



PreK-12 Science

Transfer Goals	Enduring Understandings	Essential Questions
<p>Students will be able to independently use their learning to:</p> <ul style="list-style-type: none"> • make observations and predictions in order to answer testable questions and use their senses, tools and materials to find possible solutions to problems. • observe and investigate patterns, connections, and changes in the natural world and explain their thinking with evidence. • describe and compare objects, situations, or events using relative scale and standard and nonstandard measurement tools, units, and attributes when making observations or solving problems. • investigate, observe, and explain how the parts of systems work together in order to function effectively and describe what happens when matter and energy is manipulated. 	<p>Students will understand that:</p> <ul style="list-style-type: none"> • anyone can be a scientist. • scientists ask questions, make observations, collect data, and use the data to inform. • everything is connected. • actions have outcomes. • science and technology are related. • existing beliefs can be challenged by new evidence. 	<p>Students will ask:</p> <ul style="list-style-type: none"> • What does it mean to be a scientist? • How does understanding the concepts of science help in understanding the world around us? • How do things, places, and ideas interact and change over time?

Portrait of a Graduate Attribute	Science Description
Communicate	Students will express ideas effectively through speaking, active listening, and writing to support evidence.
Collaborate	Students will participate in a variety of groups in order to conduct investigations, share evidence, and defend hypothesis. Students will take pride in their own contributions and recognize and appreciate the contributions of others working toward the same goal.
Create	Students will engage in creative thinking and act on creative ideas to make designs, models, or devices using science inquiry and knowledge.
Persevere	Students will develop positive attitudes about themselves as scientists. They will persist to accomplish difficult investigations and view failure as an opportunity to learn.
Problem Solve	Students will reflect on their learning processes to solve problems, reason, reach conclusions and apply to authentic tasks.
Self-Direct	Students will set goals, show initiative, and manage time effectively.