# 8th Grade Science

## Quarter 1 Standards

- **1. 8.P1U1.1** I can develop and use a model to demonstrate that atoms and molecules can be combined or rearranged in chemical reactions to form new compounds with the total number of each type of atom conserved.
- **2. 8.P1U1.2** I can obtain and evaluate information regarding how scientists identify substances based on unique physical and chemical properties.
- **3. 8.**P4U1.3 I can construct an explanation on how energy can be transferred from one energy store to another.
- **4. 8.P4U1.4** I can develop and use mathematical models to explain wave characteristics and interactions.
- **5. 8.P4U2.5** I can develop a solution to increase efficiency when transferring energy from one source to another.

### Quarter 2 Standards

- **1. 8.E1U1.6** I can analyze and interpret data about the Earth's geological column to communicate relative ages of rock layers and fossils.
- **2. 8.**E1U3.7 I can obtain, evaluate, and communicate information about data and historical patterns to predict natural hazards and other geological events.
- **3. 8.**E1U3.8 I can construct and support an argument about how human consumption of limited resources impacts the biosphere.
- **4. 8.P4U1.3** I can construct an explanation on how energy can be transferred from one energy store to another.
- **5. 8.P4U1.4** I can develop and use mathematical models to explain wave characteristics and interactions.
- **6. 8.P4U2.5** I can develop a solution to increase efficiency when transferring energy from one source to another.

# Quarter 3 Standards

- **1. 8.E1U1.6** I can analyze and interpret data about the Earth's geological column to communicate relative ages of rock layers and fossils.
- **2. 8.**E1U3.7 I can obtain, evaluate, and communicate information about data and historical patterns to predict natural hazards and other geological events.
- **3. 8.**E1U3.8 I can construct and support an argument about how human consumption of limited resources impacts the biosphere.
- 4. 8.L3U1.9 I can construct an explanation of how genetic variations occur in offspring through the inheritance of traits or through mutations.

- **5. 8.L3U3.10** I can communicate how advancements in technology have furthered the field of genetic research and use evidence to support an argument about the positive and negative effects of genetic research on human lives.
- 6. 8.L4U1.11 I can develop and use a model to explain how natural selection may lead to increases and decreases of specific traits in populations over time.
- 7. 8.L4U1.12 I can gather and communicate evidence on how the process of natural selection provides an explanation of how new species can evolve.

## **Quarter 4 Standards**

- **1. 8.L3U1.9** I can construct an explanation of how genetic variations occur in offspring through the inheritance of traits or through mutations.
- 2. 8.L3U3.10 I can communicate how advancements in technology have furthered the field of genetic research and use evidence to support an argument about the positive and negative effects of genetic research on human lives.
- **3. 8.L4U1.11** I can develop and use a model to explain how natural selection may lead to increases and decreases of specific traits in populations over time.
- 4. 8.L4U1.12 I can gather and communicate evidence on how the process of natural selection provides an explanation of how new species can evolve.