

AP Biology 2025 Summer Assignment

Welcome to AP Biology! I'm excited to have you in class this upcoming school year. To help you prepare for the topics we'll be exploring, you'll be completing a summer assignment that focuses on two essential components of living organisms: chemistry and water.

Understanding the chemical basis of life is key to mastering biology. This summer, you'll review important chemistry concepts such as atoms, bonding, pH, and macromolecules. You'll also dive into the remarkable properties of water and explore how this simple molecule supports all living organisms.

The AP Biology curriculum is built around 4 'Big Ideas', with Essential Knowledge and Science Practice that support each Learning Objective:

Big Idea 1: Evolution (EVO) – The process of evolution drives the diversity and unity of life.

Big Idea 2: Energetics (ENE) – Biological systems utilize free energy and molecular building blocks to grow, to reproduce, and to maintain dynamic homeostasis.

Big Idea 3: Information Storage and Transmission (IST) – Living systems store, retrieve, transmit, and respond to information essential to life processes.

Big Idea 4: Systems Interactions (SYI) – Biological systems interact, and these systems and their interactions possess complex properties.

Please take this assignment seriously, it will set you up for success in AP Biology and deepen your appreciation for the incredible chemistry of life.

Assignments are to be turned in in class by Friday of the first week of school, please do not email them.

Feel free to email me Mrs. Tice at lisa.tice@smyrna.k12.de.us if you have any questions or concerns. Have a restful summer, and I look forward to an exciting and engaging year of discovery!

Assignments!

Ch 2:

https://drive.google.com/file/d/1z6Pem2LPQn2M_j_qlyzP6vjzjUJbKiEy/view?usp=sharing

Read Ch2 and complete the Reading Guide:

<https://docs.google.com/document/d/1EITtNFbLywZyztDcaXODEbBNKhmlAEn8/edit>

Ch 3:

https://drive.google.com/file/d/1dK5CLE7QsXr0d_fZU5omaZ_3Ys1x9zml/view?usp=sharing

Read Ch3 and complete the Reading Guide

<https://docs.google.com/document/d/13A9WlGgGEVCHFeAjTSoMgKFFSmLif7MX/edit>

Watch Water: A Polar Molecule and complete the video questions.

<https://m.youtube.com/watch?v=iOOvX0jmhJ4>

Video Questions

<https://docs.google.com/document/d/1uJcr15jMrTY4dhUfYkewy0MJNw32RdSp37UjDXLRLy0/edit?tab=t.0>