



Grades 6–8

3.4.6-8.F Environmental Literacy and Sustainability: Environmental Literacy Skills

Students who demonstrate understanding can *obtain and communicate information on how integrated pest management could improve indoor and outdoor environments.*

Clarifying Statement: Examples of methods of integrated pest management may include biological (e.g., managing indoor air quality), cultural (e.g., planting locally pest-resistant crops or crop rotation), mechanical (e.g., trapping pests), and chemical (e.g., cleaning surfaces in schools) treatments of invasives; materials and procedures for cleaning surfaces and air in schools; and maintaining or promoting biodiversity.

Assessment Boundary: N/A

Science and Engineering Practices (SEP)	Disciplinary Core Ideas (DCI)	Crosscutting Concepts (CCC)
Obtaining, Evaluating, and Communicating Information Obtaining, evaluating, and communicating information in 6–8 builds on K–5 and progresses to evaluating the merit and validity of ideas and methods. <ul style="list-style-type: none"> Gather, read, and synthesize information from multiple appropriate sources and assess the credibility, accuracy, and possible bias of each publication and methods used, and describe how they are supported or now supported by evidence. 	Human Impacts on Earth Systems <ul style="list-style-type: none"> 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. 	Stability and Change <ul style="list-style-type: none"> Small changes in one part of a system might cause large changes in another part. Cause and Effect <ul style="list-style-type: none"> Cause and effect relationships may be used to predict phenomena in natural or designed systems.

Pennsylvania Context: Examples of Pennsylvania context include but are not limited to Pennsylvania farms (agriculture, urban agriculture, and aquaculture), businesses, and biotechnology industries.

PA Career Ready Skills: Analyze various perspectives on a situation.

Connections to Other Standards Content and Practices

Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Agriculture (AFNR)	CS.03.02.01.c: Create and implement a plan to improve safety, health and environmental management regulations in an AFNR workplace.



Standard Source	Possible Connections to Other Standard(s) or Practice(s)
Science, Environmental Literacy and Sustainability (NAAEE)	5-8 Strand 1.C. Collecting information: Learners locate and collect quantitative and qualitative information about the environment and environmental topics, using a range of methods and sources. They explain why they used selected information collection methods. 5-8 Strand 3.2.C. Planning and taking action: Learners use their research results to develop action strategies and design solutions at levels consistent with their maturity and preparation. As appropriate, they implement their plans.
PA Core Standards: ELA	CC.3.6.6-8.H: Draw evidence from informational texts to support analysis reflection, and research.CC.3.6.6-8.E: Use technology, including the internet, to produce and publish writing and present the relationships between information and ideas clearly and efficiently.
PA Core Standards and Practices: Math	MP.2: Reason abstractly and quantitatively. CC.2.4.6.B.1: Demonstrate an understanding of statistical variability by displaying, analyzing, and summarizing distributions. CC.2.4.7.B.3: Investigate chance processes and develop, use, and evaluate probability models.
PA Standards: Social Studies	6.1.6.D: Identify incentives that affect personal choices.
Educational Technology (ISTE)	1.3. Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts and make meaningful learning experiences for themselves and others.
Technology and Engineering (ITEEA)	STEL-3G: Explain how knowledge gained from other content areas affects the development of technological products and systems.