



Teacher Resources

The science curriculum resources below have been identified by LCS teachers as useful curricular supplements for standards-based science instruction. To help teachers in finding these and being able to utilize them at their sites, we have created this publication. When possible, a standards crosswalk has been included for the resources. Please note that these are not the district adopted curriculum for elementary science and are subject the approval of a site review board or principal-designed approval process before use.

CPALMS – All resources from CPALMS are designed by a team directed to produce curriculum and professional learning resources aligned to Florida Standards.

- **STEM Reading Resources** (Passages and activities that merge STEM and reading standards) - <https://www.cpalms.org/Public/ResourceCollection/Preview/87>
- **STEM MEA Lessons (Model Eliciting Activities)** MEAs are open-ended, interdisciplinary problem-solving activities that are meant to reveal students' thinking about the concepts embedded in these realistic activities. MEAs resemble engineering problems and encourage students to create solutions in the form of mathematical and scientific models. Students work in teams to apply their knowledge of science and mathematics to solve an open-ended problem, while considering constraints and tradeoffs and clearly documenting their thought process <https://www.cpalms.org/Public/ResourceCollection/Preview/59>

Everglades Champion Schools Literacy Program – The Everglades Literacy Program provides free, online PreK-12 Teacher Toolkits with comprehensive Everglades lesson plans that align to state academic standards.

<https://www.evergladesliteracy.org/>

Florida Ag in the Classroom - This grant-funded discretionary project provides Florida-specific lesson resources, organized by grade-level, that show connections between science and agriculture. <https://faitc.org/lessons>

Climate Innovation Challenge/CAVU - In the Climate Innovation Challenge (CIC)—CAVU's FREE NGSS-aligned, STEAM climate education program—student leaders explore solutions that build climate resilience in their communities and present their ideas in short videos that are eligible for cash prizes and scholarships! The Challenge culminates with a student video showcase featuring inspirational speakers, the screening of student projects, and the awarding of cash prizes and scholarships for outstanding entries! Register today at <https://cavu.org/engage/>

ECOSchools Lesson Plans Database - In 2019 and 2020, the Foundation for Environmental Education (FEE) invited teachers to develop and submit lesson plans that promote an action oriented pedagogy about specific Sustainable Development Goals (SDGs). <https://www.ecoschools.global/lesson-plans-for-teachers> ***Please note that an NGSSS/Florida crosswalk for these lessons has not yet been developed. This does not mean, however, that lessons are not aligned to NGSSS.

Grade 5 Science Lesson Plans with the 5E Demonstration Model from FLDOE – The 5E model of lesson planning focuses on allowing students to understand a concept over time through a series of established steps or phases. The 5E steps are Engage, Explore, Explain, Elaborate, and Evaluate

<https://www.fldoe.org/core/fileparse.php/12083/urlt/ScienceToolkit5thplans.pdf>

USF Teaching Resources: Exploring Florida Science - The Exploring Florida Science modules are designed to help teachers improve their content knowledge and more effectively communicate science concepts to their students. The modules focus on technology-rich science content and teaching materials that allow educators to simultaneously address multiple strands in the Sunshine State Standards for Science. Suggested lesson plans offer ideas for how teachers can incorporate these concepts in their classrooms. The table at the bottom of the main page shows how the modules relate to the Sunshine State Standards for Science. <https://fcit.usf.edu/florida/teacher/science/>

Community Invasive Species Network Protect U.S. Lessons - Lesson plans are correlated to the [National Science Education Standards](#) (as well as [Florida State Sunshine Standards](#)) and contain instructions for the teacher on conducting the activities, a scripted presentation (containing background information for the teacher) that accompanies the lesson plan, and student activities for reinforcement (including experiential activities, an e-learning module, and accompanying student handouts). https://entnemdept.ufl.edu/hodges/ProtectUs/K-12_Lesson_Plans.html

U.S. National Science Foundation Classroom Earth and Environment Resources - Classroom Resources is a diverse collection of lessons and web resources for classroom teachers, their students and students' families. Materials are arranged by subject area to help you quickly find resources in your interest area, and then use them to create lesson plans or at-home activities. <https://www.nsf.gov/news/classroom/earth-environ.jsp>

Inwater Research Group Traveling Turtle Educational Activity Trunks - Local teachers have the ability to bring FREE hands-on, experiential conservation education to their classrooms through one of our Traveling Trunk programs. Our Traveling Trunks each contain 4 engaging lessons that take students on a journey through conservation while highlighting the amazing world of sea turtles. Lessons are made in Florida in consultation with Florida educators and are NGSSS aligned. Each trunk includes ready-made lessons that are pre-printed, pre-cut, and pre-laminated. All you have to do is copy student worksheets! Sign up to reserve a trunk here <https://www.inwater.org/education/traveling-turtles-a-traveling-trunk-program/>

Educator Professional Development

FSU Office of STEM Teaching Activities (OSTA) - The function of the OSTA is to coordinate all activities related to science and mathematics teaching within the College of Arts and Sciences and to serve as the College's liaison with the College of Education. OSTA regularly works with Leon County Schools to provide resources via k12 student outreach programs and engaging teacher professional development. Programs and information, including on-demand resources and professional learning event info can be found on their website. <https://www.bio.fsu.edu/osta/tpdp.php>