Lesson Plans For: Penny Krumm March 16-20 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Identification of bacteria	Complete Bacterial ID game	What is the concentration of 7Up? Assign lab report	Lab: looking at mechanical advantage and efficiency 1 - inclined plane	Conduction, convection, and radiation	Discuss stars, characteristics, lifespan
Tuesday	Quiz/TEST Bacteria Begin discussion of protists	Begin discussion over protozoans	Lab report due Practice day Molarity	Lab: mechanical advantage and efficiency 2 - lever	Heat exchangers	Constellation activity - brief poster - 3minutes
Wednesday	Complete discussion of protiists	Lab: protozoan slides	What is dilution: serial and calculated	Lab: mechanical advantage and efficiency 3 - pulleys	Quantification of heat energy - joules vs calories	Constellation activity - work day
Thursday	Lab: observing protists	Discussion over algae	Lab: dilutions of koolaid	Problem solving day - mechanical advantage and efficiency	Quantifying heat energy - calorimetry	Constellation in a minute presentations
Friday Personal Day	Protist worksheet	Lab: algae slides	Problem solving dilutions and molarity	Additional problems mechanical advantage and efficiency	Basic Q=mcat problems	Locating constellations activity

Lesson Plans For: Penny Krumm Week of March 9-13, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**

Monday	No school - professional development					
Tuesday	Prep bacterial plates Begin discussion of bacterial, traits	Discussion of monera - how to classify Preserved slides	Activity: chalk talk, how many atoms are in a mole?	practice problem solving potential and kinetic energy	Design the great American egg drop	what is a light year activity? Comparing time to distance
Wednesday	Complete discussion of bacteria traits Gram Stain	Prep bacterial plates Complete discussion of bacteria - identification	Discuss molarity as concentration - moles/liter	lab: conservation of energy and the roller coaster	Experiment Egg Drop	Sampling space objects - use representative sampling to estimate numbers in space
Thursday	Colony description/ Growing bacterial culture	Lab: Simple and Gram staining	practice Molarity calculations	complete lab over conservation of energy	Discuss flow of heat energy and laws of thermodynamics	Complete representative sampling activity
Friday	Plating bacterial culture with antibiotics	Practical activity: Bacterial ID game	What is the concentration of 7 up? Lab Assign: lab report	problem solving with conservation of energy Introduce mechanical advantage and efficiency	Lab: heat and energy transfer and insulation	discuss phenomena found in space: nebula, black holes, meteors comets etc.

Lesson Plans For: Penny Krumm Week of March 2-6, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period/7th Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Finish discussion over cladistics	Day 2: Food web	Review worksheet over compound	Introduce work and power and energy; law	Lever lab: class 2 and 3	Mineral ID lab day 2

			formulas, polarity and shape	of conservation of energy		
Tuesday	Activity: Building a cladogram	Discuss other factors that allow scientists to classify organisms	TEST: compound formulas, polarity and shape	Mechanical energy: Potential and kinetic energy Activity Sliding washers	Activity: levers in everyday life	Rock ID lab day 1
Wednesday 2:00 PLC	Activity: Using keys to identify organisms	Quiz: food webs and dichotomous keys Activity: observing characteristics	Go over test Discuss quantifying atoms, molecules, and moles	Problem solving potential and kinetic energy;	pulleys as a simple machine	Rock ID lab day 2
Thursday	Discuss viruses - living or not	Activity: symmetry in organisms and complexity levels	Activity: Chalk talk Practice atoms, molecules, and moles calculations	Discuss conservation of energy: total energy before incident = total energy after	conservation of energy and All American egg drop	Rock Formations
Friday End Qtr 3	Quiz: organizing living things	Discuss domains and classification levels Slides: viruses, bacteria, plants, animals	Discuss moles and molarity as quantification of matter	Lab: conservation of energy	conservation of energy and the all American egg drop	Weathering of Rock materials

Lesson Plans For: Penny Krumm Week of February 24-28, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period/7th Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**

Monday	Test: evolution	Cladograms explain relationships between organisms	Lab: compound formulas, polarity and shape: Building compounds	Review for rotation test	Conservation of energy PE=KE and rollercoasters	Discuss tusnami as an effect of earthquakes: strength, height, structure, devastation and warning system
Tuesday Gone to SDI training P/T conf	Take notes over ch 25, 26 Classification of organisms	Dichotomous key worksheet	Review worksheet over compound formulas, polarity and shape	Rotation TEST	Video and summary over conservation of energy	Ring of fire graphing activity - location
Wednesday	Complete discussion classification of organisms	Due: dichotomous key wksht Food Web Game: who eats whom?	TEST: compound formulas, polarity and shape	Discuss work and power	Discuss different types of simple machines	Mineral ID lab day
Thursday P/T conf	Using a cladogram	Activity: predator/prey relationships	Go over test Begin discussion over atoms, moles, and molecules Activity: Chalk Talk	Lab work and power ratings	Lab: simple machines	Rock ID lab day 1
Friday No school						

