CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

NEW BRITAIN BOARD OF EDUCATION
CURRICULUM COMMITTEE MEETING

May 22, 2023 – 6:15 PM l NEW BRITAIN EDUCATIONAL ADMINISTRATION CENTER

CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

NOTICE OF MEETING

TO: New Britain Board of Education Members
Mayor Erin Stewart
Mr. Mark H. Bernacki, Town and City Clerk
New Britain Common Council Members

DATE: May 19, 2023

RE: New Britain Board of Education Committee Meetings

The following Board of Education committee meetings will be held:

- **The New Britain Board of Education Policy Committee** will hold a regular meeting on Monday, May 22, 2023 at 6:00 PM at the New Britain Educational Administration Center, located at 272 Main Street in New Britain, Connecticut.
- **The New Britain Board of Education Curriculum Committee** will hold a regular meeting on Monday, May 22, 2023 at 6:15 PM at the New Britain Educational Administration Center, located at 272 Main Street in New Britain, Connecticut.

Members of the public may attend meetings in person or view a live broadcast of the proceedings online via the livestream link:
https://www.csdnb.org/board/

The agendas and board packets in their entirety can be found on the Board of Education website:
https://www.csdnb.org/board/BOE-2023-Meetings-Documents-Calendar.php

All-America City NATIONAL CIVIC LEAGUE

CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

New Britain Board of Education | Curriculum Committee Regular Meeting

May 22, 2023 – 6:15 PM | New Britain Educational Administration Center

Members of the public may attend meeting in person or view a live broadcast of the proceedings online via the livestream link: https://www.csdnb.org/board/

1. Call to Order and Opening

A. Meeting Called to Order

2. Presentation

A. Presentation – Science Curriculum "May 2023 Science"
Presented by Ms. Lara Bohlke | Page 4

3. New Business

A. Review and Approve Minutes from Curriculum Committee Meeting on March 20, 2023
Submitted by Ms. Aja Edwards | Page 32

B. Accept Monthly EdAdvance Report
https://sites.google.com/csdnbstaff.org/nb-renewal-project/monthlyhighlights?authuser=0
Submitted by Ms. Kristina DeNegre and Mr. Tyrone Richardson

C. Review and Approve Student 5.0 – A Career Launch Program Offered by ReadyCT
Submitted by Mr. James Brasile | Page 35

4. Closing and Adjournment

A. Other Business as Permitted by Law
B. Adjournment

CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

Board Memorandum

Submitted by Lara K. Bohlke () for approval at the Regular Board Meeting on June 5, 2023.
Senior Leadership Sponsor: Ivelise Velazquez Staff Presenter: Lara Bohlke, 6-12 Curriculum Coordinator and Matt Bornn, NBHS Science Department Head

Type of Memorandum

Presentation to the Board

Background and Purpose/Rationale

Science Curriculum Approval - 'May 2023 Science'

This presentation is aligned with Dr. Gasper's 'Essential 10' - Curriculum: A rigorous, useful, Board-approved curriculum document for every subject area, course, and grade.

As discussed at the last Curriculum Committee meeting, the curriculum renewal and curriculum writing process has been progressing and there is curriculum ready to move forward to the Board for approval. The curriculum coming to the May 22nd meeting is in the Science Department and will be presented by the Science Department Chair, Matt Bornn. Matt and his team have spent time ensuring curricula are based on and aligned to the Next Generation Science Standards (NGSS), Connecticut English Language Proficiency Standards (CELP) and CSDNB's Profile of a Graduate (POG). They have aligned concepts across each curricula utilizing 'storylines', added engaging Phenomena and activities, and provided opportunities for students to practice the skills they will need to exhibit on their state assessment taken in Grade 11 through use of virtual, interactive STEM (Science, Technology, Engineering, Mathematics) simulations (provided by the Gizmos platform).
The curricula being presented at the meeting includes Earth Science (@ Grade 9), Biology (@ Grade 10) and Chemistry (@ Grade 11).

Presentation is HERE: https://docs.google.com/presentation/d/1vlzC-u8dJ9fyS8aaOskQp74aBlOWD60gDQSgigVZ4aU/edit#slide=id.p3

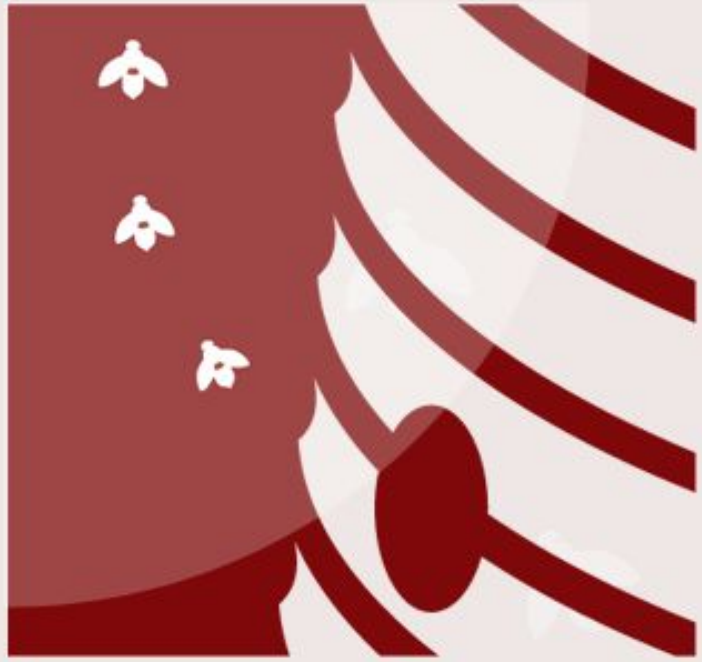
Financial Information

The total is and the funding source is .

Committee Review

To be reviewed by the Curriculum Committee on May 22, 2023

Biology Course Map - Lara Bohlke.pdf, Chemistry in the Community Unit Mapping Template - Lara Bohlke.pdf, Chemistry Unit Mapping Template - Lara Bohlke.pdf, Earth Science Course Map - Lara Bohlke.pdf, MAY 2023 Science (1) - Lara Bohlke.pdf



