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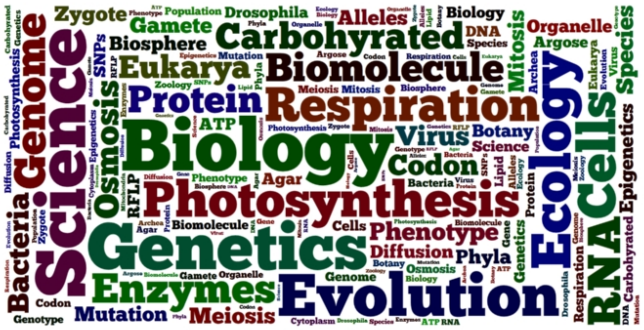

BIO

This summer you will delve into the world of biology like you never thought you would in those hot months! We will explore topics to whet your appetite 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,
- ⌦ To get you out of your house and neighborhood to enjoy nature.

ASSIGNMENT (posted on AP Biology Canvas and AP Biology Summer Google Classroom).

1. Ecology Scavenger Hunt – you must share your work on your IUSD Google Drive account with me by midnight August 21st (day before school begins) using our AP Biology Summer Google Classroom Code [**wgncc37**]

Mr Knight's email: davidknight@iusd.org

Find and take a "selfie" with each item. Write a **3-4** 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 exemplifies the term or concept. 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).

OPTION A: TAKE A SELFIE – YOU IN AN ECOSYSTEM AND SCAVENGER HUNT.

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.

AND

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.

OPTION B: SELFIE SCAVENGER HUNT ONLY.

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:

[15] *Here I am in Casper's Wilderness Park* located in south Orange *County, an example of a Chaparral* ***community****.* The chaparral is characterized by summer drought tolerant plants such as oak, sycamore and sages, and various animals such as mountain lions, coyotes, California quail, orange throated whip-tailed lizards, scrub jays and hummingbirds. This is the dominant community throughout southern California. The chaparral community is adapted to recover from periodic brushfires. [this photo could work for #25, 35 (grasses in the foreground).

Note*: If I were to use this picture as an Ecosystem for* ***OPTION A*** *I would include additional information about temperature and rainfall, that most of rain occurs during the winter months and that summers are dry and hot which is typical of what is known as a Mediterranean climate.*

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 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.

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 cryptic coloration	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 Artificial Selection	69.