

Biology of the Living Earth / Biology of the Living Earth Honors

10-day Extended Learning Lessons

Days 1-4	Develop a visual model/picture to illustrate the cycling of Carbon through the biosphere, hydrosphere, and atmosphere. Within your model, include a detailed description of the processes of photosynthesis and respiration.
Days 5-6	Interview 10 family members about genetic traits they have, such as dimples, freckles, tongue rolling, baldness, etc. Then construct a pedigree of your family that demonstrates the passing of genetic traits from parents to offspring. If possible, determine the genotypes of each person for the traits you discover.
Days 7-10	Write a detailed summary of how physical traits are formed from DNA to structure. Be sure to include the following vocabulary in your summary: DNA, RNA, mRNA, gene expression, Initiator, double helix, base pair, translation, transcription, codon, amino acid, protein synthesis, Anti-codon, tRNA, rRNA, Ribosome.