

AP Biology Summer Assignment - 100pts

BIOLOGY SCAVENGER HUNT - Due: Friday, August 17th

Complete Student Information Form at this link:

<https://forms.gle/vs6wJpSMH3Sm9Mx37>

For your summer assignment, you will be familiarizing yourself with science terms that we will be using throughout the year. On the next page is the list of terms.

How to submit assignment: Your photos will be put into a google folder, website or google slides presentation and submitted into Canvas.

1. Each item is worth 2 points. You must earn 100 points by the due date. Earn points by "collecting" (photographing) items from each of the two lists. When I say "collect", I mean you should collect that item by finding it and taking a photograph (digital or paper printed) of the item. You will need to use your photographs with appropriate explanations and descriptions to create a scrapbook, google slides presentation, or website.
2. **YOU CAN (AND SHOULD) BE CREATIVE:** If you choose an item that is internal to a plant or animal, like the term "xylem", you could submit a photograph of the whole organism or a close up of one part of the organism, and provide an explanation of what xylem is and where xylem is found in your specimen.
3. **ORIGINAL PHOTOS ONLY:** Do not use an image from any publication or the Web. You must have taken the photograph yourself. The best way to prove that is to **place a unique item or your school ID in all of your photographs**. If you use an item you will need to turn it in with your scavenger hunt in August.
4. **NATURAL ITEMS ONLY:** All items must be from something that you have found in nature. Take a walk around your yard, neighborhood, and town. **DON'T SPEND ANY MONEY!** Research what the term means and in what organisms it can be found and then go out and find examples
5. **TEAM WORK:** You may work with other students (at a distance), but each student must turn in his or her own work with a unique set of terms (in other words, **DO NOT** use the same exact terms as your team members). Working with other students means brainstorming, collaborating, discussing, going on collecting trips together, etc. It doesn't mean using the same items! There are almost 100 choices (more if you're creative), providing plenty of variety.

BIOLOGY SCAVENGER HUNT TERMS Below are the items you are to "collect" (photograph). An individual organism can only be used once. Humans are acceptable for one category only. You must take all photos yourself; no Internet photos!

GROUPINGS

Each specimen in a category is worth 2 points up to a total of 5 specimens in the category. You can do up to 5 groups. You must do some individual items in addition to the groups listed here.

1. Different biomes
2. Different types of carbohydrates
3. Different classes of proteins
4. Evidence of different alleles for the same trait
5. Distinguishing characteristics between monocots & dicots
6. Organisms in different kingdoms
7. Organisms in different animal phyla
8. Organisms in different plant divisions
9. Organisms in same class but different orders
10. Organisms in same order but different family
11. Organisms in same genus but are different species
12. Organisms on different levels of the same food chain

INDIVIDUAL ITEMS

Each specimen is worth 2 points. You may have up to 2 examples of each item; submitting more than 2 will not add any additional points. These do not need to be native to CA.

- | | | |
|--------------------------------------|---|--|
| 1. adaptation of an animal | 32. enzyme | 62. mating behavior (<i>be careful!</i>) |
| 2. adaptation of a plant | 33. epithelial tissue | 63. meristem |
| 3. altruistic behavior | 34. ethylene | 64. modified leaf of a plant |
| 4. amniotic egg | 35. eubacteria | 65. modified root of a plant |
| 5. analogous structures | 36. eukaryote | 66. modified stem of a plant |
| 6. animal that has a segmented body | 37. exoskeleton | 67. Mullerian mimicry |
| 7. anther & filament of stamen | 38. fermentation | 68. mutualism |
| 8. archaeobacteria | 39. flower ovary | 69. mycelium |
| 9. asexual reproduction | 40. frond | 70. mycorrhizae |
| 10. ATP | 41. gametophyte | 71. niche |
| 11. autotroph | 42. genetic variation within a population | 72. parasitism |
| 12. auxin producing area of a plant | 43. genetically modified organism | 73. larva |
| 13. abiotic | 44. gibberellins | 74. phloem |
| 14. Batesian mimicry | 45. glycogen | 75. pollen |
| 15. bilateral symmetry | 46. gymnosperm cone – male or female | 76. pollinator |
| 16. biological magnification | 47. gymnosperm leaf | 77. population |
| 17. C3 plant | 48. hermaphrodite | 78. predation |
| 18. C4 plant | 49. heterotroph | 79. prokaryote |
| 19. CAM plant | 50. homeostasis | 80. <i>r</i> -strategist |
| 20. Calvin cycle | 51. homologous structures | 81. radial symmetry (animal) |
| 21. cambium | 52. hydrophilic | 82. redox reaction |
| 22. cellular respiration | 53. hydrophobic | 83. rhizome |
| 23. coevolution | 54. introduced species | 84. seed dispersal (animal, wind, water) |
| 24. commensalism | 55. keystone species | 85. spore |
| 25. dicot plant | 56. Krebs cycle | 86. sporophyte |
| 26. amphibian | 57. <i>K</i> -strategist | 87. stigma & style of carpel |
| 27. detritovore | 58. lichen | 88. succession |
| 28. dominant vs. recessive phenotype | 59. lipid used for energy storage | 89. taxis |
| 29. ectotherm | 60. littoral zone organism | 90. territorial behavior |
| 30. endosperm | 61. monocot plant | 91. tropism |
| 31. endotherm | | 92. unicellular organism |
| | | 93. vestigial structures |
| | | 94. xylem |

