

 Module/ Lab Topic	Context							Tools/Skills							Models			Regional Focus		Grade	
	Climate	Geology	Oceanography/Marine Science	Chemistry	Biology	Physics	Environmental Science	Reading Primary Literature	Computer Programming option	Graphing Data	Statistics	Analyzing and Interpreting Data	Debate/Arguing from evidence	Developing Research Question	Physical	Mathematical	Graphic Representation	Place-Based (PNW)	Global	Middle School	High School/Intro college
1. Simple Climate Model using Excel	X					X	X				X		X		X	X		X			X
2. Exploring Historical Temperature Records	X						X		X	X	X					X	X	X			X
3. NASA MERRA Circulation Model (Radiation and transport)	X		X			X					X			X		X		X			X
4. Understanding Paleoproxies using Ice Cores	X	X	X	X			X		X	X	X	X						X	X	X	X
5. Earth's Energy Balance (Terrarium)	X		X			X	X							X							X
6. Biological Pump	X	X	X	X	X		X	X								X		X	X	X	X
7. Scientific Evidence for Climate Change	X						X	X				X						X			X
8. ENSO	X	X	X				X		X	X	X					X	X	X	X	X	X
9. Ice Cores, Isotopes, and Temperature	X			X					X	X	X				X	X		X			X
10. Understanding the impact of Ocean Acidification on Oysters using published data	X		X	X	X		X		X		X					X	X				X
11. Glaciology and Erosion	X	X	X				X							X			X		X		
12. Landslides Revealed	X	X				X		X	X	X	X			X	X		X				X
13. Rain on Snow Flooding	X	X				X	X				X				X		X				X
14. Presenting Science for Policy	X						X	X				X									X
15. Fish Kills in Hood Canal			X	X	X		X	X									X		X		
16. Climate-Change in Small-Town Alaska	X	X	X		X		X										X		X		
17. Harmful Algal Blooms and Climate Change	X		X		X		X				X	X					X		X		