Lesson Plans For: Penny Krumm Week of February 17-21, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period/7th Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Hardy Weinberg activity	Discuss classification processes	Discuss polarity and electronegativity VSPER molecular shape	Review for rotation test	Discuss work and power	Present Earthquake projects
Tuesday	Review for test	Activity: what is a cladogram?	Practice predicting shape	Review for rotation test	Human work and power lab	Mineral ID lab day
Wednesday	Review 2 for test	How to use a dichotomous key	Review for test over compounds	TEST: rotation and torques	Discuss different types of simple machines	Rock ID lab day 1
Thursday	Test: evolution	Harry Potter dichotomous key	TEST: compounds	Discuss work and power	Lab: simple machines	Rock ID lab day 2
Friday PD no students	PD - no students					

Lesson Plans For: Penny Krumm Week of February 10-14, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Discuss processes of natural selection	Discuss history and why there's still disease	Lab: covalent compounds	Lab: torques and force	Discuss friction as a force	Work day on Earthquake project
Tuesday	Discuss Hardy Weinberg principle and evidence of natural solution	Disease transmission activity	Discuss lewis diagramming	Problem solving torques	Using friction to calculate net force	Presentations: earthquakes
Wednesday	Discuss	Discuss speciation	Practice lewis	Problem solving	Forces can rotate	Discuss

	speciation	processes	diagramming compounds	torques 2		identification of minerals
Thursday	Review for test over Evolution	Discuss classification processes	Discuss polarity of compounds	Review for rotation test	Lab: Rotational forces	Lab: mineral ID lab
Friday gone	TEST: evolution	Activity: what is a cladogram?	Practice lewis diagramming and polarity	TEST: rotation and torques	Basic rotation problems	Take notes over rock identification

Lesson Plans For: Penny Krumm February 3-7, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Grow plates Work on NOVA evolution	Discuss evolution and embryology, and biochemistry	Discuss balancing compounds, monotomic and polyatomic ions	Rotation problem solving	Discuss first law of motion Inertia activities	Activity: different kinds of faults and movement of faults
Tuesday	Transformation of fluorescent protein	Activity: biochemistry similarities	Work day: chemical formulas and names	Merry go round experiment	Second law of motion F=ma day 1	Locating the epicenter of an earthquake

Wednesday 2:00 PLC	Work on NOVA evolution	Activity: natural selection	Discuss different types of compounds, covalent and ionic, traits	Quiz: rotation	Second law of motion day 2	Complete locating the epicenter of an earthquake
Thursday	Plasmid DNA	Discuss history and why there's still disease	Lab: ionic vs covalent compounds	Discuss torques, force and distance from reference point	Third law of motion Balloon rockets	Earthquake events project
Friday	Complete plasmid DNA Work on NOVA evolution	Disease transmission activity	Lab: covalent compounds are polymers	Lab: torques and force	Friction as a force	Work on project

Lesson Plans For: Penny Krumm week of Jan. 27-31, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Discuss Ch 22 history of evolution	Timeline of life scale model	Activity: Who Am I Identifying elements by their traits	Impact and momentum Lab	Mass or velocity have bigger effect lab	Activity: making a topographic playdough map
Tuesday Dr appt PM	Complete ch 22 history of evolution Assign ch review Due Thursday	Evidence for evolution activity: similarity in DNA sequences	Discuss atoms vs ions, purpose structure, naming	Complete problem solving momentum and impact	Basic calculations velocity and momentum	Quiz: topographic mapping Assign: article Mars landing
Wednesday 2:00 pm PLC	HHMI evolution activity	Evilution slide show (AP bio)	Discuss compound formation, formula and naming	Introduce rotational and revolutionary motion, planetary, fixed radius	Lab: measuring forces - force and weight	Article due What is a mineral and how do we identify them?