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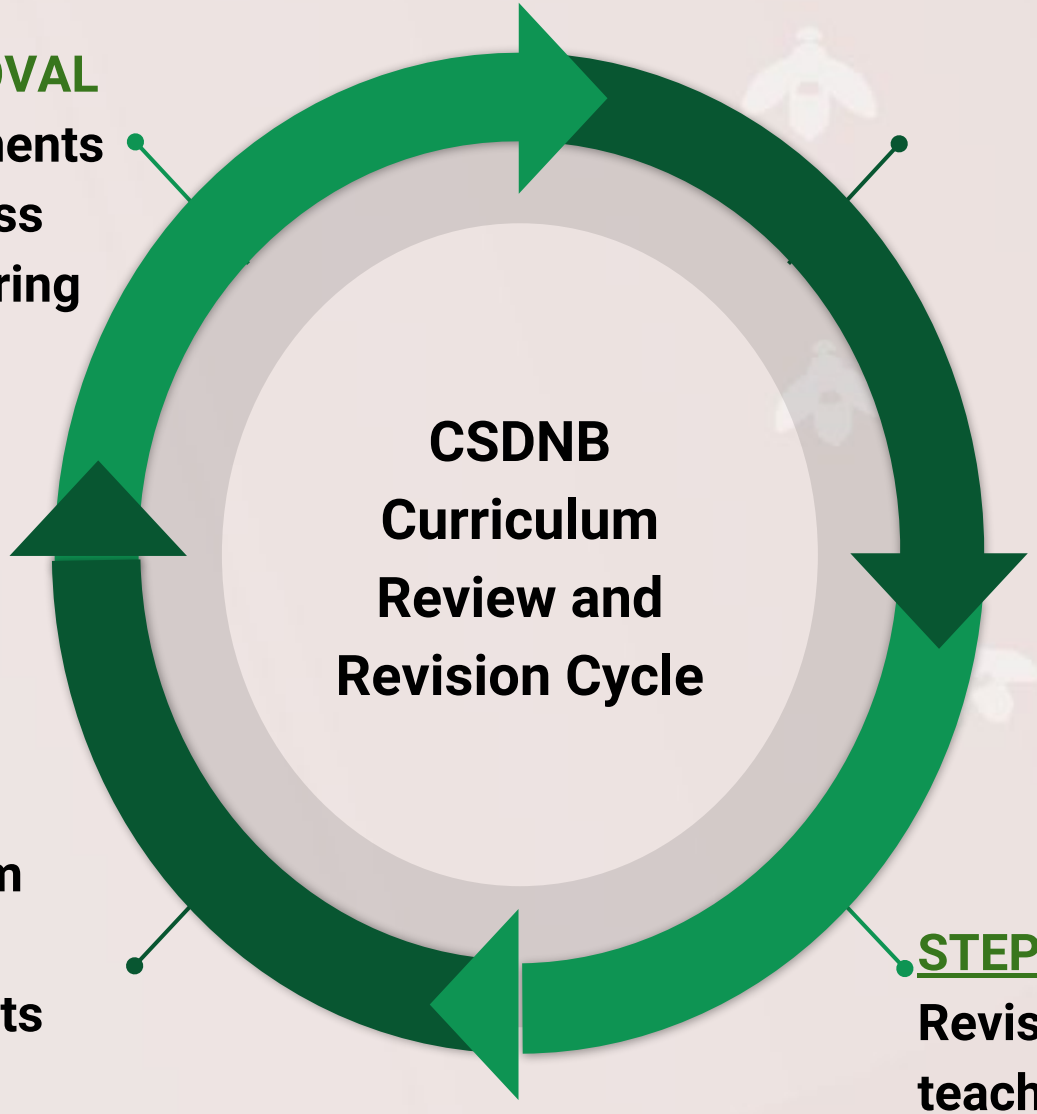
TWO YEAR REVIEW FOR ALL CURRICULUM



STEP ONE: DATA REVIEW

Review student outcome data to determine if students are responding to the curriculum with increasing levels of proficiency. IF the data shows no revision is needed, the curriculum will be placed on a list for review in another 2 years.

STEP TWO: REVISION

Revise the curriculum with teachers including special education and multilingual staff.

STEP THREE: PILOT

Use the draft curriculum units and/or materials with a subset of students including students with disabilities and multilingual learners.

STEP FOUR: BOE APPROVAL

Make necessary adjustments based on the pilot, discuss with stakeholders, and bring to the BOE curriculum committee for approval.

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Common Elements Across All Content Areas

- **Essential questions developed to engage students in critical thinking and inquiry**
- **Profile of a Graduate Focus**
- **Designed with Content Area Standards/Frameworks and CT English Language Proficiency (CELP) Standards**
- **Specific Skills ★ Student-Centered Learning Experiences ★ Assessments in alignment with Standards, Frameworks and PoG**
- **Culturally Responsive Teaching Resources**
- **Strategies to support all learners**
- **Units written by NBHS staff with sustained support from EdAdvance**

Earth Science (591,592,593)

Standard, Accelerated and Honors, Length (1 cr), Grade 9

STEP 1: COURSE DATA REVIEW

- Align to NGSS standards and POG
- Student-centered v. teacher-centered
- Claim-Evidence-Reasoning (CER) scores on common assessments
- Vertical alignment

STEP TWO: COURSE REVISION

- Participants:
  - Matthew Bornn: Science Department Head
  - Teachers

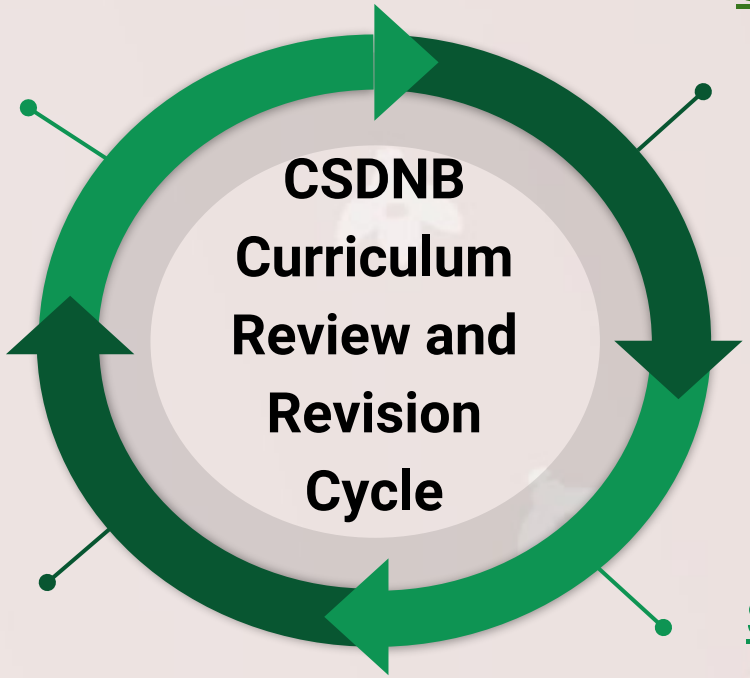
STEP THREE: PILOT

- Phenomena that includes choice
- Scaffolds for ELL and Special Education students
- Chunking and repetition
- Centered on student refinement of thought process
- Teacher as guide/Facilitator

STEP FOUR: BOE APPROVAL

Earth Science Course Map

- Student feedback on POG Skills
- Focus areas determined by results of NGSS interim assessments
- Questions modeled on NGSS Assessment



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Biology (535,522,521)

Standard, Accelerated and Honors, Length (1 cr), Grade 10

STEP 1: COURSE DATA REVIEW

- Align to NGSS standards and POG
- Student-centered v. teacher-centered
- Claim-Evidence-Reasoning (CER) scores on common assessments
- Vertical alignment

