NorthBay NGSS for Interactive Videos

Grade	Middle School NGSS Earth and Space Science	Title of Video
6th Grade	MS-ESS2-4 Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	***Water Cycle With Ms. Alaina***
	MS-ESS2-5 Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.	***Atmosphere & Weather with Mr. Corey***
	MS-ESS2-6. Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.	***Atmospheric & Oceanic Circulation with Mr. Steven***
	MS-ESS1-1. Develop and use a model of the Earth-sun-moon system to describe the cyclic patterns of lunar phases, eclipses of the sun and moon, and seasons	***Earth's Place in the Universe with Ms. Alaina***
	Life Science	
7th Grade	MS-LS4-5 Gather and synthesize information about technologies that have changed the way humans influence the inheritance of desired traits in organisms.	***GMO's with Mr. Dylan***
	MS-LS3-2 Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with genetic variation.	***Genetics with Ms. Ashley***
	MS-LS4-3. Analyze displays of pictorial data to compare patterns of similarities in the embryological development across multiple species to identify relationships not evident in the fully formed anatomy.	***Embryology with Ms. Emma***
	Physical Science	
8th Grade	MS-PS1-4 Develop a model that predicts and describes changes in particle motion, temperature, and state of a pure substance when thermal energy is added or removed.	***Energy of Chemistry with Ms. Sam***
	MS-PS3-4 Plan an investigation to determine the relationships among the energy transferred, the type of matter, the mass, and the change in the average kinetic energy of the particles as measured by the temperature of the sample.	***Energy of Chemistry with Mr. Bob***
	MS-PS1-2 Analyze and interpret data on the properties of substances before and after the substances interact to determine if a chemical reaction has occurred.	***Chemical Reactions with Mr. Bob***
	MS- PS2-2 Plan an investigation to provide evidence that the change in an object's motion depends on the sum of the forces on the object and the mass of the object.	***Newton's 3rd Law of Motion with Ms. Ashley***

Grade	High School NGSS Earth and Space Science	Title of Video
9th-12th	HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.	***Carbon Cycling with Mr. Steven***
	HS-ESS3-6 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity	***How Humans Impact the Carbon Cycle with Ms. Sam and Ms. Alaina***
	Life Science	
10th-12th	HS-LS4-4. Construct an explanation based on evidence for how natural selection leads to adaptation of populations	***Natural Selection with Mr. Marquise***
	HS-LS3-2. Make and defend a claim based on evidence that inheritable genetic variations may result from: (1) new genetic combinations through meiosis, (2) viable errors occurring during replication, and/or (3) mutations caused by environmental factors.	***Natural Selection with Mr. Dylan***
	HS-LS 2-5 Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and geosphere.	***The Carbon Cycle with Ms. Emma***
	Mendelian Genetics	***Mendelian Genetics with Mr. Dylan***
11th-12th	Physical Science with Applications in Biology: Invasive Species	***Invasive Species with Ms. Jess***
	Zoology: Birds	***Zoology: Birds with Ms. Jess***
	Zoology: Mammals	***Zoology: Mammals with Ms. Sam***