Arizona Science

Grade 8

Adopted 2018

Physical Sciences	1. **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.** `8.P1U1.1`
	2. **Obtain and evaluate information regarding how scientists identify substances based on unique physical and chemical properties.** `8.P1U1.2`
	3. **Construct an explanation on how energy can be transferred from one energy store to another.** `8.P4U1.3`
	4. **Develop and use mathematical models to explain wave characteristics and interactions.** `8.P4U1.4`
	5. **Develop a solution to increase efficiency when transferring energy from one source to another.** `8.P4U2.5`
Earth and Space Sciences	6. **Analyze and interpret data about the Earth's geological column to communicate relative ages of rock layers and fossils.** `8.E1U1.6`
	7. **Obtain, evaluate, and communicate information about data and historical patterns to predict natural hazards and other geological events.** `8.E1U3.7`
	8. **Construct and support an argument about how human consumption of limited resources impacts the biosphere.** `8.E1U3.8`
Life Sciences	9. **Construct an explanation of how genetic variations occur in offspring through the inheritance of traits or through mutations.** `8.L3U1.9`
	10. **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.** `8.L3U3.10`
	11. **Develop and use a model to explain how natural selection may lead to increases and decreases of specific traits in populations over time.** `8.L4U1.11`
	12. **Gather and communicate evidence on how the process of natural selection provides an explanation of how new species can evolve.** `8.L4U1.12`