

# **Pre-AP Biology**

Summer  
Summer

Assignment  
Assignment



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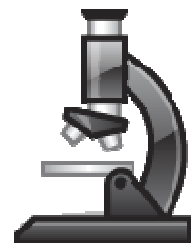
PreAP biology students,

In order to receive credit for preAP biology, you must complete several assignments that the regular biology students do not have to do. You will be required to participate in the dissection, complete a novel study, and submit the summer assignment. You have the option of selecting one of the three summer assignments discussed in this document. The assignment that you select will be due within the first two weeks of school. Each assignment is of equal value and counts as a test grade in the first six weeks grading period. In preAP, the test grades are worth 70% of your grade, so it is very important that this project be complete, submitted on time, and be of high quality.

If you have any questions, feel free to contact your teacher via email. Both preAP biology teachers will be checking their email weekly during the summer, so do not stress if you do not hear back immediately from them.

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# Independent Investigation – Option 1

(choose 1 of the 3 options available)

Due Date: During the 1<sup>st</sup> 2 weeks of school

You are to locate and identify an organism that lives in your backyard. Be creative, do not limit your self to just the plants!! Keep a journal of the activity, development, and changes of your organisms. This will be worth a test grade your first week back to school.

Page #	Description	Point Value
<b>1-2</b>	<b>Table of Contents</b>	
<b>3</b>	<b>Identification of organism</b> Kingdom, Phylum, Class, Order, Family, Genus, Species	5
<b>3</b>	<b>Species</b> – Introduced or Native Is this organism an introduced species or is it native to this area in Texas? If it is an introduced species, where is it's native home and does it have the potential to become an invasive species?	5
<b>4</b>	<b>Habitat description</b> Describe the organism's habitat <b>in detail</b> . What does it live in, on, or around? Describe the other organisms living in its community.	5
<b>5</b>	<b>Drawings of organism</b> Label the drawing.	5
<b>6</b>	<b>Food Web</b> Design a food web that includes your organism. What does it eat and what eats it? Then continue the food web out to at least 4 organisms.	10
	<b>DATA</b> Gather MEASUREABLE data on your organism. This is VERY open ended. If you are researching ants, maybe you could keep track of the location of the ant piles. If you are observing a butterfly bush in your yard, keep track of its height, number of leaves, number or type of insects visiting it. These are just a few ideas to get you thinking!!	20
	<b>Journal entries</b> There must be at least 15 entries spread over the summer. These will include your data and any other observations that you may have. You cannot have 15 entries within the last 2 ½ weeks of summer. Please keep your entries in a bound lab journal. Number the right hand pages of your notebook, and write only on the right hand side (unless you are left-handed).	15
	<b>Photographs</b> There are to be 5 photographs of your <b>actual organism</b> placed in your journal. These are not to be images from the internet of an organism like yours. They do not need to be all together. You can spread them throughout your journal entries.	15
	<b>Originality</b> Unique or unusual	5
	<b>Creativity</b>	5
	<b>Flyer</b> Include a 1 page flyer when you turn in your project during the 1 <sup>st</sup> 2 weeks of school that briefly describes the research that you completed.	10
	<b>Interview (extra)</b> Interview an <u>expert</u> on the organism that you are observing. This should not be a parent or neighbor. Your interview can be online.	5
	<b>Volunteer hours (extra)</b> Volunteer at a local nature center, garden, or park.	

**Scientist for a Day – Option 2**  
(choose **1** of the **3** project options available)

Due Date: During the 1<sup>st</sup> 2 Weeks of school

**Assignment:** Have you ever thought that you might want a career in science? If so, now is your chance to find out a little about that dream career. Your assignment is to spend a work day with a person that has a science related job. Pick to visit the career that you think that you will want to pursue. This is an actual investigation of the career, not a *tour* of the facility.

During the workday, you are to keep a journal, complete an interview, and take at least one photo of you with the scientist, as well as other photos to describe your visit. Below is the grading rubric for the assignment. These are the minimum expectations for the project. Feel free to email Mrs. McCurley or Mrs. Lowery if you have any further questions.

<b>Guidelines</b>	<b>Points</b>
<b>Photo with the scientist</b>	10
<b>Journal</b> Detailed explanation of activities hourly (minimum of 6 hours) Include any thoughts, reflections, and/or questions that you may have about the career	30
<b>Interview</b> 10 question interview that you design	20
<b>Additional Photos</b> 5 pictures (with captions) that chronicle your time spent with the scientist	15
<b>Neatness and organization</b>	10
<b>Originality</b> Unique and unusual profession	5
<b>Creativity of Project Display</b>	10
<b>Total</b>	

**Science Fair Project – Option 3**  
(choose **1** of the **3** project options available)

Due Date : During the 1<sup>st</sup> 2 weeks of school

You may complete a scientific investigation for entry in the science fair as your summer assignment. If you choose to complete a science fair project, it will be included in the CHS school science fair competition. If selected as a finalist for CHS, it could *potentially* go on to compete at the regional, state, and national level. For this reason, your project idea must be pre-approved. Please email project ideas by July 1, 2008 to Mrs. Lowery or Mrs. McCurley.

The following is a list of obligations involved with completing a Science Fair Project:

<b>Requirements (Summer)</b>	<b>Points</b>
Three page research paper on approved topic (due during the first 2 weeks of school)	65
Project plan (including): Purpose or Question Hypothesis Materials Procedure Safety Procedures and Equipment Location of Experiment Supervising Person (due during the first 2 weeks of school)	25
Rough Draft of the Project Approval forms (due during the first 2 weeks of school)	15
<b>Test Grade Total</b>	

The science fair project will need to be displayed on a board when it is time for entry in the science fair. There is also a certain amount of paperwork required to fill out for competition in the science fair. Below is a link which includes detail of all the necessary requirements, paperwork, etc. for submission of a science fair project.

[http://hunstem.uhd.edu/SEFH/approval\\_main.htm](http://hunstem.uhd.edu/SEFH/approval_main.htm)