		Share evolution note framework and classwide ideas				
Thursday	Ch 22 review due Complete HHMI evolution activity	Activity: embryology, homologous/analagous structures, vestigial structures	Practice balancing chemical compound formulas	Lab: does mass affect rotational velocity?	Activity: First law of motion - law of inertia	Lab:mineral ID day 1
Friday	NOVA evolution simulation	Activity: fossils as evidence for change	Discuss polyatomic ions and differences in naming	Complete rotational motion lab Introduce Kepler's Laws	Activity: Second law of motion	Lab: mineral ID day 2

Lesson Plans For: Penny Krumm Week of Jan. 20-24, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	No School - PD					
Tuesday	Genetic profiling online activity	CPR testing	Discuss trends of the periodic table	Lab: conservation of momentum	Look at momentum in lab - FT=mv	Topographic mapping 1
Wednesday	Begin ch 21 evolution	Chalk walk - what is evolution	Lab: families of elements	Momentum problem solving	Conserv. Of momentum lab	Topographic mapping 2
Thursday	Discuss history of Earth and of evolutionary ideas	Compiling ideas into a timeline for discussion	Activity: who am I	Problem solving day momentum and impact	Discuss what is a force? (Use lab scenarios to discuss forces involved)	Topographic mapping 3

					Balanced vs unbalanced	
Friday	HHMI evolution activity	Evolutionary Timeline activity	Activity day 2: who am I Hand out polyatomic ion sheet	Complete problem solving momentum and impact	Lab: measuring forces - force and weight	Quiz: topo. Maps Introduce rocks and minerals

Lesson Plans For: Penny Krumm Week of January 13-17, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday **6th - ind. lab**	Making agarose gel/loading/run gel	CPR testing	Complete discussion over periodic table Activity: sorting cards	F=ma, net forces and the car	Problem solving velocity and acceleration	AR layers of the earth
Tuesday	Set up for transformation of fluorescent gene	CPR testing	Lab: Families of elements	Problem solving day	Discuss motion due to gravity - gravity is constant	Introduce topographical mapping
Wednesday	Transformation of fluorescent gene	Introduce evolution Chalk talk	Lab: Transition elements	Discuss gravitational forces and Kepler's laws of planetary motion	Complete gravity is constant lab	Mapping topography practice
Thursday	Complete transformation lab	Group ideas	Graphing trends of periodicity	Lab: rotational motion, affect of mass and radius on velocity	Problem solving with gravity	Lab: map the topography

Friday	DNA fingerprinting	Timeline of life	Quiz: periodic table Hand out list of ions to know	Problem solving day with rotational motion	Discuss momentum and ft=mv	Analysing a topographical map

Lesson Plans For: Penny Krumm January 6-10, 2020

previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Ch 16 history of DNA	CPR training	Begin discussion over periodicity: general arrangement of table	Second law of motion Lab: f=ma	Lab: Frame of reference	Layers of the earth - interactive online education
Tuesday	transcription/translation	CPR training	Complete discussion over periodic table Activity: sorting cards	Problem solving F=ma	Lab: average speed	Topographical mapping
Wednesday	Online plasmid DNA	CPR training	Lab: Families of elements	Lab: water rocket and second law of motion	Lab: instantaneous speed	Topographical mapping activity
Thursday	Modeling DNA transformation	CPR training	Lab: Transition elements	Third law of motion Action reaction lab	Lab: acceleration/deceleration	Reading topographical maps
Friday	Ch 20 DNA technology	CPR training	TEST: element symbols Graphing trends of periodicity	Gravitation laws	Problem solving motion day	Topographical mapping

Lesson Plans For: Penny Krumm January 3, 2020 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday						
Tuesday						
Wednesday						
Thursday						
Friday	Begin discussion DNA technology	Begin CPR training	Review over element symbols to know - TEST next Friday	Review over F=ma Problem solving, prep water rocket lab	Introduction of physics concepts for semester 2: examples of basic problem solving	Introduction of earth science concepts for semester 2

Lesson Plans For: Penny Krumm December 16-20, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	TEST Genetics	Spongebob genetics	Learn chemical symbols	Lab: rocket	Practice chemical equations	Alternative Energy Solar Cells
Tuesday	Mutations in Chromosomes and Chromosome Mapping	Spongebob genetics	Learn chemical symbols	Problem solving rocketry	Lab: chemical reactions/equations	Alternative energy Wind and water power
Wednesday	Chi square analysis lab: candy	Pedigrees	Quiz: chemical symbols	Lab: calculating net force on slope	Cookie equations	Start Gorillas in the Mist
Thursday **Gone all day - Dr**	Chi square worksheet	Pedigree worksheet	https://www.chemistryworld.com/opinion/whats-next-after-the-international-year-of-the-periodic-table/4010732.article	Net forces problems	Make up work day for semester	Finish the movie Gorillas in the Mist
Friday						

Lesson Plans For: Penny Krumm December 9-13, 2019 previous week's plans listed below

Prep	**Adv. Biology**	**Biology 1**	**Chemistry**	**Physics**	**Physical Science**	**Env.**

