

Welcome to
AP Biology
2022-23

Mr. Frazer

- BA in Biology; MS in Education
- Interests
- 1st AP course taught: AP Bio (2 years ago)
- 2 AP institutes

Who is the AP Bio Student?

- Enjoys scholarship
- Enjoys Science
- Enjoys sitting down with a book
- Enjoys being challenged
- Enjoys inquiry and investigation
- Does not mind confusion
- Can tolerate and accept that every assignment is not a steady stream of A's



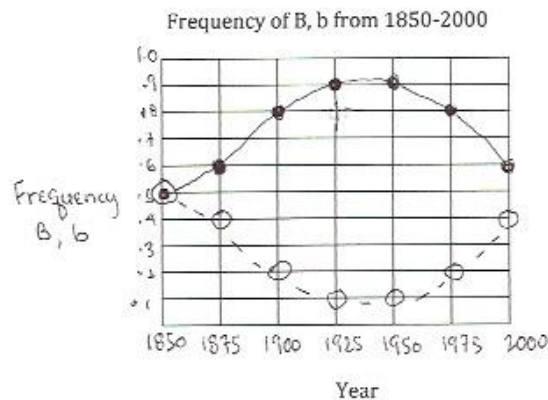
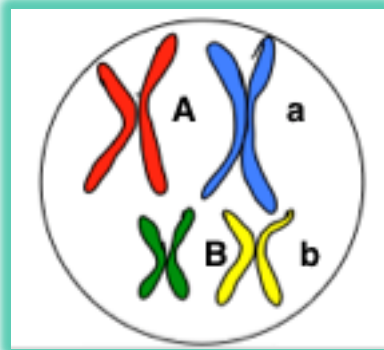
What is the course

- College level
- Semester and AP Exam
- Essay writing
- Labs and investigations
- 4 “Big Ideas”
- 8 Units



Big Idea 1

The process of evolution drives the diversity and unity of life.

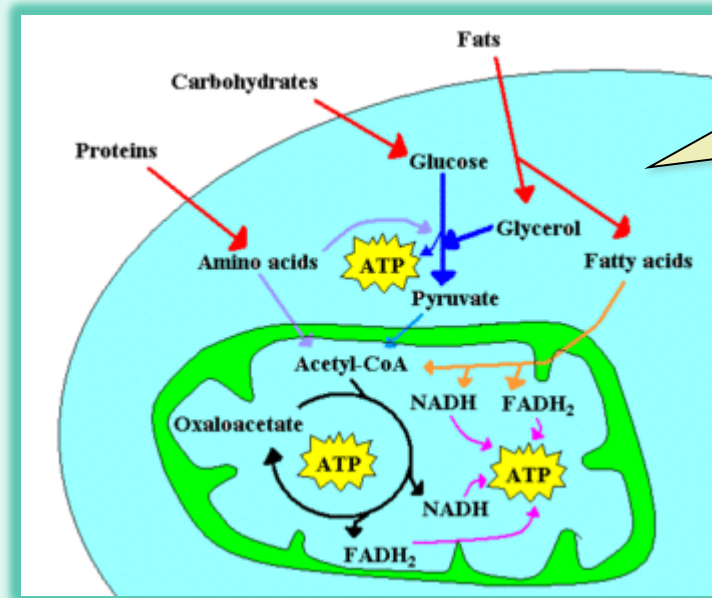


B — ●
b - - ○

Alleles!

Big Idea 2

Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.

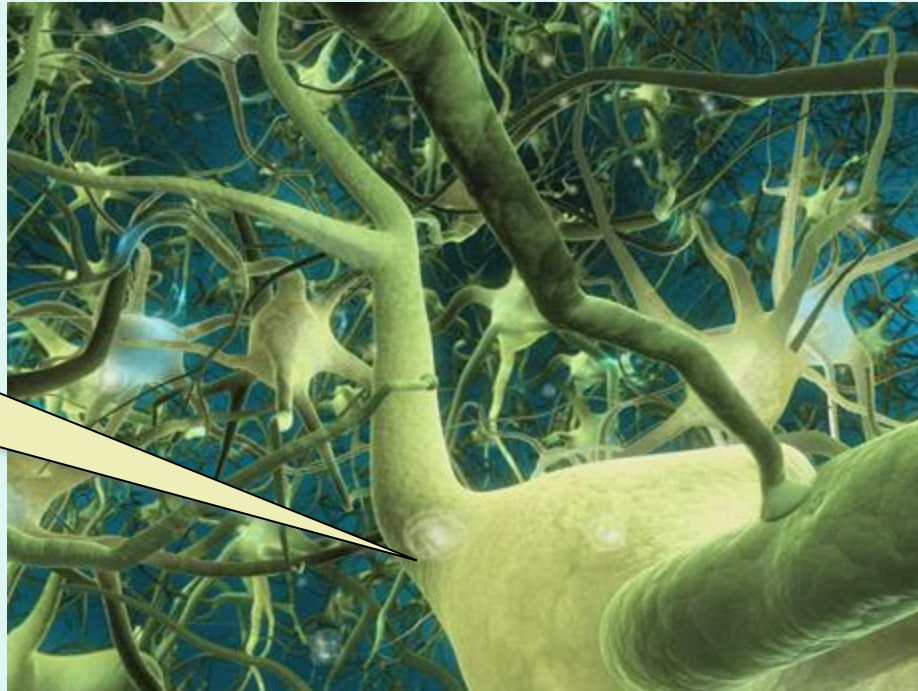


EEK...
Krebs!