STEP TWO: COURSE REVISION

- Participants:
  - Matthew Bornn: Science Department Head
  - Teachers

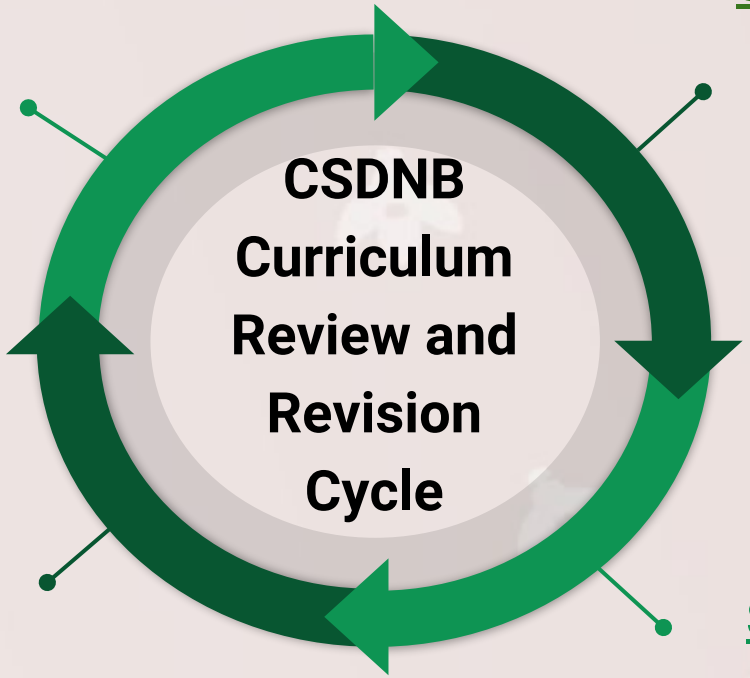
STEP THREE: PILOT

- Phenomena that includes choice
- Scaffolds for ELL and Special Education students
- Chunking and repetition
- Centered on student refinement of thought process
- Teacher as guide/Facilitator

STEP FOUR: BOE APPROVAL

Biology Course Map

- Student feedback on POG Skills
- Focus areas determined by results of NGSS interim assessments
- Questions modeled on NGSS Assessment



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Chemistry (541,542,543)

Standard, Accelerated and Honors, Length (1 cr), Grade 11

STEP 1: COURSE DATA REVIEW

- Align to NGSS standards and POG
- Student-centered v. teacher-centered
- Claim-Evidence-Reasoning (CER) scores on common assessments
- Vertical alignment

STEP TWO: COURSE REVISION

- Participants:
  - Matthew Bornn: Science Department Head
  - Teachers

STEP THREE: PILOT

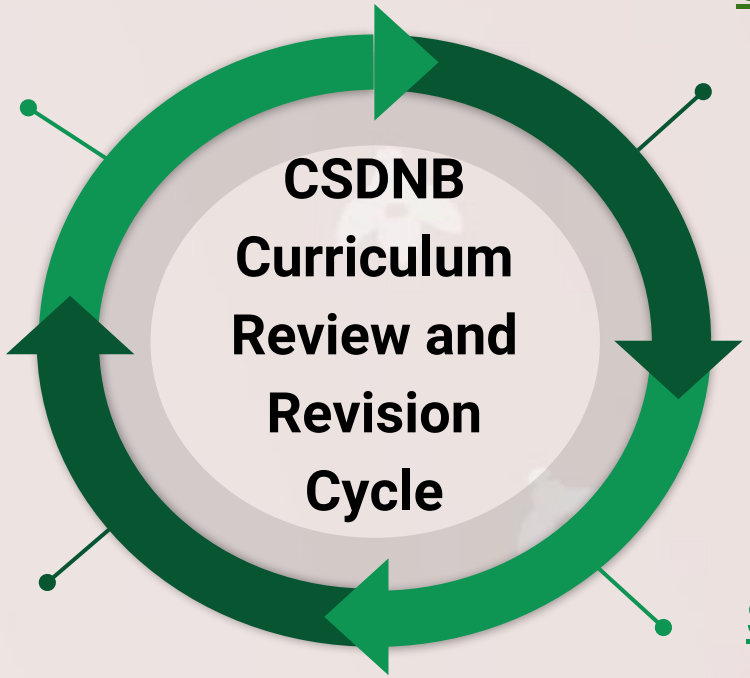
- Phenomena that includes choice
- Scaffolds for ELL and Special Education students
- Chunking and repetition
- Centered on student refinement of thought process
- Teacher as guide/Facilitator

STEP FOUR: BOE APPROVAL

Chemistry 541 & 542 Course Map

Chemistry 543 Course Map

- Student feedback on POG Skills
- Focus areas determined by results of NGSS interim assessments
- Questions modeled on NGSS Assessment



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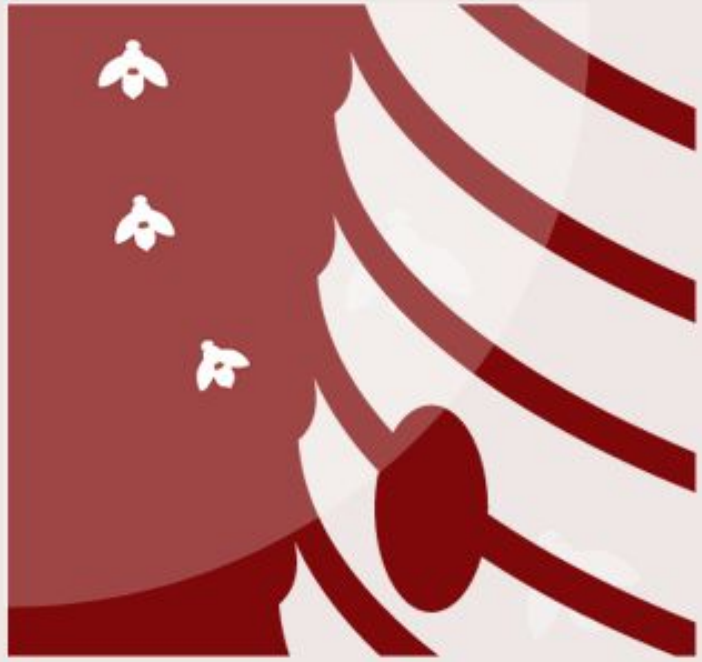

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Biology Course Unit Overview

Course Title_____Biology **Essential Question (for Course)** What are the processes of life?