6th Period	1st Period	2nd Period	3rd Period	4th Period	5th Period	Science/Earth Science 8th Period
Monday	Chi Square analysis of data	Interpreting DNA Translation Assign: Transcription and Translation ws	Quiz: protons, neutrons, electrons, atomic mass Introduce electron configuration	Complete lab: who slides the quickest?	Discuss concentration of solutions - Acidity and pH Activity: Concentrated or dilute	Watts the cost activity - electricity conservation
Tuesday	Complete Chi Square analysis	Quiz: Transcription and Translation Discuss DNA to genes	Valence configuration, and ionic configuration Practice electron configuration	Discuss problem solving with forces and friction, net forces	Discuss acids and bases as solutions, properties	Complete Watts the cost
Wednesday	Discuss Ch15 human genetics	Personal traits and genetics activity	Practice electron configuration	Continue with forces problem solving	Discuss chemical reactions and equations	Lab: energy in fuel
Thursday	Pedigree Charts	Continue personal traits and genetics activity	Review for atomic theory test	Chair friction lab	Lab: writing equations for experiments	Lab: BTU in fuel
Friday	Mutations in Chromosomes and Chromosome Mapping	Finish up personal traits and genetics activity	TEST: atomic theory	Problem solving friction and normal forces	Practice balancing chemical equations	Discussion over saving energy

Lesson Plans For: Penny Krumm December 2-6, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	DNA/Genetics Ch14, Mendelian genetics	Practice mitosis and meiosis Move from meiosis into DNA size and structure: activity chromosomes	Quantifying the atom, atomic number, mass, and isotopes	Review projectile problem solving	What's in the atom	Plastics recycling codes and structure
Tuesday	Complete discussion over ch 14	Discuss timeline of DNA	What is a neutral atom and what is an ion?	Review projectile problems	Discuss pure and impure matter: homogeneous and heterogeneous	Ways to clean up pollution Air Scrubber
Wednesday	Punnett squares, basic, genotype, and phenotypic frequencies	Activity: Building a model of DNA, complementary base pairs	Where are the electrons located?	TEST projectiles	Activity: separating solutions and rate of forming solutions	Discuss energy forms
Thursday	Incomplete dominance and codominance	Reading the DNA code Transcription	Electron configuration day 1	Go over test Introduce forces Activity force vectors, normal and weight Lab: who slides the quickest?	Discuss concentration of solutions Activity: Concentrated or dilute	Watts the cost activity - electricity conservation
Friday	Sex linked genes	Interpreting DNA Translation Assign: Transcription and Translation ws	Electron configuration day 2	Complete lab: who slides the quickest?	Discuss acids and bases as solutions, properties	Complete Watts the cost

Lesson Plans For: Penny Krumm Week of November 25-27, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Online lab cell division	2 - making root beer Discuss mitosis	Discuss atoms, properties and different forms	Shooting angled projectiles	Present atomic energy slides	Finish endangered species project Introduce pollution, types, sources, 3 R's
Tuesday	Review for Quiz over cell division and reproduction	Activity: what is mitosis/stages	Activity: candy isotopes Discuss atom structure and history	Problem solving projectiles review	Atomic structure practice	Recycling Activity Go over recycling codes
Wednesday 1:00 out	Quiz: cell division and reproduction	Discuss meiosis	Complete isotopes lab Atomic energy history	Quiz: projectiles	Discuss impure matter: homogeneous and heterogeneous	Continue discuss of pollution types
Thursday Break						
Friday Break						

Lesson Plans For: Penny Krumm For the week of November 18-22, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Complete discussion over mitosis and meiosis	present projects	Discuss different classes of matter: Impure: heterogeneous, homogeneous Pure: Elements, Compounds	Review for Quiz: projectiles	Discuss structure of the atom	Present endangered species
Tuesday	Lab: Cell division slides using online guide, find examples of each stage and draw	Complete cell energy projects	Classification of matter activity	Go over test Introduce forces Activity force vectors, normal and weight	Atomic structure practice	Pollution and habitat loss Types, effects
Wednesday	Review	Human respiration Lab	problem solving day	Lab: who slides the quickest?	Discuss impure matter: homogeneous and heterogeneous	Activity: clean up the oil spill
Thursday	TEST: cell division	Making root beer - fermentation	TEST: properties	Complete lab: who slides the quickest?	Activity: rate of solutions forming	Air Scrubber
Friday PBIS day						

