

KDS Science Classes Preparing for College and Beyond

The KDS High School Advanced Placement Biology and Anatomy and Physiology classes are working hard to prepare themselves for college studies and possible careers in science, biotechnology, health, and many other fields with the help of teacher Ashley Weems.



On February 6, the AP Biology classes went on a field trip to visit HudsonAlpha Institute for Biotechnology in Huntsville. There, they completed an AP required lab which utilized DNA gel electrophoresis to determine a patient's predisposition for

developing cancer. The students were also able to tour the facility and learn more about biotechnological career opportunities.

The Anatomy and Physiology class is studying the brain and nervous system by dissecting a sheep's brain. The purpose of the lab was for the students to learn to identify the individual parts of the brain. Lucas Collier found the lab intriguing. "It was very informative and fun," Lucas said. His lab partner, Matthew Laski, wasn't quite as excited as Lucas and didn't want to touch the brain or get too close to it.

The freshman Pre-AP biology class studies genetics through a variety of hands-on activities. Recently, students have been exploring the differences between GMO (genetically modified) and non-GMO (non-genetically modified) foods, and the benefits of each. Students were shown how to differentiate between healthy and unhealthy food using their knowledge of genetic modification and by examining food labels.



Pre-AP Biology Students have also been learning about DNA and RNA transcription, as well as the similarities and differences between the two. Something also covered in the genetics unit is the way our genes influence our physical appearance, ability, and genetic defects. During the unit, students learn about the human genome, our entire genetic makeup, and how it can be used to eradicate and prevent diseases.



Thanks to Mrs. Weems, the students are able to have a broad knowledge of genetics and the way it influences our lives right down to the things we eat, which is not only helpful as a student, but as an adult.

