

PhD SCIENCE® Five Reasons to Choose *PhD Science*

PhD Science® is a hands-on K–5 science program that sparks wonder as students build enduring knowledge of how the scientific world works. *PhD Science* students think and act like real scientists as they ask questions, gather evidence, develop models, and construct explanations while investigating authentic phenomena.

As you look for science materials that foster curiosity while supporting all learners, there are five distinguishing elements that will set *PhD Science* apart from other science programs.

1 Authentic Phenomena Connect Science to the Real World

Authentic, real-world phenomena empower students to make sense of the world around them. Students make connections to real places and events, building background knowledge and an enduring understanding of science concepts.

Fine art on the covers connects to the module's anchor phenomenon.



2 A Coherent Storyline Builds Student Knowledge and Skills

Students build knowledge and skills across lessons, modules, and grade levels. Their knowledge gradually builds from concept to concept as students make sense of the larger phenomenon and topic. Their understanding deepens as they make connections to the real world and other content areas.

Building Knowledge and Skills Across Levels

Throughout *PhD Science*, students build knowledge and skills associated with the Science and Engineering Practices, Disciplinary Core Ideas, and Crosscutting Concepts.

Building Knowledge across Levels

The study of these plants and animals leads to investigations through Earth from the Biosphere to a more regional understanding of the movement of matter and energy and organisms and ecosystems in water. The plants have roots that absorb water and nutrients from the soil. The animals have bodies that absorb water and nutrients from the soil. The plants have leaves that absorb water and nutrients from the air. The animals have bodies that absorb water and nutrients from the air.

Why?

Why do these plants and animals live in these environments?

Why do these plants and animals live in these environments?

Module Map

Anchor Phenomenon: Life History & Migration	Phenomenon Question	Student Learning	Performance Expectation
How do plants and animals live in their environments?	How do plants and animals live in their environments?	How do plants and animals live in their environments?	How do plants and animals live in their environments?
How do plants and animals live in their environments?	How do plants and animals live in their environments?	How do plants and animals live in their environments?	How do plants and animals live in their environments?

Module Map

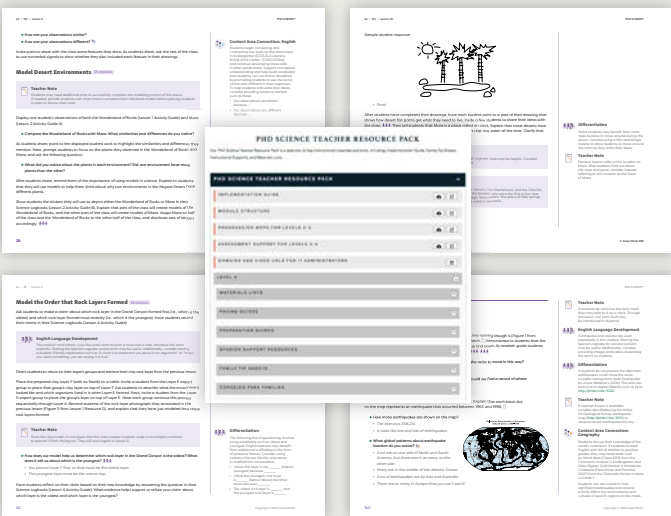
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Students build knowledge and skills associated with all three dimensions.

3 A Student-Driven Curriculum Engages with Hands-On Investigations

Students actively do science to build knowledge rather than memorizing and quickly forgetting scientific facts. Through hands-on experiences integrated in every module, students capture their observations and evidence in a consumable logbook with models, claims, explanations, predictions, collected data, and more.

Materials kits and other supports prepare teachers for student-driven, hands-on learning that is captured in consumable logbooks.



4 Equity is Advanced Through Universal Design for Learning (UDL)

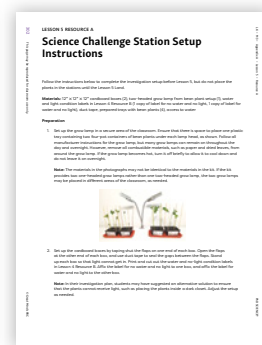
PhD Science provides all students with the opportunity to build knowledge of the scientific world in multiple formats, including video, trade books, and hands-on learning. The Teacher Edition includes just-in-time differentiation supports. The online Teacher Resource Pack provides additional tips and strategies, especially for action and expression.

Teachers are supported at point of use with additional supports found online.

5 Students Engage in the Practices of Real Scientists and Engineers

Every module includes a Science or Engineering Challenge where students apply what they're learning to answer and solve real-world questions and problems by designing and conducting their own investigations. Students engage in scientific discourse throughout modules to make sense of phenomena and develop scientific understanding.

Students do science rather than just read about it.



For a more in-depth view of PhD Science, visit greatminds.org/science.