Unit Title ⇨	Ecology	Cell Energy	Homeostasis	Protein Synthesis and Genetics	Evolution
Essential Question(s) ⇨	How do organisms interact with the living and nonliving factors to obtain matter and energy? What happens to ecosystems when the environment changes? What are the impacts of human activities on ecosystems?	How do organisms live, grow, and respond to their environment and reproduce? What are the processes in which organisms obtain and or produce energy?	How do organisms maintain a steady state of equilibrium that allows for their survival? How do the organ systems maintain equilibrium in the human body?	What is the basic structure and function of DNA? How does DNA affect the structure and function of organisms? How is the genetic information in genes inherited and expressed?	How can there be similarities among organisms yet so many different kinds of plants, animals and microorganisms? How does genetic variation and biodiversity among organisms affect survival and reproduction?
Standards/PoG ⇨	**LS 2-4, 2-5 Energy and Cycles** **LS 2-6 Patterns** **LS 2-1 Populations and Carrying Capacity** **LS 2-2 Biodiversity and Populations** **LS 2-7, 4-6 Impacts** **Meaningful and Purposeful Communication** Modeling , Gallery walk, lab **Critical & Creative Problem Solving** - Mass extinctions - Managing deer populations - lab **Analyzing & constructing arguments based on evidence**	**LS 1-6 Biochemistry** **LS 1-5 Photosynthesis** **LS 1-7, 2-3 Respiration and Fermentation** **LS 2-5 Carbon cycling** **Meaningful and Purposeful Communication** Modeling , Gallery walk, lab **Analyzing & constructing arguments based on evidence** Mission to Mars CER/Scientific Explanation of the phenomenon/Data Nuggets, lab **Critical & Creative Problem Solving** Enzyme lab	**LS 1-3 Feedback mechanisms** **LS 1-2 Integrating Systems** **Meaningful and Purposeful Communication** Modeling, lab **Analyzing & constructing arguments based on evidence** CER/Scientific Explanation of the phenomenon/Data Nuggets, lab **Critical & Creative Problem Solving**	**LS 1-1 DNA structure and function** **LS 3-1** **LS 3-2** **LS 3-3** **Empathy and Cross cultural understanding** Phenomenon choice / Scientific explanation of the phenomenon **Analyzing & constructing arguments based on evidence** CER/ Scientific explanation/Data Nuggets, lab **Critical & Creative Problem Solving** Genetic engineering performance task, lab, Science Take Out	**LS 4-1 Phylogenetics** **LS 4-4 Natural Selection** **LS 4-2 Evidence for Evolution** **LS 4-5 Speciation** **LS 2-8 Behavior** **LS 4-3 Data Analysis** **Empathy and Cross cultural understanding** Phenomenon choice / Scientific explanation of phenomenon **Meaningful and Purposeful Communication** Gallery walk of the models with feedback, lab **Analyzing & constructing arguments based on evidence** CER/Data Nuggets, lab

	Scientific Explanation of how wolves changed the rivers /CER/ Data Nuggets, lab		Science take out kit for homeostasis, lab		
Skills ⇨	• Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem. • Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in new ecosystems. • Use math and/or computational representations to support explanations of factors that affect carrying capacity of ecosystems at different scales. • Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity. • Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales. • Create or revise a simulation to test a solution to mitigate adverse impacts of human activity on biodiversity.	• Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules. • Use a model to illustrate how photosynthesis transforms light energy into stored chemical energy. • Use a model to illustrate that cellular respiration is a chemical process whereby the bonds of food molecules and oxygen molecules are broken and the bonds in new compounds are formed resulting in a net transfer of energy. • Construct and revise an explanation based on evidence for the cycling of matter and flow of energy in aerobic and anaerobic conditions. • Create 3D biological molecules models. • Create a model that thoroughly explains the unit's phenomenon (How was Luke able to survive on Mars?). • Develop a model to illustrate the role of photosynthesis and cellular respiration in the cycling of carbon among the biosphere, atmosphere, hydrosphere, and	• Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. • Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. • Create a human organ system model.	• Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells. • Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring. • 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. • Apply concepts of statistics and probability to explain the variation and distribution of expressed traits in a population.	• Communicate scientific information that common ancestry and biological evolution are supported by multiple lines of empirical evidence. • Construct an explanation based on evidence for how natural selection leads to adaptation of populations. • Construct an explanation based on evidence that the process of evolution primarily results from four factors: (1) the potential for a species to increase in number, (2) the heritable genetic variation of individuals in a species due to mutation and sexual reproduction, (3) competition for limited resources, and (4) the proliferation of those organisms that are better able to survive and reproduce in the environment. • Apply concepts of statistics and probability to support explanations that organisms with an advantageous heritable trait tend to increase in proportion to organisms lacking this trait. • Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species. • Evaluate the evidence for the role of group behavior on individual and species'

		geosphere.			chances to survive and reproduce.
Key Content ⇨	Phenomena: How Wolves Change Rivers go only to 1:30 Anchor Phenomena Question: How do the wolves impact the environment?	Phenomena: Student Choice for Phenomena Anchor Phenomena Question: Model phenomenon throughout the unit: Mission to Mars - how can we survive on Mars? Student Choices: 1. Aquaponics - how can you grow plants without soil? 2. Amazon Rainforest - how does this ecosystem represent the “lungs of the world”? 3. Seed to Sequoia - how does this tree get so big? 4. Venus Flytrap - how does this plant get energy from the bug?	Phenomena: Student Choice for Phenomena Anchor Phenomena Question: Model phenomenon throughout the unit: Student Choices: 1. How do alligators survive in the ice? 2. How can Wim Hoff survive swimming in such extremely cold water? 3. What happened to the football player? 4. Why did Jennifer die?	Phenomena: Student Choice for Phenomena Anchor Phenomena Question: Why is there a higher prevalence of sickle cell in the African American Community? Student Choices: 1. Lucy and Maria Aylmer are twins. How can that be? 2. Meet the Roloff family. How can a family have both normal height and dwarf height children if the parents are both dwarf height? 3. Ernest Hemingway's cat. How and why can his cat have 6 toes? 4. How can you genetically design a superhero?	Phenomena: Student Choice for Phenomena Anchor Phenomena Question: Why do humans have different skin colors? Student Choices: 1. Why are the crickets in Hawaii silent? 2. How did the whale go from a legged land creature to what we see today? 3. Why are some people lactose intolerant? 4. Why are there many breeds of dogs and are they the same species?
Assessments ⇨	CER timeline	CER timeline Summative	Accelerated and Standard Summative Honors Summative CER timeline	CER timeline	CER timeline
Resources ⇨	Storyline Padlet Flipgrid with how to	Storyline	Storyline	Storyline	Storyline

	Self and peer evaluation google form				
Timeframe ⇨	20 school days	20 school days	15 school days	20 school days	15 school days

Chemistry in the Community Course Unit Overview

Course Title_____Chemistry in the Community_____ **Essential Question (for Course)** How does matter and its interaction impact daily life?

Unit Title ⇨	Properties of Matter	Nuclear Chemistry	Petroleum	Food & Nutrition
Essential Question(s) ⇨	How can one explain the structure, properties and interactions of matter?	What forces hold nuclei together and mediate nuclear processes?	How do humans depend on Earth's fossil fuels ?	How do food choices impact overall health?
Standards/PoG ⇨	HS-PS1-1 *Matter and it Interactions* Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. HS-PS1-2 *Matter and it Interactions* Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. HS-PS1-7 Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)	HS-PS1-1 *Matter and it Interactions* Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. HS-PS1-8 *Matter and it Interactions* Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)	HS-PS3-1 Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known. HS-PS3-2 Develop and use models to illustrate that energy at the macroscopic scale can be accounted for as a combination of energy associated with the motion of particles (objects) and energy associated with the relative positions of particles (objects). HS-PS3-3 Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy. HS-PS3-4 Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results	HS-PS1-6 *Matter and it Interactions* Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. HS-PS1-7 *Matter and it Interactions* Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)

			in a more uniform energy distribution among the components in the system (second law of thermodynamics). **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)	
Skills ⇨	• Use mathematical representations to support claims. • Evaluate the claims, evidence, and reasoning • Use math and/or computational representations to support explanations • Design, evaluate, and refine a solution • Use mathematical representations to support and revise explanations based on evidence. • Develop a model. • Communicate effectively • Demonstrate time and resource management • Collaborate through teamwork • Demonstrate problem solving • Demonstrate critical thinking • Demonstrate an understanding of scientific measurements in the laboratory. • Communicate their understanding of the law of conservation of mass and density.	• Define radioactivity. • Identify types of nuclear decay and which atoms undergo decay. • Balance nuclear decay reactions. • Compare the advantages and disadvantages of nuclear energy. • Develop a model to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.	• Describe how crude oil is used as a raw material. • Explore alternate forms of energy. • Investigate the use and recycling of plastics	• Identify and explain the importance of the six nutrients. • Differentiate and identify sources of good fat vs. bad fat; essential nutrients vs nonessential nutrients; soluble vs insoluble vitamins. • Analyze drink labels for sugar and caffeine to make informed decisions on their drink choices. • Differentiate between misleading and valid market strategies. • Create a cross cultural learning menu demonstrating nutritious choices from various cultures. • Explore the impact of food on physical and mental health as well as disease prevention.

