Summer work

There are two parts, worksheets and vocabulary.

AP Biology Practices

The categories below contain live links to videos that you should review. **Complete the worksheets** by Winnie Litten for each to be turned in or uploaded on the second day of class.

- Models & Representation
- Using Mathematics
- Scientific Questioning
- Data Collection Strategies
- Analysis & Evaluation of Evidence
- Scientific Explanations & Theories
- Scales, Concepts & Representations

AP Biology Vocabulary

Below are vocabulary words with which you should already be familiar, organized according to the topics covered in the course. *At the beginning* of each unit there will be a vocabulary quiz for a grade. Start familiarizing yourself with these terms prior to each unit, and preferably prior to the beginning of the year. You need a general, not comprehensive, understanding of these terms at this time

Scientific Practices	biotechnology, gene recombination, gene splicing, genetic engineering, genetically modified organism (GMO),
Life	biology, abiotic, biotic, organic molecule, organism, homeostasis,
Biochemistry	amino acid, element, compound, pH, cohesion, carbohydrate, proteins, amino acids, adhesion, catalyst, enzyme, monomer, monosaccharide, nucleic acid, nucleotide, limiting factor, lipids, polymer

Cell Biology	cell, Golgi apparatus, active transport, adenosine triphosphate (ATP), cellular respiration, chlorophyll, chloroplast, concentration gradient, carrier (transport) proteins, endocytosis, endoplasmic reticulum (ER), ribosomes, diffusion, eukaryote, intracellular, nucleus, organelle, osmosis, passive transport, macromolecule, impermeable, mitochondrion, multicellular, exocytosis, extracellular, facilitated diffusion,
Genetics	Gene, allele, frame-shift mutation, DNA mutation, DNA replication, multiple alleles, deoxyribonucleic acid (DNA), RNA, Watson, Crick, and Franklin
Reproduction	cell cycle, chromosomes, cytokinesis, crossing-over, asexual reproduction, mitosis, interphase, meiosis, nondisjunction, gamete,
Heredity/Traits	co-dominance, genotype, phenotype, dominant inheritance, incomplete dominance, inheritance, traits, generation, Gregor Mendel
Organismal Biology	Anatomy, physiology, organ, tissue, organ system, structure-function, hormones, nerves, endocrine, paracrine
Evolution	evolution, analogous structure, cladogram (phylogeny/taxonomy), artificial selection, competition, embryology, homologous structure, founder effect, genetic drift, natural selection, extinction, gradualism, fossils, Charles Darwin
Ecology	community (ecological), exponential growth, biomass, biome, biosphere, carnivore, aquatic, consumer (ecological), ecology, ecosystem, decomposer, endosymbiosis, energy pyramid, habitat, herbivore, migration, omnivore, niche, nonnative species, food chain, food web,