

PILOT OVERVIEW AND CHECKLIST

A *PhD Science*® pilot gives teachers and students the opportunity to experience the rich, knowledge-building K–5 science curriculum from Great Minds® through an abbreviated implementation.

TIMELINE

Great Minds offers flexibility in when pilots take place during the school year, but it is recommended that pilots follow the professional learning plan and schedule in place. Participating teachers pilot Module 1 or another agreed upon module over 6–8 weeks.

GOALS

Participating teachers build understanding of the following:

- *PhD Science* program components
- *PhD Science*'s learning design, including
 - the Content Learning Cycle students use to wonder and explore rich, authentic phenomena,
 - the phenomena and questioning structures that guide student learning,
 - the role of knowledge building as students begin to make sense of the world around them,
 - formative and summative assessments that contain alternative phenomena,
 - three-dimensional standards integration and state standards correlations, and
 - the structure and components of modules and lessons, including Launch, Learn, and Land at the lesson-level
- the curriculum's hands-on nature and the collaborative opportunities it provides for students

Participating students

- build scientific conceptual understanding,
- do and think as if they are scientists and engineers,
- engage in the practices of scientists and engineers as they do hands-on activities, read trade texts, and participate in sense-making,
- conduct investigations to process and communicate evidence to support their claims with sound reasoning,
- develop collaborative skills by discussing module topics, phenomena, and questions, and
- develop and use scientific terminology through the Activity Before Concept > Concept Before Terminology approach.

MATERIALS

Each pilot classroom will need the following materials:

- Teacher Edition (print or digital)
- Science Logbooks
- Core Texts
- Materials Kits

The following materials are suggested:

- PhD Projected
- Student Science Packs
- Assessment Packs
- *PhD Science in Sync*®

Participating teachers will need to create a Great Minds account to access the free Teacher Resource Pack, which contains the Implementation Guide and other resources. Levels K–2 teachers will be able to use that free account to access PDFs of the Teacher Edition and Science Logbooks as an [open educational resource](#) (OER) to their dashboard.

GREAT MINDS SUPPORT

Great Minds works closely with pilot sites to develop a comprehensive site plan for implementation.



EIGHT TO TEN WEEKS BEFORE PILOT

Leaders

- Meet with a member of the *PhD Science* Implementation Success (IS) team to communicate about length and goals of pilot.
 - Schedule the Launch *PhD Science* professional development (PD) session.
 - Determine start and end date of *PhD Science* Pilot.
 - Schedule check-ins with the IS team for the beginning, middle, and end of pilot.
- Select teachers to pilot *PhD Science* and communicate pilot goals to teachers.
- Order pilot materials for each pilot classroom.



FIVE WEEKS BEFORE PILOT

Leaders and Teachers

- Establish account on greatminds.org.
 - Add the *PhD Science* **Teacher Resource Pack*** to the dashboard.
 - Download and save the PDF of the Implementation Guide.



FOUR WEEKS BEFORE PILOT

Leaders

- Distribute materials to each participating teacher.
- Participate in the Launch *PhD Science* PD session with teachers.

Teachers

- Read Module Overview and skim lesson sets/ lessons to gain familiarity with lesson structure and components.
- Preview Module Storyline (Appendix B) to further develop understanding of pedagogy and student action.
- Participate in Launch *PhD Science* PD session.

*The Teacher Resource Pack includes the Implementation Guide, Module Structure, Materials Lists, Pacing Guides, Preparation Guides, Family Tip Sheets, and more.



THREE WEEKS BEFORE PILOT

Leaders

- Share with teachers the pilot and pacing expectations (e.g., that during initial implementation some lessons may take longer than suggested).

Teachers

- Continue gaining familiarity with program components and lesson structure with further reading and skimming of materials.
- Clarify pilot and pacing expectations with leaders.
- Preview Pacing Guides and Preparation Guides to ensure materials and content readiness.



ONE WEEK BEFORE PILOT

Leaders

- Share with teachers expected outcomes, observation schedules, and plans for evaluating effectiveness of pilot.
- Make a plan with teachers for sharing and analyzing artifacts to evaluate pilot outcomes (e.g., Science Logbook pages, rubrics from Teacher Edition).

Teachers

- Send home Family Tip Sheets (found in the Teacher Resource Pack) to families of participating students.
- Set up classroom based on conversation with IS partner for engaging with anchor visuals and conducting hands-on investigations.
- Clarify expected outcomes and observation plans with leaders.
- Make a plan with leaders for sharing and analyzing artifacts to evaluate pilot outcomes (e.g. Science Logbook pages, rubrics from Teacher Edition).

✓ **DURING PILOT (WEEKLY/ONGOING)**

Leaders

- Schedule and conduct classroom observations.
- Gather and analyze pilot artifacts.
- Maintain ongoing communication with teachers.

Teachers

- Update classroom setup and organize materials.
- Collaborate with other piloting teachers; discuss pacing and instructional routines, analyze student work, identify trends in student outcomes, and share implementation challenges.
- Participate in classroom observations and data collection (as determined in partnership with leaders).
- Attend ongoing Professional Learning opportunities, such as Learning Labs.
- Maintain ongoing communication with leaders.

✓ **AFTER PILOT**

Leaders

- Gather teacher input on the pilot's impact.
- Determine next steps in a curriculum adoption.

Teachers

- Share feedback on the pilot's impact with the leadership team.



every child
is capable of
greatness