	• Demonstrate graphing skills. • Identify the properties of the 3 states of matter and the 6 phase changes that matter undergoes. • Classify matter and identify physical and chemical properties and changes. • Identify indicators of a chemical reaction.			
Key Content ⇨	Phenomenon: Gazillion Bubbles video *Why do bubbles exist?* • Three states of matter at the molecular level • Properties of the various classifications of matter • Phase change occurs at the molecular level • Density • Physical and chemical observations • Physical and chemical changes • Mass is conserved during physical and chemical processes	Phenomenon: Atomic Bomb Explosion Video *Why is the explosion so large?* • Nuclear Processes • Conservation of Energy and Energy Transfers • Organization of the Periodic Table • Radioactivity • Alpha, beta, and gamma decay • Nuclear Power	Phenomenon: Burning Ocean video *How is this happening to the ocean?* • Petroleum is hydrocarbon • Petroleum is a fuel and raw material • Petroleum is a product of choice for many consumer items • Kinetic and Potential Energy • Combustion • Alternate fuels	Phenomenon: Carrot man *What do you notice in the picture?* • The components of a healthy balanced diet. • Health effects of food fats versus bad fats. • Health effects of simple sugars vs. complex carbohydrates. • Too much of anything, even a healthy component, can have detrimental health effects. • Companies' advertising strategies can sway consumer food choices.

Assessments ➪	**Formative assessments:** ● White board meetings. ● Phenomenon model ● White board meetings. ● Idea models ● Student Choice Nuclear Chemistry Model ● Entry/Exit Tickets ● Kahoot ● PearDeck ● Self Peer Evaluation ● Think Pair Share ● JigSaw ● Student worksheet Cotton ball lab ● Bubble Lab ● States of Matter Lab ● Classification of Matter card game, before and after ● Classroom CuCl2 Lab-physical chemical properties/changes ● Student worksheet Ice cube lab ● Student worksheet Dissolving sugar ● Classroom Density Lab ● Student worksheet Forming a precipitate **Summative Assessments:** ● Summative	**Formative assessments:** ● White board meetings. ● Phenomenon model ● Student Choice Nuclear Chemistry Model ● Entry/Exit Tickets ● Kahoot ● PearDeck ● Self Peer Evaluation ● Think Pair Share ● JigSaw ● Three truths and a lie ● POGIL Mass Number ● Pear deck Intro to Nuclear Chemistry ● Radiation & Medical Uses ● Radiation Effects on Humans ● Edpuzzle: The most radioactive places on earth ● Student worksheet Ice cube lab ● Formative Assessment: Nuclear **Summative Assessments:** ● Directions for Nuclear Model ● Unit 2 Phenomenon Model Rubric	**Formative assessments:** ● White board meetings. ● Phenomenon model ● White board meetings. ● Idea models ● Student Choice Nuclear Chemistry Model ● Entry/Exit Tickets ● Kahoot ● PearDeck ● Self Peer Evaluation ● Think Pair Share ● JigSaw ● Student worksheet Mass of burning steel wool ● Petroleum You Decide ● Polymer Lab ● Lab & Post Lab Let's Make a Splash **Summative Assessments:** ● Summative Unit 3 Phenomena Model Rubric.	**Formative assessments:** ● White board meetings. ● Phenomenon models ● Food and Nutrition Peardeck ● Sugar & Starches Lab ● Good Fat vs. Bad Fat ● Lab on Fat ● Sugar Buzz Lab ● Student copy Thirst quencher Lab **Summative Assessments:** ● Food and Nutrition Summative ● Unit 4 Phenomenon Model Rubric
Resources ➪	● Physical/Chemical Change sort ● Describing and classifying matter ● States of matter ● Physical and Chemical Change Virtual Lab ● Physical and chemical changes PowerPoint	● Isotopes Peardeck ● Basics of Atoms Peardeck ● Atoms Intro Webquest ● Bohr Model CER ● Accidental Discoveries ● Isotopes Introduction ● Background Radiation Dose ● Radioactivity: Duckster ● Nuclear Facts and Fiction ● Edpuzzle: Most Radioactive Places on Earth	● Covid waste webquest ● Kinetic and potential energy ● 3000 years of petroleum in 300 seconds video and worksheet ● Recycling plastic by numbers ● Intro to Polymers	● Padlet warm up discussion: misleading pictures on food packages ● Edpuzzle good fat vs. bad fat) ● Ed puzzle how to read food labels ● Webquest food additives) ● Ed puzzle food additives

Timeframe ⇨	Quarter 1	Quarter 2	Quarter 3	Quarter 4

Chemistry Course Unit Overview

Course Title_____Chemistry 541/542_____ **Essential Question (for Course)** How does matter and its interactions impact daily life?

Unit Title ⇨	Physical Properties of Matter	Periodic Table and Bonding	Mass Relations in Chemistry	Chemical Kinetics	Nuclear
Essential Question(s) ⇨	How can one explain the structure, properties and interactions of matter?	How do particles combine to form the variety of matter one observes?	How do substances combine or change (react) to make new substances?	How does one characterize and explain how forces change these reactions?	What forces hold nuclei together and mediate nuclear processes?
Standards/PoG ⇨	HS-PS1-1*Matter and it Interactions* Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. HS-PS1-2 *Matter and it Interactions* Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. HS-PS1-7 *Matter and it Interactions* Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion)	HS-PS1-2 *Matter and it Interactions* Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. HS-PS1-3*Matter and it Interactions* Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles. HS-PS1-4*Matter and it Interactions* Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy. HS-PS1-5*Matter and it Interactions* Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or	HSP-PS1-1 *Matter and it Interactions* Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms. HS-PS1-2 *Matter and it Interactions* Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties. HS-PS1-3 *Matter and it Interactions* Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles. HS-PS1-4*Matter and it Interactions* Develop a model to illustrate that the release or absorption of energy from a chemical reaction system depends upon the changes in total bond energy.	HS-PS1-5 *Matter and it Interactions* Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs. HS-PS1-6 *Matter and it Interactions* Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)	HS-PS1-8 *Matter and it Interactions* Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay. HS-PS3-1 *Energy* Create a computational model to calculate the change in the energy of one component in a system when the change in energy of the other component(s) and energy flows in and out of the system are known. HS-PS3-4 *Energy* Plan and conduct an investigation to provide evidence that the transfer of thermal energy when two components of different temperature are combined within a closed system results in a more uniform energy distribution among the components in the system (second law of thermodynamics). **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion)

