

Science Competencies

General Science

√	Targets	Date Completed	Evidence/Notes
	Lead scientific investigations		
1.1	Ask a scientific question		
1.2	Formulate a hypothesis		
1.3	Define and Analyze variables		
1.4	Plan an Investigation		
1.5	Organize and strengthen plan		
1.6	Conduct the investigation		
	Analyze and interpret data		
2.1	Analyze and interpret data		
2.2	Explain and represent relationships between variables		
2.3	Explain limitations and sources of error		
2.4	Construct evidence-based explanations		
2.5	Receive and respond to critique		
2.6	Follow writing conventions		
	Develop and use models		
3.1	Create models to represent systems		
3.2	Use models to communicate ideas		
3.3	Use models to make predictions		
3.4	Evaluate and refine models		
	Apply math and computational thinking		
4.1	Apply math concepts to scientific problems		
4.2	Represent conclusions mathematically		
4.3	Use digital tools		
4.4	Apply metacognitive thinking		
	Obtain, evaluate, and communicate information		
5.1	Gather and analyze credible sources		
5.2	Interpret symbols and scientific terms		
5.3	Identify and summarize central ideas		

5.4	Evaluate competing arguments		
5.5	Analyze text structure and purpose		
5.6	Communicate scientific ideas and concepts		
	Apply cross-cutting concepts		
6.1	Identify and analyze patterns		
6.2	Evaluate cause and effect		
6.3	Apply knowledge of scale, proportion, and quantity		
6.4	Analyze systems and models		
6.5	Model transfers and cycles of energy and matter		
6.6	Apply knowledge of structure and function		
6.7	Analyze stability and change		