora removes dead skin and parasites from its host animal while receiving protection from would be predators as well as a free ride!

[note, this could also be used for #24 or #62]

Former students recommend that you first learn the terms on the list and define them, and then go hunt for pictures that match the term. There are plenty of places around OC (Mason Park, Bommer Canyon, San Joaquin Wildlife Sanctuary, the beach, Irvine Regional Park, Trader Joes, and Irvine Zoo) to find everything on the list. This should be done throughout the summer, not at the last minute and will take approximately 4 or 5 outings.

ITEM IN PHOTO MUST BE IDENTIFIABLE

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 (3 step minimum)	11. An abiotic factor	12. Evidence of decomposition
13. Evidence of human impact on environment	14. Example of Artificial Selection	15. A biological community
16. A gymnosperm	17. An angiosperm	18. Estuary
19. A plant adaptation	20. An animal adaptation	21. Example of polygenic trait
22. Genetically modified organism (GMO)	23. A photosynthetic autotroph	24. A chemoheterotroph
25. Wind dispersed seed	26. A producer	27. A reptile
28. A sporophyte	29. A moss gametophyte	30. A dicot leaf
31. A monocot leaf	32. C-3 plant	33. C-4 plant
34. CAM plant	35. A monocot flower	36. A dicot flower
37. A pollinator	38. Meristem	39. Rocky intertidal zone
40. An epiphyte	41. A photosynthetic stem	42. A conifer
43. A drought deciduous plant	44. Littoral zone of lake/pond	45. Heron or egret
46. Example of artificial selection	47. Niche	48. Herbivore
49. An invasive species	50. Detritivore	51. Precipitation
52. Atmospheric condensed water vapor	53. Combustion of fossil fuel	54. Restored landscape in OC
55. Reservoir of carbon	56. A triglyceride	57. A disaccharide
58. An example of surface tension	59. A structure with sclerids	60. Apical meristem/bud
61. Xerophytic plant	62. An ectotherm	63. An endotherm
64. Exoskeleton	65. A Coleopteran	66. Arachnid silk
67. Brown pelican	68. Example of cryptic coloration	69. A mollusk
70. A bony fish	71. A cartilaginous fish	72. An amphibian