Arizona Science

Grade 7

Adopted 2018

Physical Sciences	1. **Collect and analyze data demonstrating how electromagnetic forces can be attractive or repulsive and can vary in strength.** 7.P2U1.1
	2. **Develop and use a model to predict how forces act on objects at a distance.** 7.P2U1.2
	3. **Plan and carry out an investigation that can support an evidence-based explanation of how objects on Earth are affected by gravitational force.** 7.P3U1.3
	4. **Use non-algebraic mathematics and computational thinking to explain Newton's laws of motion.** 7.P3U1.4
Earth and Space Sciences	5. **Construct a model that shows the cycling of matter and flow of energy in the atmosphere, hydrosphere, and geosphere.** 7.E1U1.5
	6. **Construct a model to explain how the distribution of fossils and rocks, continental shapes, and seafloor structures provides evidence of the past plate motions.** 7.E1U1.6
	7. **Analyze and interpret data to construct an explanation for how advances in technology has improved weather prediction.** 7.E1U2.7
Life Sciences	8. **Obtain, evaluate, and communicate information to provide evidence that all living things are made of cells, cells come from existing cells, and cells are the basic structural and functional unit of all living things.** 7.L1U1.8
	9. **Construct an explanation to demonstrate the relationship between major cell structures and cell functions (plant and animal).** 7.L1U1.9
	10. **Develop and use a model to explain how cells, tissues, and organ systems maintain life (animals).** 7.L1U1.10
	11. **Explain how organisms maintain internal stability and evaluate the effect of the external factors on organisms' internal stability.** 7.L1U1.11
	12. **Construct an explanation for how some plant cells convert light energy into food energy.** 7.L2U1.12