NGSS CORRELATION

GUIDING QUESTION

How does your community make decisions about how to use land?

GRADES 6–8 DECISIONS, DECISIONS

PRACTICES

ENGAGING IN ARGUMENT FROM EVIDENCE

Students on the Town Council compare and critique different ways of solving the land-use dilemma.

OBTAINING, EVALUATING, AND COMMUNICATING INFORMATION

Student groups communicate information to the Town Council about their proposal.

CONCEPTS

HUMAN IMPACTS ON EARTH SYSTEMS

By developing proposals to address a land-use issue, students explore how human activities can alter natural habitats.

SYSTEMS AND SYSTEM MODELS

As students develop and defend their proposals, they determine how elements of human systems interact with natural systems.

SCIENCE AND ENGINEERING PRACTICES

Engaging in Argument from Evidence

Compare and critique two arguments on the same topic and analyze whether they emphasize similar or different evidence and/or interpretations of facts.

Obtaining, Evaluating, and Communicating Information

Communicate scientific and/or technical information (e.g. about a proposed object, tool, process, system) in writing and/or through oral presentations.

DISCIPLINARY CORE IDEAS

ESS3.C: Human Impacts on Earth Systems

Human activities have significantly altered the biosphere, sometimes damaging or destroying natural habitats and causing the extinction of other species. But changes to Earth's environments can have different impacts (negative and positive) for different living things.

PERFORMANCE EXPECTATION

MS-ESS3-3. Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

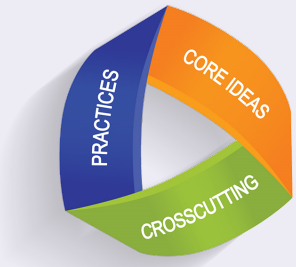
Note: Keep in mind that no single activity can fully meet a Performance Expectation.

CROSSCUTTING CONCEPTS

Systems and System Models

Systems may interact with other systems; they may have sub-systems and be a part of larger complex systems.

PROJECT LEARNING TREE
An initiative of SFI



NGSS CORRELATION

GUIDING QUESTION: GROUNDED IN PHENOMENA

Phenomenon-based instruction is directly connected to students' homes, communities, and cultures, thus making teaching and learning more diverse, inclusive, and relevant. PLT identifies Guiding Questions that drive phenomenon-based, three-dimensional learning for each of the 50 Explore Your Environment K-8 Activity Guide activities.

CONNECTING PLT'S EXPLORE YOUR ENVIRONMENT K–8 ACTIVITY GUIDE TO NGSS

IN THE ACTIVITY

The left hand column details where science connections can be found in the PLT activity.

PRACTICES

ENGAGING IN THE PRACTICES OF SCIENCE helps students understand how scientific knowledge develops. Students gain skill in the wide range of approaches that are used to investigate, model, and explain the world.

CONCEPTS

THESE CORE IDEAS HAVE BROAD IMPORTANCE across science disciplines, providing tools for understanding or investigating complex ideas and solving problems, and can be taught at progressive levels of depth and complexity.

Project Learning Tree is committed to supporting educators in providing instruction that helps students meet science education standards.

The Next Generation Science Standards (NGSS) define what students should know or be able to do at the end of instruction. To demonstrate learning, NGSS identifies Performance Expectations (PEs) that may be used to assess a student's knowledge and proficiency. To meet benchmarks, students engage in the three dimensions of science— Science & Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts—to explain a phenomenon or design a solution.

Activities in the *Explore Your Environment K-8 Activity Guide* provide students opportunities to explore the three dimensions of science to build knowledge and understanding. In addition, activities offer phenomenon-based learning, which involves exploring the real world through learner-centered, multidisciplinary investigations that promote inquiry and problem solving.

The NGSS Correlation pages for each activity include a guiding question, science connections found in the activity, and explicit NGSS correlations. Activities are organized around the three dimensions of science, making it useful for educators even if their state has not adopted NGSS.

FROM NGSS

The right hand column identifies correlations to specific NGSS standards, including references to the relevant PE for focus on the grade level band.

SCIENCE AND ENGINEERING PRACTICES

The practices are what students do to make sense of phenomena and reflect how scientists and engineers investigate the world and design solutions.

DISCIPLINARY CORE IDEAS

These foundational ideas of science are grouped into four domains: physical sciences; life sciences; Earth and space sciences; and engineering, technology and applications of science.

CROSSCUTTING CONCEPTS

These concepts hold true across the natural and engineered world. Students use them to make connections across disciplines, connect to prior experiences, and engage with material in other dimensions.

PROJECT LEARNING TREE
An initiative of SFI