Lesson Plans For: Penny Krumm November 11-15, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday Personal Day	Quiz: Photosynthesis/Respiration Reading cell division	Work day on Cell energy project	Practice basic specific heat problems	problem solving horizontally thrown projectiles	Fruit and vegetable periodic table	Work day endangered species
Tuesday	Discuss mitosis, ch 12	Last work day on cell energy project	problem solving final temp problems	lab projectiles at angles	Lab: families of elements	Work day endangered species
Wednesday	Continue discussion of cell division, ch 13	Present to the class	Discuss different classes of matter: Impure: heterogeneous, homogeneous Pure: Elements, Compounds	problem solving projectiles	Watch video on the history of atomic research	Work day endangered species
Thursday	Online lab onion root and cell division	Discuss energy in the cell Activity: pass the charge	Classification of matter activity	Problem set projectiles	Discuss atomic energy	Present endangered species
Friday	Lab: Cell division slides	Lab: respiration and the human body	Review for matter and properties test	Review for Quiz: projectiles	Working on atomic number and mass, protons, neutrons and electrons	Watch video regarding endangered species

Lesson Plans For: Penny Krumm November 4-8, 2019 previous week's plans listed below

Prep 6th Period 5/9	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Metabolism problem sets biologyjunction.com syllabus/timeline	Lab: day 1 diffusion of water/osmosis	Discuss predicting final temperature of a system Lab: Final temperature of a system	Vector TEST	Activity: balancing chemical compounds part 2	Succession and floristic game
Tuesday	Biologyjunction.com/ AP%20laboratories.htm Biologycorner.com Respiration lab	Lab: day 2 diffusion of water/osmosis	Problem solving specific heat and final temperature	Introduce projectiles: hitting the target	Discuss the periodic table and periodicity Activity: periodic table of vegetables and fruits	Day 2: Succession and floristic game
Wednesday 2:00 out	Review for test over chapter 9, 10	Review for test/quiz over the cell structures and membrane movement	Problem solving specific heat and final temperature	Problem solving projectiles thrown vertically	Lab: periodicity, families of elements	Activity: M&M and Biomagnification
Thursday	TEST Respiration/photo synthesis	TEST: Cell structure/and membrane movement	Discuss different classes of matter: Impure: heterogeneous, homogeneous Pure: Elements, Compounds	Lab: what angle to hit the target Introduce problem solving	Online family of elements game	Begin Endangered Species Project
Friday Play Matinee	Discuss cell division	Cell Energy Project 3 Groups: Photosynthesis Respiration Fermentation	Classification of matter activity	Problem solving projectiles thrown at angles	Discuss what are elements made of? Atoms and subatomic particles, atomic number and atomic mass	Work day Endangered Species

Lesson Plans For: Penny Krumm Week of October 28-Nov1, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Complete discussion over photosynthesis	Work day cell analogy	Intrinsic physical properties: density Within in phase, different substances	Problem solving vectors	Work on element presentation	Discuss habitat destruction, human and natural sources Activity: graphing land development
Tuesday	Photosynthesis lab day 1	presentations of cell analogy	Complete density lab: intrinsic property	Discuss vectors not at right angles - law of cosines	Work on element presentation	Finish graphing land development and habitat destruction
Wednesday	Photosynthesis lab day 2	Discuss cell parts Lab: making cell preps from different living materials Onion, leaves	Intrinsic physical properties: Boiling point, melting point	Problem solving concurrent vectors and vectors not at right angles	Discuss presentations, unique properties of elements	Human interaction and habitat destruction activity
Thursday	Begin discussion over cellular respiration	Discuss cell transport	Lab: phase changes and energy	Problem solving vectors not at right angles	Discuss how elements combine to form compounds	Human interaction and habitat destruction activity day 2
Friday	Complete discussion over cellular respiration	Lab: Diffusion of water/osmosis	Discuss specific heat and temperature changes	Review for test over vectors	Activity: balancing chemical formulas	Succession and floristic game

Lesson Plans For: Penny Krumm October 21-25, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Review day 2 the cell	Cell components analogy	Lab: is it physical or chemical?	Lab: signpost and forces	Introduce elements Names and symbols	Complete water and soil testing
Tuesday 2:00 out P/T conf.	TEST: the cell	Work day cell component analogy	Lab: day 2 is it physical or chemical? Alchemy KMnO4	Problem solving force vectors, x/y components	Review game over element symbols	Discuss different types of soil, sources of water
Wednesday	Ch 9, 10 Discuss photosynthesis and respiration	Complete work on cell component analogy	MOLE DAY Intrinsic physical properties: density Within in phase, different substances	Lab: x/y components, solving for components, given resultant	Practice element symbols	Weathering and erosion
Thursday 2:00 out P/T conf.	Complete discussion over photosynthesis/respiration	Present cell analogy	Intrinsic physical properties: Boiling point, melting point	Problem solving, concurrent, independent, x/y vectors	TEST: Element symbols	Human interaction and habitat destruction activity
Friday No School						

