St. Mary's Academy 2022 Summer Assignment AP Biology

AP Biology Summer Assignment 1

Grow the largest radish! (Estimated time to full growth: 27 days)

It sounds simple because it is. You will be given 25 radish seeds (though you are welcome to procure your own), and your goal is to end the summer with the largest (by mass) single radish.

Throughout the summer, treat this as an experiment! Record the conditions of your plants (both control and experimental groups), the frequency of watering, and/or whatever you think will provide you the edge over your classmates! At the very least, you should keep a weekly record of the growth/progress of your radishes.

Be careful and detailed with your observations and write-up. This will be your first Lab grade of the semester!

The students with the largest radishes will receive extra credit on the Unit 1 Test.

AP Biology Summer Assignment 2!

Take a selfie and write appropriate description for **EACH** item on the list below. **Each object** (selfie) can count only for <u>one</u> item on the list!

Next, create a 51 slide Powerpoint with your images and descriptions. The first slide should be the title and the rest should be the topics in order!

You may work with other AP Biology students on this assignment!

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.

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DUE: 8-9-2022

Scavenger Hunt List:

1. commensalism 26. a scavenger 2. phototropism 27. a lichen 3. parasitism 28. a producer 4. predator-prey relationship 29. an amphibian 5. a primary consumer 30. an animal track 6. mimicry 31. a sporophyte 7. secondary succession 32. a reptile 8. a secondary consumer 33. tree rings 9. a decomposer 34. a dicot leaf 10. a simple food chain 35. mutualism 11. an abiotic factor 36. C3 plant 12. evidence of decomposition 37. C4 plant 13. evidence of human impact on an ecosystem 38. CAM plant 14. an example of cryptic coloration 39. a flower 15. a community 40. a fungus 41. a pollinator 16. a gymnosperm 17. an angiosperm 42. Moss 18. evidence for artificial selection 43. a monocot leaf 19. a plant adaptation 44. a heterotroph 20. an animal adaptation 45. a population 21. genetic variation within a population 46. exoskeleton 22. genetically modified organism 47. a biome 23. an autotroph 48. meristem 24. cuticle layer of a plant 49. Gametophyte 25. a wind dispersed seed 50. FREE SPACE-

something fun