

4th Grade - Science

4th Science	<p>In Grade 4, students will study how the structures of living and nonliving organisms affect their functions, beginning with an examination of the human respiratory and circulatory system. By reflecting on their own physical reactions to rest and activity, students will examine the many different ways energy moves through the world. Scholars will question whether objects at rest have energy, while also enjoying the inherent fun of seeing what happens when objects collide. After learning about how energy can be transferred from one object to another, students will examine the peculiar motion of waves, puzzling over and Socratically debating whether a wave can be said to be a “thing” when it has no consistent body. Students will then apply their understanding of waves to examine how sound and light propagate, which leads directly to an inquiry into the anatomy of the human ear and eye. From there, students will study the interdependence between the structures and functions of both plants and animals, arriving at an understanding of how an organism’s environment can play a role in physically determining that organism’s shape. Zooming out from solitary organisms and ecosystems, students will focus on the various processes that determine the Earth’s structure, observing how that structure can change over time through erosion. Finally, students will gain an appreciation for the natural resources at our disposal, returning to the beginning of the year’s inquiry into energy by understanding how human beings can continue to use energy for everyday life.</p> <p>Unit 1: Energy Transformation and Change</p> <p>Unit 2: Investigating Wave Motion</p> <p>Unit 3: Structures and Functions of Living</p> <p>Beings Unit 4: Processes that Shape the Earth</p> <p>Unit 5: Using Natural Resources for Energy</p> <p>Unit 6: Human Respiration and Circulation</p>
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