Lesson Plans For: Penny Krumm Week of October 14, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 2nd/7th Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	Discuss ch 8 cell function	Review paper Due Review for test over Biochemistry	Review Due Review for test over data representation	Problem solving day 2 vectors	Phase changes are physical: melting ice to steam	Due: graphs from predator/prey populations Introduction of abiotic factors
Tuesday M.L.9	Complete ch 8 discussion	TEST: Biochemistry	Review for test over data representation	Lab: Boat activity and current day 1	Phase changes are physical: graphing data	Water and soil testing day 1
Wednesday 2:00 PLC	Lab: enzyme function day 1	Go over test Cell size limitations Activity	TEST: data representation	Lab: Boat and current day 2	complete graphing phase change data	Water and soil testing day 2
Thursday	Lab: enzyme function day 2	Discuss cell theory	Go over test Discuss properties of matter, physical and chemical	Discuss concurrent/independent vectors Problem solving	Physical separation of matter - centrifugation, filtration	Complete water and soil testing
Friday STEM-fingerprinting	Review for test over unit 2	Cell components analogy	Lab: is it physical or chemical?	Lab: concurrent vectors	Phase change worksheet, matter	Discuss different types of soil, sources of water

Lesson Plans For: Penny Krumm Week of October 7-11, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday Gone at 11:45	discuss ch 7 cell membrane structure	Notes from Book Enzymes, pages 156-160, questions 1-6	Cubed conversions	Mark treasure Discuss what is a vector	Ink and chromotography	Film predator/prey Interactions Write summary
Tuesday	lab: osmosis and diffusion	lab: toothpick enzymes	review day 1	Using trigonometry to solve vectors Hand out vector problem packet	Phase changes are physical: graphing data	Predator/Prey modeling
Wednesday	Lab: day 2: calculating osmotic pressure	lab: enzymes Making cream cheese	review day 2	Problem solving right angled vectors	complete graphing phase change data	complete predator prey modeling
Thursday	ch 8 cell function	review for biochemistry test	test: data representation	River lab and independent vectors	Physical separation of matter - centrifugation, filtration	Introduction of abiotic factors
Friday Gone to SDI	complete ch 8 cell function	Test: Biochemistry	complete test over data representation	complete river vectors lab	Phase change worksheet, matter	Water and soil testing

Lesson Plans For: Penny Krumm September 30 - October 4, 2019 **WIN Begins** previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 and 2 2nd Period 7th Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Env. Science/Earth Science 8th Period**
Monday	complete discussion ch 6 cell structures	types of biological molecules and functions Cracker demo	Due: Conversion 1 How to convert with double labels	Plotting vectors graphically	Activity: what is matter Air has mass and can exert a force	Food webs and trophic levels
Tuesday	online cell lab: cell structures	Lab: life is cellular - making a slide prep of cheek cells	Practice day with factor labeling	Using trigonometry to solve vectors Hand out vector problem packet	Lab: Using physical changes to separate matter: The Red ones taste better	Complete food webs and trophic levels
Wednesday 2:00 out PLC	Discuss ch 7 cell function	Lab: Carbs, protein, and fats, oh my! Basic analysis of nutrients	Review for test over data representation	Problem solving right angled vectors	Continue chromotography lab over M&Ms and skittles	Biomagnification through the food web
Thursday	Lab: Osmosis and Diffusion	Discuss enzymes, structure, function	Review for test over data representation	River lab and independent vectors	Application of chromotography to ink samples	Predator/Prey modeling
Friday	Lab: day 2: calculating osmotic pressure	Lab: toothpick enzymes	TEST: Data Representation	Lab: Force vectors, roof and sign	Phase changes are physical: graphing data	Complete predator/prey modeling

