

Science: Grade 4

| UNIT/Weeks | Timeline/Topics | Essential Questions |
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| 1.6 | <p><u>Structures and Functions of Living Things</u></p> <ul style="list-style-type: none"> • Structures and Functions of Plants • Structures and Functions of Animals • Information Processing in Animals • The Role of Animals' Eyes | <ul style="list-style-type: none"> • How do plant structures help them survive and reproduce? • How do animal structures help them survive? • How do animals sense and respond to information? • How do animals see? |
| 1.6 | <p><u>Energy and Motion</u></p> <ul style="list-style-type: none"> • Energy and Speed • Energy Change in Collisions | <ul style="list-style-type: none"> • How are energy and speed related? • What happens when objects collide? |
| 1.6 | <p><u>Transfer of Energy</u></p> <ul style="list-style-type: none"> • Types of Energy Transfer • Transfer of Energy by Electricity • Transfer of Energy by Light • Design Energy Solutions | <ul style="list-style-type: none"> • How is energy transferred? • How do the electric currents transfer energy? • How does light transfer energy? • What kinds of problems can be solved by understanding energy transfer? |
| 1.6 | <p><u>Wave Patterns and Information Transfer</u></p> <ul style="list-style-type: none"> • How Waves Move • How Waves Transmit Information | <ul style="list-style-type: none"> • How do waves travel? • How do we use patterns and waves to transmit information? |
| 1.6 | <p><u>Energy From Natural Resources</u></p> <ul style="list-style-type: none"> • Energy from Nonrenewable Resources • Energy from Renewable Resources | <ul style="list-style-type: none"> • What are the benefits and drawbacks of renewable and nonrenewable resources? • How are renewable resources used as energy? |

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| | | <ul style="list-style-type: none"> • How do variations in traits provide advantages for survival? |
| 1.6 | <p><u>Patterns of Earth's Changing Features</u></p> <ul style="list-style-type: none"> • Earth's Landforms and Features • Effects of Erosion • History of Earth's Surface | <ul style="list-style-type: none"> • What are Earth's features? • How do living and nonliving things change Earth's surface? • What can rock formations tell us about Earth's history? |
| 1.8 | <p><u>Natural Hazards</u></p> <ul style="list-style-type: none"> • Earthquakes and Volcanoes • Tsunamis and Floods | <ul style="list-style-type: none"> • How are people affected by earthquakes and volcanoes? • How can people prepare for floods? |