The "Laws" of Natural Systems
Trimester 2 Curriculum Map

Learning Targets	Content Sequence and Standards	Assessments
I can explain the 3 "laws" of natural systems: thermodynamics, limits of growth, and self-organization. I can analyze human systems by applying the laws of natural systems to them. I can develop the skills of an earth sysem scientist	**Systems Refresher** System Stories Forcing factor: Snow Systems Interactions Walk **Limits to Growth** Survival 101 – what do you *need* Rapa Nui – respecting limits Wessels Readings Comparative Analysis of Deer and Human Population Curves The Most Imprtant Discovery? -Nitrogen Fixation Case Study Bumper Sticker Activity **Thermodynamics** Messy Room Activity: an exploration of entropy Wessels Reading Ecosystem Analysis -Understanding Trophic Levels -Track the Energy Activity Ice Cream Lab LT summary On Demand Entropy Presentation **Quiz** **Self-organization** Wessels Readings Nitch Discussion **Analysis of Human Systems Project** Student Presentations on research papers, and models of redesigned systems. Earth System Stories Snow Walk Systems Interaction ID Walk Hypothesis, Theory, Law reading Oh Deer Analysis Energy Activity Analysis Nitrogen Fixation: Take a Stand Ice Cream lab Human Application Project	**Formative** Systems walks and discussions - **Formative** Oh Deer Lab It says, I say, and so discussions Limit To Growth Bumper Sticker **Formative** Food Web Activity Ice Cream Lab Taking Inventory – Writing about Learning Targets On Demand Presentation **Summative** Quiz Human System Analysis: - Paper - Model - Presentation Evidence based on performance during labs and analysis activities