	Meaningful and purposeful communication (White Board meetings)	concentration of the reacting particles on the rate at which a reaction occurs. HS-PS1-6*Matter and it Interactions* Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)	HS-PS1-7 *Matter and it Interactions* Use mathematical representations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. **POG** Empathy and cross-cultural understanding (group work) Critical and Creative Problem Solving (lab experiment) Initiative & Perseverance (grade reflection) Analyze and construct arguments based on evidence (lab conclusion) Meaningful and purposeful communication (White Board meetings)		Meaningful and purposeful communication (White Board meetings)
Skills ⇨	• Demonstrate proficiency in scientific measurements in the laboratory. • Communicate understanding of the law of conservation of mass and density. • Demonstrate graphing skills. • Analyze energy diagrams. • Calculate density in a laboratory activity. • Calculate the energy that flows through matter. • Use significant figures in calculations. • Use dimensional	• Use the periodic table to predict trends and atomic behavior. • Write electron configurations of atoms and ions. • Classify matter • Draw lewis dot structures • Draw and identify parts of an atom • Identify and draw parts of a wave • Differentiate between ionic and molecular compound • Name ionic and molecular	• Demonstrate dimensional analysis. • Relate the mass of an atom to the number of particles/moles/liters of gas at STP. • Calculate molarity of solutions. • Calculate percent composition of chemical compounds. • Calculate empirical formula of chemical compounds. • Use coefficients to balance equations. • Identify the 5 types of chemical reactions. • Calculate mass of	• Communicate how factors affect reaction rate. • Draw energy diagrams with and without catalyst and indicate exothermic and endothermic reactions. • Communicate how a reaction shifts its' equilibrium position based on an applied stress.	• Define radioactivity. • Identify types of nuclear decay and which atoms undergo decay. • Balance nuclear decay reactions. • Compare the advantages and disadvantages of nuclear energy. • Develop a model to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fission, fusion, and radioactive decay.

	analysis to convert units. • Calculate pressure, volume or temperature using gas laws. • Differentiatie and quantify energy in solids, liquids and gases. • Calculate heat of a system.	compound • Identify the IMF's in molecular compounds • Differentiate the properties of the four types of solids	product from reactants using balanced equations. • Identify the limiting reactant and excess reactant. • Calculate percent yield.		
Key Content ⇨	Phenomenon: Exploding can demo. *Why does the explosion happen?* • The Nature of Gases, Liquids, and Solids • Physical/chemical properties/change • Density • Scientific Measurement • The Flow of Energy • Measuring and Expressing Heat Changes • Heat in Changes of State	Phenomenon: Flame test *Why do you see different colors?* • The Periodic Table • Electrons & Electron Configuration • Waves • Ionic & Molecular Compounds • Intermolecular forces • Polarity • Lewis Dot Structures	Phenomenon: Phenomenon: Exploding can demo *Why is there a time delay before the explosion?* • Dimensional Analysis in Chemistry • Stoichiometry • Percent Yield • Percent Composition • Empirical Formula • Molarity • Limiting & Excess Reactant • Classify and Balance Chemical Equations	Phenomenon:MRE *What is occurring?* Equilibrium Shifts *Why is there a color change?* • Factors that affect reaction rate • Activation Energy • Equilibrium • Le Chatelier's Principle	Phenomenon: Atomic Bomb Explosion Video *Why is the explosion so large?* • Nuclear Processes • Conservation of Energy and Energy Transfers • Organization of the Periodic Table • Radioactivity • Alpha, beta, and gamma decay • Nuclear Power
Assessments ⇨	**Formative assessments:** • White board meetings • Entry/Exit Tickets • Kahoot • PearDeck • Self Peer Evaluation • Think Pair Share • JigSaw • Student worksheet Cotton ball lab • Student worksheet Melting Ice • Student worksheet Dissolving sugar • Student worksheet Forming a precipitate • Student worksheet Alka Seltzer Lab	**Formative assessments:** • White board meetings • Entry/Exit Tickets • Kahoot • PearDeck • Self Peer Evaluation • Think Pair Share • JigSaw • Atoms Basics formative • POGIL: Atomic Structure and Beginning to read the periodic table • Polarity of Slime and Silly Putty • Student-Four Types	**Formative assessments:** • White board meetings • Entry/Exit Tickets • Kahoot • PearDeck • Self Peer Evaluation • Think Pair Share • JigSaw • Mole Formative • Balancing formative • 5 Types of Chemical Reactions • Types of Reactions lab • Stoichiometry formative • Student worksheet Density column	**Formative assessments:** • White board meetings • Entry/Exit Tickets • Kahoot • PearDeck • Self Peer Evaluation • Think Pair Share • JigSaw • Reaction rates Inquiry Lab • Student activation energy activity • Student worksheet Easter Eggs • Le Chatelier Principle Formative **Summative Assessments**	**Formative assessments:** • White board meetings. • Phenomenon model • Student Choice Nuclear Chemistry Model • Entry/Exit Tickets • Kahoot • PearDeck • Self Peer Evaluation • Think Pair Share • JigSaw • Three truths and a lie • POGIL Mass Number • Pear deck Intro to Nuclear Chemistry • Radiation & Medical Uses • Radiation Effects on Humans • Edpuzzle: The most

	• Student worksheet Mass of burning steel wool • Gas Law Lab • Gases dry labs • Classroom Density Lab • Lab-Icy Hot **Summative Assessments** • 541/542-Summative Part #1 • 541-Summative Part #2 • 542 Summative Part #2 • 541-Summative Part #3 • 542-Summative Part #3 • 541-Summative Part #4 • 542-Summative Part #4	of Solids • Pear Deck: Electron Configuration • Student worksheet Ice cube lab • Introduction to IMF whiteboard meeting **Summative Assessments** • Unit 2 Phenomenon model rubric • Google form summative Part #1 • Open ended summative #1 • 541/542 Unit 3 Summative Part #2 Multiple Choice • 541 Summative Part #2 open ended • 542 Summative • 541 Summative Part #3 • 542 Summative Part #3 • 541/542 Unit 3 Summative Part #4 Multiple Choice • 541 Summative Part #4 Open Ended • 542 Summative Part #4 Open Ended	• 541-Limiting Reagents formative • Percent Yield formative **Summative Assessments** • 541 Summative Unit 3 Part #1 • 542 Summative Unit 3 Part #1 • 541/542 Unit 3 Summative Part #2 Multiple choice • 541 Unit 3 Open ended Summative Part #2 • 542 Unit 3 Open Ended Summative Part #2 • 541 Summative Part #3 • 542 Summative Part #3 • Unit 3 Phenomenon model rubric	• 541/542 Multiple Choice summative • 541/542 Open ended Summative Unit 4 • Unit 4 Phenomenon model rubric	radioactive places on earth • Student worksheet Ice cube lab • Formative Assessment: Nuclear **Summative Assessments:** • Directions for Nuclear Model • Unit 5 Phenomenon Model Rubric
Resources ⇨	• Mass & Change Worksheet • 541/542 Summative 1 review • Metric conversion Practice worksheet	• Pear Deck Naming Compounds/Writing Formulas • Practice Lewis Dot Structures,	• Dimensional Analysis Lab • Mole to mass conversion practice	541 ch 11powerpoint • 541 summative review • Keq Practice • PhET-LeChat • Collision Theory POGIL	• Isotopes Peardeck • Basics of Atoms Peardeck • Atoms Intro Webquest • Bohr Model CER • Accidental Discoveries • Isotopes Introduction