Big Idea 3

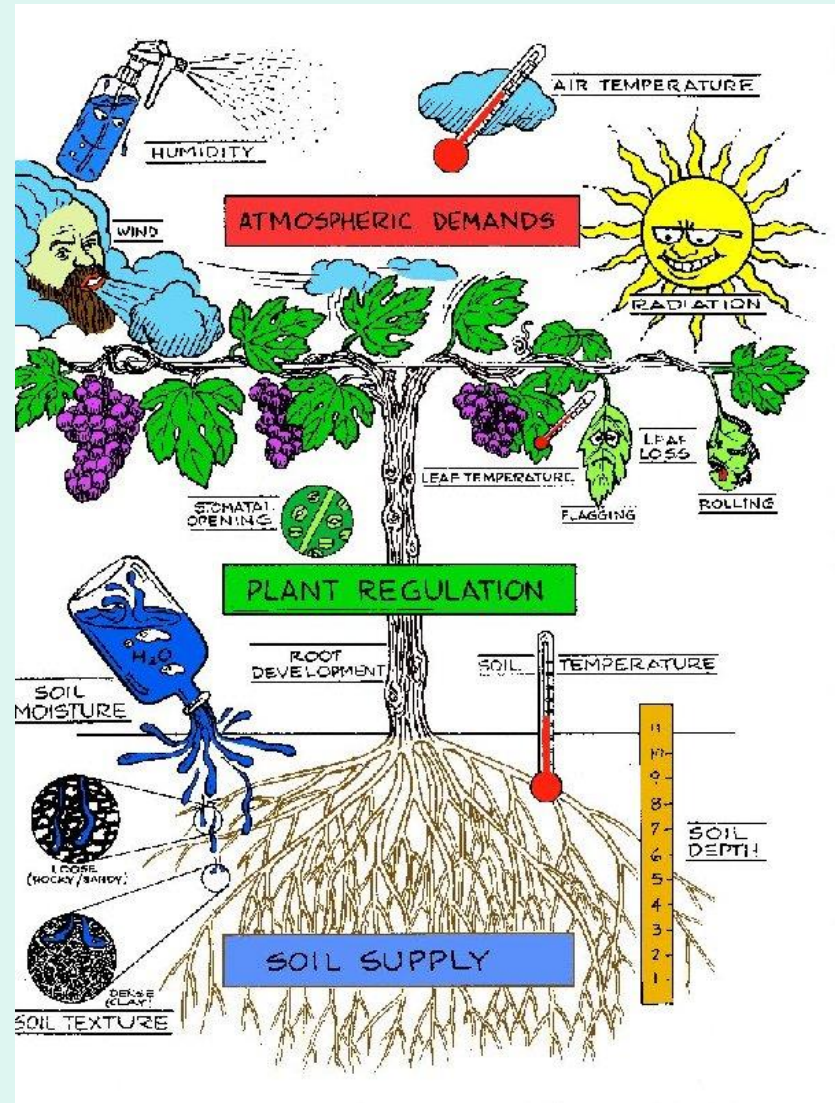
Living systems store, retrieve, transmit, and respond to information essential to life processes.

neurons



Big Idea 4

Biological systems interact, and these systems and their interactions possess complex properties.



8 Units

1. Chemistry of Life
2. Cell Structure and Function
3. Cell Energetics
4. Cell Communication and Cell Cycle
5. Heredity
6. Gene Expression and Regulation
7. Natural Selection
8. Ecology



Exam May 2023



Section 1 (90 minutes)

- 63 Multiple-choice questions
- 50% of score

Section 2 (80 minutes + 10-minute reading)

- 2 Long Response (25%)
- 6 Short Response (25%)



Science Practices Assessed

- the use of **modeling** to explain biological principles;
- the use of **mathematical processes** to explain concepts;
- the **making of predictions** and the justification of phenomena;
- the implementation of **experimental design**; and
- the manipulation and interpretation of **data**.



Grading Policy

- Grades can be accessed online via the student and/or parent Aeries Portal. Aeries Portal access can be obtained from the office. Overall grades will be weighted as follows:
 - **Assessments – Summative (e.g. examinations, performance assessments, etc.) 50%**
 - **Assessments – Formative (e.g. quizzes, FRQs, etc.) 20%**
 - **Laboratory (e.g. laboratory activities, laboratory notebooks, Data Blitz presentations, etc.) 15%**
 - **Assignments (e.g. classwork, homework, discussion, etc.) 15%**

Fun Videos

- http://www.ted.com/talks/lang/en/the_cockroach_beatbox.html
- https://www.youtube.com/watch?v=B_zD3NxSsD8
- <https://www.youtube.com/watch?v=MnYppmstxls&t=27s>