Welcome to Mrs. Biery's Honors Biology Class

I hope you are excited to jumpstart our fascinating study of life!!!

PLEASE JOIN OUR GOOGLE CLASSROOM before the start of the school year.
Go to Google Classroom, hit the plus button in the upper right corner, then hit join class & enter the below class code.

Class Code 4qycrwa

HERE YOU WILL FIND OUR SYLLABUS & WEBSITE IF YOU WANT TO TAKE A PEAK BEFORE THE SCHOOL YEAR.

Required Materials

⭐Please purchase within the first week of school, reachout to me if needed.⭐

✅3 - ring plastic binder (2 inch minimum) with a plastic cover
✅Packages of dividers (need 10 tabs)
✅Favorite pens & pencils with a good eraser
✅White lined hole punched paper

Following are OPTIONAL if you would like your own (can always use classroom supply)

✅Package of Markers, Crayons OR Colored Pencils (pick favorite)
✅Highlighters (a few colors)
✅A pair of scissors

💻Technology needed ~
✅Charged chromebook everyday with earbuds or headphones
- I prefer the school chromebook (please email me if you plan on using your own personal computer)

HONORS BIOLOGY ~ SUMMER WORK

The purpose of summer work is to keep you engaged over the long break allowing you to keep your skills sharp and to prepare for topics covered during the year. This will also be an example of what most homework will look like. In the Honors class expect a few of the individual outlines weekly. **If this is too much work for you, college prep biology might be a better option. If so, contact guidance as soon as possible to make a schedule change.** We will hit the year running having an **assessment on Unit 1 early in the school year**. Please **follow the instructions** below.

1. Pick up your textbook before the end of the school year if you did not get it already from your 8th grade teacher.
   ~room A140 – Mrs. Biery or room A233 – Mr. Pingsterhaus
   ~Extra books will be left in the office over the summer
2. Cover textbook – keep at home
3. Complete the attached Unit 1 Outline: Nature of life (1.1, 1.2 & 1.3)
4. Bring completed summer work for the 1st day of class along with a picture of your covered book on your phone. If you do not have a phone please email me a picture of your covered book before our first class.
5. Be prepared to take an assessment on UNIT 1

Outline Guidelines for the Entire Year:

- ➔ needs to be **handwritten & on white lined paper**
- ➔ give a heading with outline **title, your name & block**
- ➔ **in the margin, DATE** as you work along for **every new day**
- ➔ **follow order given** vocabulary first then questions for each section
- ➔ **HIGHLIGHT** your vocabulary words
- ➔ **write out questions fully** & answer **completely all parts**
- ★ ***do your own work*** *and do not share with others*

I know a lot of you have numerous summer work assignments and vacation plans so plan your time wisely! If you complete this assignment early in the summer please make sure you review material before entering the classroom.

Please email with any concerns. jbiery@lunenburgschools.net

HAVE A SAFE AND FUN SUMMER!!

~ Mrs. Biery

HONORS BIOLOGY ~ UNIT 1: The Nature of Life (Microscopes/Classification)
CHEMISTRY OUTLINE: Scientific process, Microscopes/Classification

TEXT: Biology by Miller & Levine 2019, Chapters 1

DIRECTIONS: ALWAYS READ FOR UNDERSTANDING, NUMBER OUTLINES/QUESTIONS & WRITE OUT ALL QUESTIONS & HIGHLIGHT VOCABULARY WORDS.

Outline 1 - READ 1.1 (pages 8-14) What is Science?

Define Vocabulary: observation, inference, hypothesis, controlled experiment, independent variable, dependent variable, control group, data, theory

1. Why do they call science a process?
2. How is science different from other ways of explaining how the world works?
3. Why is it important for scientists to collect and organize information in an orderly way?
4. Why is it important to construct testable explanations? Why must explanations be supported by data?
5. Why does science rarely prove things?
6. Why is it important to select similar plots of marsh grass for the salt marsh experiments (figure 1-2)?
7. Give an example of both an independent variable and a dependent variable in an experiment of your choosing.

Outline 2- READ 1.2 (pages 15-21) Science in Context

Define Vocabulary: bias

1. What are the 4 main scientific attitudes that scientists often possess? Explain the importance of each.
2. How do scientists share ideas? What is peer review?
3. Why is replication important to the scientific process?
4. Why is science alone not enough?
5. Why is avoiding bias in science so important?
6. How are science and engineering similar practices? How are they different?

Outline 3- READ 1.3 (pages 22-29) Patterns in Life

Define Vocabulary: biology, sexual reproduction, asexual reproduction, DNA, metabolism, stimulus, homeostasis, evolve

1. There are 8 characteristics of living things. Make 8 sentences describing each of the living characteristics.
2. Why is a virus not considered living?
3. Pick 3 of the crosscutting concepts in biology and explain each.
4. How do crosscutting concepts help unite the study of biology?
5. Pick one of the fields of biology described in our text that interests you the most. Explain why you picked that field.
6. Why do scientists use a common system of measurement?