

#### Grade 5

3.3.5.E Earth and Space Sciences: Earth and Human Activity

Students who demonstrate understanding can obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

Clarifying Statement: N/A
Assessment Boundary: N/A

#### Science and Engineering Practices (SEP)

## Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in 3–5 builds on K–2 experiences and progresses to evaluating the merit and accuracy of ideas and methods.

 Obtain and combine information from books and/or other reliable media to explain phenomena or solutions to a design problem.

#### **Disciplinary Core Ideas (DCI)**

#### **Human Impacts on Earth Systems**

 Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and communities are doing things to help protect Earth's resources and environments.

#### **Crosscutting Concepts (CCC)**

#### **Systems and System Models**

Natural and Material World.

 A system can be described in terms of its components and their interactions.

# Connections to Nature of Science Science Addresses Questions About the

Science findings are limited to questions that can be answered with empirical evidence.

**Pennsylvania Context:** Examples of Pennsylvania context include but are not limited to quarries, reclamation of mines, riparian buffer zones, stream bank fencing, forest and land management, Pennsylvania Conservation Districts, extension services, Pennsylvania Fish and Boat Commission, Pennsylvania Fish and Game Commission, and Pennsylvania Department of Agriculture.

PA Career Ready Skills: Demonstrate respect for the uniqueness of others.

#### Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Agriculture (AFNR)	CS.04.01.01.c: Devise strategies for stewarding natural resources at home and within community.
Science, Environmental Literacy and Sustainability (NAAEE)	5-8 Strand 2.3.A. Human-environment interactions: Learners describe human-caused changes that affect the immediate environment as well as other places, other people, and future times.

### Science, Technology & Engineering, and Environment Literacy & Sustainability (STEELS)



Standard Source	Possible Connections to Other Standard(s) or Practice(s)
PA Core Standards: ELA	CC.1.2.5.G: Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. CC.1.5.5.A: Engage effectively in a range of collaborative discussions on grade-level topics and texts, building on others' ideas and expressing their own clearly.
PA Core Standards and Practices: Math	MP.1: Make sense of problems and persevere in solving them. MP.6: Attend to precision. CC.2.4.5.A.2: Represent and interpret data using appropriate scale.
PA Standards: Social Studies	7.4.5.B: Identify the effect of people on the physical systems within a community.
Educational Technology (ISTE)	1.7. Global Collaborator: Students use digital tools to broaden their perspectives and enrich their learning by collaborating with others and working effectively in teams locally and globally.
Technology and Engineering (ITEEA)	STEL-4I: Explain why responsible use of technology requires sustainable management of resources.