

8th Grade Science Unit Overview

The Louisiana Student Standards for Science (LSS) for Science represent the knowledge and skills needed for students to successfully transition to postsecondary education and the workplace.

These standards call for students to:

- 1) apply content knowledge**
- 2) investigate, evaluate, and reason scientifically**
- 3) connect ideas across disciplines**

Science tests are no longer a list of random, memorized facts. Assessments are embedded at various, strategically planned points within the science curriculum to check for understanding and application of essential science skills. Students demonstrate mastery of LSS in various ways, including, but not limited to: typed constructed responses to a scientific phenomena, data interpretations, digital simulations, creating concept models, verbal discussions, (CER) Claim, Evidence, Reasoning-based writing, engineering solutions, and designing & testing hypotheses through lab investigations.

Daily in science class, students will participate in rigorous science units based on the LSS for their grade levels & performance expectations for each standard. We use the high-quality, DOE recommended www.openscienced.org curriculum to facilitate mastery of the standards. <https://www.louisianabelieves.com/resources/library/k-12-science-resources>

8th MS Science Units in Google Classroom

- 1. Everest**
- 2. Natural Hazards**
- 3. Energy in Reactions**
- 4. DNA Mutations**
- 5. Population Ecology**
- 6. Genetics/Heredity**
- 7. Penguins**
- 8. Natural Resources**
- 9. Animal Adaptations**

Each year in science we continue building upon the previously learned concepts and explore more challenging material at a deeper level of understanding. We cover a variety of interesting standards-based topics as students develop their research and science skills. We reinforce skills such as data collection and analysis, graphing, scientific inquiry, collaboration, and communication during class.

Students participate in class discussions, lab group work, table partner work, and individual assignments. Students are encouraged to share questions and learning connections during class. Peers can answer questions using scientific evidence and reasoning. Students also learn to collaborate to discover key concepts behind the initial unit phenomena. In so doing, students leave AEP MS Science well prepared to be STEM leaders & effective communicators in high school and beyond.