	• Scientific notation worksheet • Density Peardeck • 542 Summative #2 Review • Warm-up Peardeck: accuracy and precision • Thermal Expansion-Constructing An Explanation • Teacher Key-thermal expansion constructing an explanation • Energy Particles in Motion Worksheet • Exemplar Heat a substance-Expansion • Quantitative Energy Problems Intro Slides • Gas Intro Notes • POGIL Accuracy and Precision	Geometry, and Polarity • Review for Summative Elec Conf/Waves • Review for Summative-Classification of Matter • Graphic-Classification of Matter • Lab ionic vs Molecular • LAB Wave Characteristics • Separation Lab • Atomic structure review • IMF lab • PowerPoint Covalent Bonding • LAB Molecular Geometry Balloon	• Percent Composition & Empirical Formula Worksheet • Ed puzzle: stoichiometry • Stoichiometry Practice • Stoichiometry/LR/Yield Worksheet • Types of Chemical Reaction Worksheet • Modeling Chemical Reactions • Ed puzzle: reaction types • Bal Equation Worksheet • Balloon limiting reactant • stoichiometry - mixed problems worksheet		• Background Radiation Dose • Radioactivity: Duckster • Nuclear Facts and Fiction • Edpuzzle: Most Radioactive Places on Earth
Timeframe ⇨	541 45 days 542 50 days	541 40 days 542 50 days	541 45 days 542 50 days	541 20 days 542 does not do this unit	541 30 days 542 30 days

Earth Science Course Map

Course Title Earth Science

Essential Question (for Course) How do the processes that formed the universe and the solar system and continuous processes that drive the evolution of the Earth impact human life?

Unit Title ⇨	Astronomy	Geology	Earth's Systems	Human Impacts
Essential Question(s) ⇨	What is the universe, and what is Earth's place in it? How do scientists determine the structure, motion, scale, and composition of the Universe and the Solar System?	How do geological processes shape the surface and the interior of the Earth?	How and why is Earth constantly changing? How do the physical and chemical properties of water change Earth's surface and affect its systems?	How does human use and management of natural resources impact Earth's systems?
Standards/PoG ⇨	HS-ESS1-1. Develop a model based on evidence to illustrate the life span of the sun and the role of nuclear fusion in the sun's core to release energy that eventually reaches Earth in the form of radiation. HS-ESS1-2. Construct an explanation of the Big Bang theory based on astronomical evidence of light spectra, motion of distant galaxies, and composition of matter in the universe. HS-ESS1-3. Communicate scientific ideas about the way stars, over their life cycle, produce elements. HS-ESS1-4. Use mathematical or computational representations to predict the motion of orbiting objects in the solar system. HS-ESS1-6. Apply scientific reasoning and evidence from	HS-ESS1-5. Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks. HS-ESS2-1. Develop a model to illustrate how Earth's internal and surface processes operate at different spatial and temporal scales to form continental and ocean-floor features. HS-ESS2-3. Develop a model based on evidence of Earth's interior to describe the cycling of matter by thermal convection. HS-ESS2-7. Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth. **POG** **Analyze and Construct Arguments Based on Evidence** **Critical and Creative Problem Solving** **Meaningful and Purposeful Communication**	HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. HS-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate HS-ESS2-6 Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere. HS-ESS2-5. Plan and conduct an investigation of the properties of water and its effects on Earth materials and surface processes. **HS-ESS3.C:** Human activities in agriculture, industry, and everyday life have had major effects on the land, vegetation, streams, ocean, air, and even outer space. But individuals and	HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems. HS-ESS2-4 Use a model to describe how variations in the flow of energy into and out of Earth's systems result in changes in climate. HS-ESS2-6 Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere. HS-ESS2-7 Construct an argument based on evidence about the simultaneous coevolution of Earth's systems and life on Earth. HS-ESS3-1 Construct an explanation based on evidence for how the availability of natural resources,

	ancient Earth materials, meteorites, and other planetary surfaces to construct an account of Earth's formation and early history. **POG** **Analyze and Construct Arguments Based on Evidence** **Critical and Creative Problem Solving** Meaningful and Purposeful Communication Initiative and Perseverance **Empathy and Cross Cultural Understanding**	**Initiative and Perseverance** Empathy and Cross Cultural Understanding	communities are doing things to help protect Earth's resources and environments. (5-ESS3-1) **POG** **Analyze and Construct Arguments Based on Evidence** **Critical and Creative Problem Solving** **Meaningful and Purposeful Communication** **Initiative and Perseverance** Empathy and Cross Cultural Understanding	occurrence of natural hazards, and changes in climate have influenced human activity. HS-ESS3-3 Create a computational simulation to illustrate the relationships among management of natural resources, the sustainability of human populations, and biodiversity. HS-ESS3-4 Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.* **HS-ESS3-5 Earth and Human Activity** Analyze geoscience data and the results from global climate models to make an evidence-based forecast of the current rate of global or regional climate change and associated future impacts to Earth systems. **HS-ESS3-6 Earth and Human Activity** Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity. **POG** **Analyze and Construct Arguments Based on Evidence** **Critical and Creative Problem Solving** **Meaningful and Purposeful Communication** **Initiative and Perseverance** Empathy and Cross Cultural Understanding

Skills ➪	• Demonstrate ability to use stellar measurement units. Astronomical unit, light year • Read measurements • Convert measurements • Explain how the fusion process works • Create a model to show hydrogen and helium atoms combining to release energy • Explain how the fusion process results in new elements. • Characterize three subatomic particles • Compare and contrast conduction,convection,radiation. • Demonstrate an understanding of the electromagnetic spectrum. • Identify and define the different types of energy on an EMS diagram. • Show how audible sound changes with respect to wavelength • Create a model to show Doppler Effects • Collaborate to show how sound is used to show the behavior of red/blue shifts • Explain how big bang evidence supports the theory • Create a model showing how wave changes during doppler shift. • Explain Kepler's laws and how they advance our understanding of planetary motion • Create a model illustrating the three laws with diagrams and equations. • Use math to predict	• Use Wegener's evidence of continental Drift to support the belief of continental movement. • Compare and contrast the strengths and weaknesses of Wegener's theory. • Incorporate the discovery of seafloor spreading into the revised theory of Plate tectonics • Compare the concepts of catastrophism and uniformitarianism and use evidence to show how those forces work today. • Explain how relative dating techniques are used (sedimentary rock layers). • Absolute dating (half life/radioactive decay)	• Understand the concept of a feedback loop (positive/negative) • Interpret a diagram • Explain the processes of the Carbon cycle. • use the carbon cycle diagram to evaluate and explain the carbon cycle verbally to peers and in writing • Explain the Earth's energy budget(absorption, reflection) • Use the energy budget diagram to evaluate and explain the transfer of energy (using quantitative data) through the atmosphere (both verbally and in writing) • Explain the characteristics of a water molecule. • Explain the chemical and physical properties (shape and polarity) of a water molecule and how water coalesces in different phases of matter impacting surroundings. • Predict the changes in river flow due to the physical and chemical properties of water. • Apply previously learned knowledge about water to communicate erosional impact of land surfaces • Demonstrate,draw and label water flow/velocity in a stream table and in a diagram based on changes in river gradient, substrate and obstacles.	• Understand the concept of a feedback loop (positive/negative) • Identify how humans alter the Earth's energy budget. (land use, GHG) Explain how the earth's global environment has evolved over time. • Identify a specific situation where; ○ Organisms have modified the environment and its outcome ○ The environment has modified an organism and the outcome. • Create a representation to show how the availability of resources influenced human development • Compare and contrast forms of fossil and alternative energy. • Identify current environmental problems • Explain the impact that these problems have for humans. • Use data to predict climate change in the future

