

Three-Dimensional Learning in the Amplify Science 6th Grade Course

The Amplify Science Grade 6 Course includes 6 units that support students in meeting the NGSS. The following unit summaries demonstrate how students engage in three-dimensional learning to solve real-world questions and problems.

Metabolism: Students take on the role of medical students and diagnose a patient whose body systems aren't working. They learn about cellular respiration and how body systems work together to get molecules to the cells.

Thermal Energy: Students take on the role of medical students and diagnose a patient whose body systems aren't working. They learn about cellular respiration and how body systems work together to get molecules to the cells.

Phase Change: Students, in their role as student chemists, investigate the mystery of disappearing methane lakes on Saturn's moon, Titan. They must apply what they learn about phase change, matter, and energy.

Ocean, Atmosphere, and Climate: As climatologists, students must explain the pattern of temperature changes in El Niño years, which are impacting agriculture around the Pacific. They learn about how sunlight, ocean, and atmosphere interact to produce regional climate.

Weather Patterns: Students play the role of forensic meteorologists who must explain why powerful storms have increased after a manmade lake was built. They learn how air masses, water, and energy from the Sun produce weather phenomena.

Plate Motion: Students play the role of geologists working for the fictional Museum of West Namibia to investigate Mesosaurus fossils found both in southern Africa and in South America.