Lesson Plans For: Penny Krumm Week of September 23-27, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday	test unit 1	Quiz: terminology Introduce basic biochemistry: atomic structure and function Atomic models	complete significant figures lab Assign: significant figures 3	Review for test over linear motion and gravity	Finish up lab over properties Discuss physical property of density	Quiz: terminology Introduce basic biochemistry: atomic structure and function Atomic models	Complete lab using quadrats and transects
Tuesday	discuss ch 6 the cell	writing review of basic biochemistry Atomic models	due: sig. Dig. 3 Quiz: Significant Figures Discuss metric units, prefixes, and basic conversions	TEST: linear motion/gravity	density lab: different samples same material	writing review of basic biochemistry Atomic models	Representative sampling - using a clinometer to estimate tree height
Wednesday	complete discussion ch 6 cell structures	polarity, shape and covalent molecules	Converting Cubes labels and values Assign: conversion probls 1	Go over test What is a vector? Can we find the treasure?	density lab: different phases have different density	polarity, shape and covalent molecules	Discuss food webs Making a food web activity
Thursday	online cell lab: cell structures	types of biological molecules and functions Cracker demo	Due: Conversion probls 1 How to convert with double labels	plotting vectors graphically	activity: what is matter Air can exert a force	types of biological molecules and functions Cracker demo	Discuss predators and prey
Friday	Discuss ch 7 cell function	Discuss Nucleic Acids Activity: Extract your own DNA	practice conversion and factor labeling	using trig to solve vectors Hand out vector packet	phases and phase changes: different samples of same material melts at same temperature	Discuss Nucleic Acids Activity: Extract your own DNA	Activity: predators and prey

Lesson Plans For: Penny Krumm Week of September 16-20, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday	Review for unit 1 test	Hand out books Bio Terms- quizlet and kahoot	Go over sig fig multiplication/division Introduce addition/subtraction	Graphs due Problem solving with gravity and linear motion	Article due Lab: Chemical Properties	Hand out books Bio Terms- quizlet and kahoot	Go over Biosphere requirements Discuss sampling from videos
Tuesday Gone to common formative assessment	TEST: unit 1	Work on quizlet or matching to learn terms	Significant figures problems	Problem solving linear motion/gravity	Properties of matter worksheet	Work on quizlet or matching to learn terms	https://betterlesson.com/lesson/633603/mark-and-recapture-population-sampling
Wednesday	Discuss Ch 6 The Cell, its structures and functions	Introduce basic biochemistry: atomic structure and function	Significant Figures lab day 1	Review for test over linear motion and gravity	Lab: Physical Properties	Introduce basic biochemistry: atomic structure and function	Representative sampling - transects and quadrats
Thursday **FAST Testing**	Complete discussion over cell structures	Review terms quiz tomorrow	Significant Figures Lab day 2 Significant figures ws	TEST: linear motion/gravity	Discuss properties of matter: physical and chemical	Review terms quiz tomorrow	Complete lab using quadrats and transects
Friday	Online lab: cell structures	Quiz terminology Atomic model questions	Due: sig. Fig. 3 Quiz: significant figures	Go over test What is a vector? Can we find the treasure?	Discuss changes of matter: physical and chemical	Quiz terminology Atomic model questions	Representative sampling - using a clinometer to

			Introduce factor labeling and metric				estimate tree height
	Adv. Biology 1st Period	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**

Lesson Plans For: Penny Krumm For the week of Sept. 9-13, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday	Complete discussion ch 4 organic chemistryActivity: Building molecules	Complete Is it Alive Discuss characteristics of living things Hand out books	Lab: % Iron in Cereal Assign: lab report	problem solving linear motion	Importance of labeling and recording data accurately: units in metric Modeling sizes	Complete Is it Alive Discuss characteristics of living things Hand out books	Introduce the biosphere Video clips of Biosphere 2
Tuesday	Discuss ch 5: Macromolecules	Activity: Characteristics of living things	Due: Lab Report Discuss rules of significant figures and practice calculation Assign: Significant figures	quiz: linear motion introduce linear motion due to gravity	Scientific notation of values and conversion of labels Examples of scientific notation in the real world	Activity: Characteristics of living things	Work on Biosphere 3 What is needed, roles, amounts, reasoning
Wednesday	Complete discussion over macromolecules 3D modeling of macromolecules	Hand out list of terms to know	due: Significant figures 1 Calculations with significant figures	lab: gravity is constant	lab: factor labeling in metric system Calculating and measuring	Hand out list of terms to know	Defend choices for Biosphere 3

		Basic terminology is Biology - matching game				Basic terminology is Biology - matching game	
Thursday	Review for unit 1 TEST: Biochemistry	Terminology - Pictionary	lab: significant figures stations	graphing gravity is constant	lab: factor labeling day 2	Terminology - pictionary	Introduce Biotic factors: predation, disease, competition, parasitism, consumption, symbiosis
Friday	TEST: Biochemistry	Terminology- Around the world Assign: Quiz tomorrow terminology	lab: day 2: significant figures	problem solving gravity	basic factor labeling	Terminology- Around the world Assign: Quiz tomorrow terminology	Representative sampling - transects
	Adv. Biology 1st Period	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**

