PhD Science® Family Night | **OVERVIEW**

You may consider sharing some of the following information with parents or guardians. You could share this with them before the event, or you could present the information to them on the night of the event before sending them to the various stations with their students.

What Is *PhD Science*?

PhD Science is an exemplary new science program from Great Minds®, the creators of *Eureka Math®* and *Wit & Wisdom®*. Created by our team of teacher–writers and subject matter experts, this innovative curriculum inspires students to wonder about the world and empowers them to make sense of it.

***PhD Science* Is a Phenomenon-Driven Curriculum**

Scientific phenomena are observable events that can be explained or predicted through scientific understanding. They range from everyday events, such as animals interacting with a tree in the schoolyard, to extraordinary events that challenge our understanding of the world, such as a soccer ball floating on the International Space Station. By carefully selecting and introducing a variety of phenomena, *PhD Science* lays a path for students to reveal enduring knowledge about the world around them.

There are four modules per grade level. Modules begin with an anchor phenomenon with lessons throughout focused on supporting or investigative phenomena. As students connect the ideas revealed through supporting phenomena, they become equipped to apply their knowledge to a variety of contexts, including the anchor phenomenon. Throughout each module, students may share related phenomena they have experienced in their lives. And finally, students are assessed through phenomenon-driven assessments that are centered around explaining phenomena or solving problems that arise from phenomena.

PhD Science Is Student Driven

PhD Science uses recurring anchor visuals throughout each module to help develop coherence and to collect and display evidence of students' new knowledge, helping them integrate it with what they have already learned. Anchor visuals also make students' questions and thinking visible as they progress through each concept.

As a class, students organize their learning in each module with a common set of three anchor visuals.

- **Driving question board**: a chart that drives learning from concept to concept by organizing phenomenon-based student questions and new questions that arise through investigation
- **Anchor model:** a model that students develop and modify throughout the module as new learning emerges to explain the anchor phenomenon
- **Anchor chart:** a chart containing key scientific understandings that grows as knowledge develops
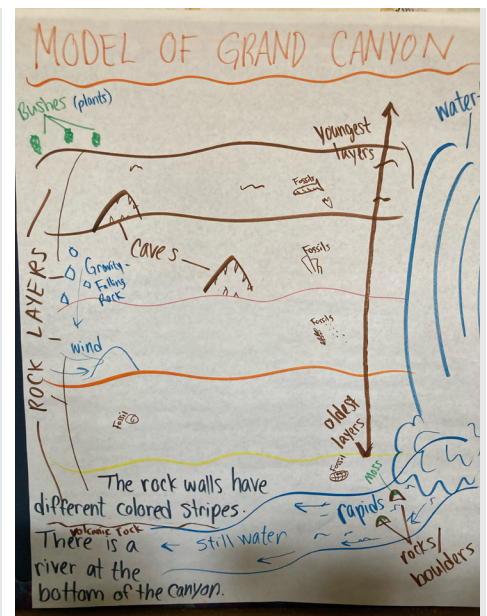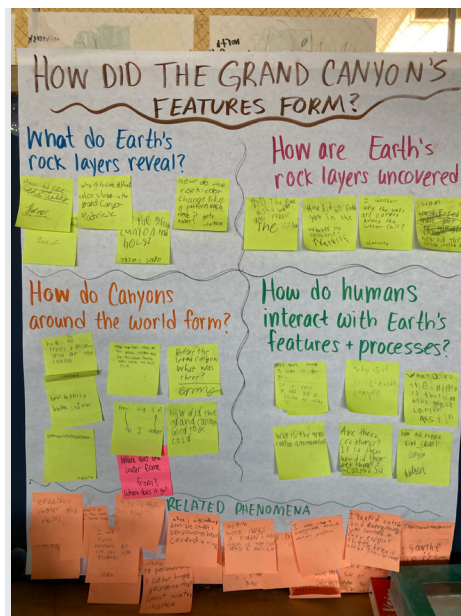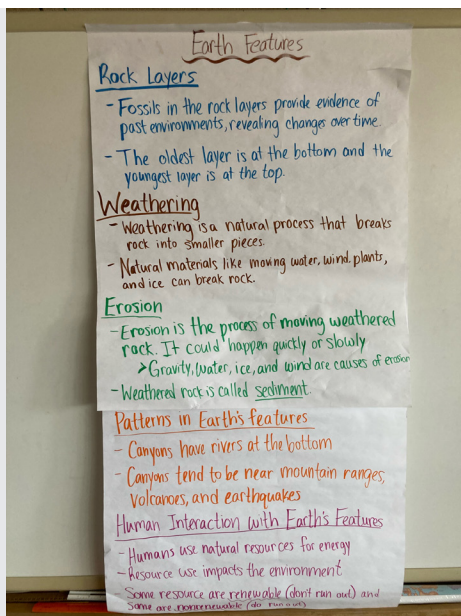
Examples from a Level 4 PhD Science *Classroom*

A *PhD Science* Classroom Involves Student Discussion

During every step of the learning process, students must have the opportunity to process information. They accomplish this when they clarify, justify, and interpret their ideas through discussion, allowing them to deepen their reasoning.

Students engage in multiple practices as they gather evidence and make sense of phenomena. Discourse is the sense-making tool used with each practice that allows students to put the pieces of evidence together to develop scientific understanding. Scientific discourse is integral to *PhD Science* and requires a classroom environment where all students productively share their ideas and questions.