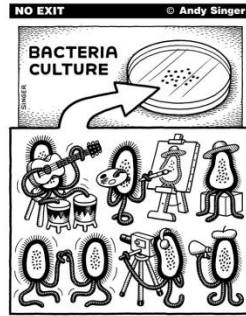


Name: _____

AP Biology Summer Assignment



Welcome to AP Biology!

I have a passion for biology, and I am very excited to be able to share that passion with you next year. I know you may think it's a little too early to start thinking about next year, however, general biology encompasses a great deal of information, therefore, the sooner we get started the better.

AP Biology is an introductory college-level biology course. You will be able to cultivate your understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes — energy and communication, genetics, information transfer, ecology, and interactions.

Your AP biology test will be focused on the following “Big Ideas.”

- Big Idea 1: The process of evolution drives the diversity and unity of life.
- Big Idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
- Big Idea 3: Living systems store, retrieve, transmit and respond to information essential to life processes.
- Big Idea 4: Biological systems interact, and these systems and their interactions possess complex properties.

What to do before the first day of school:

- (Highly suggested but not mandatory) Purchase a copy of 5 Steps to a 5 by Mark Anestis (Amazon or your local book store). It must be the NEWEST addition because the course was redesigned 3 years ago.

Assignment #1: Overview of AP Exam

In order to get a better understanding of what AP Biology is all about and the expectations for this course, watch the videos on the following links and take handwritten notes for both:

AP Biology Exam: A Users Guide

<http://www.bozemanscience.com/new-ap-biology-exam-users-guide>

The 4 Big Ideas in AP Biology

<https://paul-andersen.squarespace.com/biology>

Essential Knowledge (EK) Student Diagnostic in AP Biology

<http://www.clearbiology.com/wp-content/uploads/2012/07/Essential-Knowledge-Student-Diagnostic.pdf>

For this assignment, pick any 5 EKs you marked that you don't know or understand. Use your textbook, any other published source, or watch the corresponding EK videos at <http://www.bozemanscience.com/ap-biology/> to research these EKs. Provide evidence for all 5 EKs along with the reasoning for that evidence. Please cite the references that you used to learn about each of the 5 EKs you have chosen.

Assignment #2: AP biology essential chemistry

Attached you will find the registration instructions to Onboard. Here you will find your first assignment which consists of a series of modules you will need to watch and answer questions as you go. This module focuses mainly on basic chemistry that you will need to succeed in AP biology.

- Use the following code to register:

T3XD-39YY-K3QJ-XQ7C-TCBG

All modules are due August 23, 2015 at 11:59 pm, at that time all modules will be closed.

- Introduction to ONboard for AP Biology
- Math Skills
- Graphing and Data Analysis
- Experimental Design
- Chemistry Foundation
- Biology Big Ideas

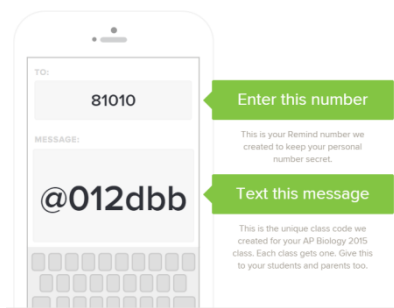
Attached, you will also find the registration information for the online book we will be using throughout the school year. You may use the book as a reference to help you do your summer assignment.

- Use the following code to register:

NMB4-VTQX-NQPX-EKXB-3QD4

Assignment # 3: Remind

Join our Remind Text Class. When I need to send out fast class information quickly or send out reminders I use Remind. It will send you automatic text messages from me.



Assignment #4: Biology Prefixes and Suffixes-The Language of Science

- Review and memorize the scientific Latin/Greek roots that form many of our scientific terms.
 - Print and complete the Biology Prefixes and Suffixes

Biology Prefixes and Suffixes-The Language of Science

The main reason students find it difficult to understand science is because of all the hard to write, spell and read words. Actually, scientific vocabulary is a mix of small words that are linked together to have different meanings. If you learn the meanings of the little words, you'll find scientific vocabulary much easier to understand. Find the mean to the following Greek/Latin root words.

Word	Meaning
a/an	
meso	
leuco	
aero	
anti	
amphi	
aqua/hydro	
artho	

auto	
bi / di	
cephal	
chloro	
chromo	
cide	
cyto	
derm	
haplo	
ecto (exo)	
endo	
epi	
gastro	
genesis	
herba	
hetero	
homo	
ov	
kary	
neuro	
soma	
saccharo	
primi/ archae	
phyll	
hemo	
hyper	
hypo	
intra	
-itis	
lateral	
-logy	
-lysis	
-meter	
mono	
micro	
macro	
multi/poly	
pod	
-phobia	
-philia	
proto	
photo	
pseudo	
synthesis	
sub	
troph	
therm	
tri	
zoo, zoa	
-tropism	
-taxis	

-stasis	
zyg/zygous	
phago	
path/phy	
sym/syn	

Once you have completed the table, use it to develop a definition, in your own words, for each of the following terms.

1. Hydrology _____
2. Cytolysis _____
3. Protozoa _____
4. Epidermis _____
5. Spermatogenesis _____
6. exoskeleton _____
7. Abiotic _____
8. Pathogen _____
9. pseudopod _____
10. Hemophilia _____
11. Endocytosis _____
12. herbicide _____
13. Anaerobic _____
14. Bilateral _____
15. autotroph _____
16. Monosaccharide _____
17. Arthropod _____
18. polymorphic _____
19. Hypothermia _____
20. Biogenesis _____

Don't procrastinate on your summer assignments. Schedule some time just for AP Biology!

If you have any questions e-mail me: magdalena.salas@fwisd.org

Class website: <http://salasbiology.weebly.com/>

Have a fun-filled, relaxing and rejuvenating summer!