Lesson Plans For: Penny Krumm Week of September 2-6, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday	No school - labor day						
Tuesday	Complete ch 2 biochemistry	Lab: measuring and recording data Metric refresher	Measuring and Estimation lab- review with metric	Introduce linear motion: average velocity, instantaneous velocity, acceleration	Measurement and data collection in metric - length	Lab: measuring and recording data Metric refresher	Activity:what is the atmosphere - scale model
Wednesday 2:00 out PD	Begin ch 3 - waterLab: Water properties, density pH	What makes something living? Activity: characteristics of living things	Discuss accuracy vs precision, how to estimate and how to calculate and assess	Continue lab - using equations to predict speed	Measurement and data collection in metric -mass and volume	What makes something living? Activity: characteristics of living things	Activity: percent oxygen in the atmosphere Graph of components of atmosphere
Thursday	Lab: water and its unique properties	Activity: Characteristics of living things	Lab: Accuracy vs precision, measuring and reactions	Hand out linear motion problem set Begin problem solving	Differences between English and Metric system	Activity: Characteristics of living things	Introduce the biosphere Video clips of Biosphere 2
Friday	Discuss ch 4 organic chemistry	Hand out list of terms to know	Introduce data representation, scientific notation, significant figures, data conversion	Problem solving day linear motion	Importance of labeling and recording data accurately: units	Hand out list of terms to know	Activity: Design biosphere 3

	Handout study guides for ch 4 and 5	Basic terminology is Biology - matching game				Basic terminology is Biology - matching game	

Lesson Plans For: Penny Krumm Week of Aug.26 - 30, 2019 previous week's plans listed below

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday	Begin Ch 1 Themes in the study of life Hand out books Hand out reading/lecture guide Assign: quiz Friday	complete introduction Go over class expectations Hand out books Lab recording Begin intro lab - lab skills - What traits are correlated? Hand length and foot length	Lab safety Hand out books Begin lab check in Assign: intro math 1	Hand out books Lab:tower competition Hand out math practice	Hand out books - store in room Safety demo Splatter lab: what determines how big a splatter is?	complete introduction Go over class expectations Hand out books Begin intro lab - lab skills	What is the environment day 1
Tuesday	Lab: Think Like a Scientist: Mystery Powder	Continue lab: What traits are correlated? Height vs wing span	Due: math 1 Complete lab check in Assign: math 2	Due: math practice Begin lab graph analysis: wire length vs mass Assign: how to graph online and	Complete splatter lab Review through variables and data analysis	Continue lab: What traits are correlated?	what is the environment day 2

				determine line of best fit			
Wednesday	begin ch 2 Hand out reading guide and note framework	Discuss lab, how we approach research, hypothesis, variables, data representation	due: Math 2 Introduce lab writing in chemistry	Day 2: lab graph analysis: ceramic tiles, area vs mass Assign: graph data	Lab application: bounce height vs drop height Assign: lab report	Discuss lab, how we approach research, hypothesis, variables, data representation	Activity:what is the atmosphere - scale model Activity: percent oxygen in the atmosphere Graph of components of atmosphere
Thursday	work on ch 2 biochemistry	Lab: measuring and recording data: 1.metric 2.hypothesis 3.collect data	Lab: Salty Sahara, separating salt from sand	Due: data of tiles Quiz: scientific math and data analysis	Due: lab report Measurement and data collection in metric How to use the metric system	Lab: measuring and recording data: 1.metric 2.hypothesis 3.collect data	Introduce the biosphere Video clips of Biosphere 2
Friday	quiz: ch 1 Complete discussion ch 2	Lab: measuring and recording data 4.graphing data and data analysis 5.Types of graphs and labels 6. conclusions	Quiz: Chemistry math and equipment Lab: Salty Sahara day 2 Assign: lab report	Introduce linear motion: average velocity, instantaneous velocity, acceleration	Measurement and data collection in metric Activity: Comparison between English and Metric	Lab: measuring and recording data 4.graphing data and data analysis 5.Types of graphs and labels 6. conclusions	Activity: Design biosphere 3
Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**

Lesson Plans For: Penny Krumm Friday, August 23, 2019

Prep 6th Period	**Adv. Biology 1st Period**	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**
Monday							
Tuesday							
Wednesday							
Thursday							
Friday	Hand out books Intro. To class, needs, expectations Hand out syllabus	Show All About Me Intro to course	Class expectations and safety demos. Hand out intro math	Class expectations, data recording, math practice	Class expectations, data recording Safety lab	Show All About Me Intro to course	Class expectations, folder What is environmental science
	Adv. Biology 1st Period	**Biology 1 2nd Period**	**Chemistry 3rd Period**	**Physics 4th Period**	**Physical Science 5th Period**	**Biology 2 7th Period**	**Env. Science/Earth Science 8th Period**