	relative velocity and distance of celestial bodies ● Identify the factors that explain gravitational forces and how a change in those factors affects the gravitational pull between two objects. ● Compare/contrast formation of the solar system			
Key Content ➪	Phenomenon: Hubble Deep Field ● Stellar measurements ● Formulas for conversions of measurement ● Fusion process ● Subatomic particles ● Conduction, convection, radiation ● Electromagnetic spectrum ● EMS diagram ● Sound and wavelength ● Doppler Effects ● Big Bang Theory ● Kepler's laws ● Relative velocity/distance of celestial bodies ● Factors on gravitational forces ● Solar system formation	Phenomenon: Video on volcano eruption ● Use Wegener's evidence of continental Drift to support the belief of continental movement. ● Compare and contrast the strengths and weaknesses of Wegener's theory. ● Incorporate the discovery of seafloor spreading into the revised theory of Plate tectonics ● Compare the concepts of catastrophism and uniformitarianism and use evidence to show how those forces work today. ● Explain how relative dating techniques are used (sedimentary rock layers). ● Absolute dating (half life/radioactive decay)	Phenomenon: Subsidence of the San Joaquin Valley ● Feedback loops ● Carbon cycle ● Earth's energy (absorption/reflection) ● Transfer of energy ● Chemical and physical properties of a water molecule ● Changes in river flow ● Water flow/velocity	Phenomenon: Man In Africa, Starving Polar Bears, Dust Bowl (1930's), Hypoxia, Mining Pictures ● Feedback loops (positive/negative) ● Human impact on energy ○ Land use ○ GHG ● Changes in the environment over time ● Use of graphing programs ● Organism impact modifying the environment ● Environmental impacts on organisms ● Nile flooding, ● Oil discoveries ● Water as transport method ● Impact of fossil fuels ● Impact of alternative energy sources ● Data as evidence
Assessments ➪	**Formative assessments:** ● CER Stars baseline ● EM Spectrum Quiz ● Kepler's Laws Quiz (forms) ● Red Shift/Blue Shift Interactive ● Life Cycle Of a Star comic strip ● Stars Group Activity ● Why will the Sun die and what happens to Earth?	**Formative assessments:** ● Sea Floor Spreading CER student ● Evidence for Continental Drift ● Wegener/Drift evidence Form ● Student choice of impact on earthquake ● Sea floor Spreading ● What is a hydrothermal vent? **Summative assessments:** ● Midterm	**Formative assessments:** ● Condensation CER ● Interconnectedness of Earth Systems ● Stream Table Lab ● Ocean Acidification in a cup ● Where have all the glaciers gone **Summative assessments:** ● Unit 3 Summative	**Formative assessments:** ● Week 1 Human Impact Project: ● Week 2 Human Impact Project: ● Week 3 Human Impact Project: ● Week 4 Human Impact Project: ● Week 5 Human Impact Project: **Summative assessment:** Summative Presentation for students

	• Evidence of the Earth's History **Summative assessments:** • Unit 1: Stars and Light Assessment (Alfie)-	• Unit 2 Phenomenon model Rubric	• Unit 3 Phenomenon model Rubric	
Resources ⇨	• Kepler's Laws PearDeck • Birth of Stars PearDeck • Activities	• Relative Age dating PearDeck • Scavenger Hunt of North America • Layers of the Earth foldable	• Intro to earth Systems Peardeck • Relative Age Dating PearDeck • Rock Cycle PearDeck	• Introduction Phenomenon
Timeframe ⇨	September - November 1	November 2 - January 10	January 25 - April 10	April 25 - June 5
Next Steps	1. Looking at assessments 2. Finish skills 3. Look at phenomena 4. Time frame needs to be looked at for unit ½ 5. Identify create common lessons/activities			

CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

NEW BUSINESS

New Britain Board of Education Curriculum Committee Meeting

March 20, 2023 – 6:15 PM l New Britain Educational Administration Center

Call to Order and Opening

Mr. Anthony Kane, Curriculum Committee Chair, called the meeting to order at 6: 18 PM.

Board Members Present

Ms. Gayle Sanders-Connolly, Mr. Merrill Gay, Mr. Anthony Kane, Ms. Diana Reyes, #Ms. Tina Santana.
#Online

CSDNB Staff Present

Ms. Amy Anderson, Ms. Lara Bohlke, Ms. Kristina DeNegre, Ms. Aja Edwards, Dr. Anthony Gasper, Ms. Wanda Lickwar, Ms. Maryellen Manning, Mr. Tyrone Richardson, Mr. Paul Salina, Dr. Nicole Sanders, Mr. Mark Spalding, and Ms. Ivelise Velazquez.

New Business

Review and Approve Minutes from the Curriculum Committee Meeting on February 21, 2023

Ms. Reyes motioned to approve minutes from the Curriculum Committee Meeting on February 21, 2023, seconded by Mr. Gay. Motion carried unanimously.

Accept Monthly EdAdvance Report

Presentation: Monthly EdAdvance Report
Presented by Ms. Kristina DeNegre and Mr. Tyrone Richardson

March 2023 Update:
Department of Academics Updates:

ARC Coaching Sessions - The DOA has held three training sessions with our Literacy Coaches for the rollout of ARC. Coaches worked with our ARC constituents to dive into the program and develop professional development and presentations for upcoming NBU sessions. The feedback from these sessions has been positive and the coaches are getting ready to turn-key their first ARC sessions to all K-5 teachers at the end of March.

Robert Dyar, our Implementation Success Manager from Learning Ally, reached out with Congratulations to Smith Elementary and Vance Village! Learning Ally conducted a 'Great Reading Games' event that has recently ended. The results indicated that two CSDNB schools were winners! Smith Elementary School placed 6th in the nation amongst elementary schools their size and Vance Village School placed 3rd amongst middle schools (schools with grades 5-8) their size. Smith Elementary will receive a $100 gift card and Vance Village will receive a $150 gift card. Principal Karen Falvey at Smith and Principal Sarah Harris at Vance Village have been notified. They are proud of the reading their students have been doing and excited about this recognition.

Read Across America happened across the district on March 2, 2023. Each of our schools (PreK-8) had guest readers come in and read to our students. Our students were so excited to have readers from within our CSDNB community and the community at large read to them. One student was quoted as saying "This is my favorite day of the year because we get to listen to people

read and then we get to read our favorite books".

Vance Elementary School held their "Camp Read A Lot" Event this month to continue the momentum of building the love of reading. Students received a Camp Read A Lot passport and traveled through the cafeteria, music room, and gym where they encountered Literacy games, make and take centers, and areas where they could read with family and friends. For example, the gym had several tents and a "campfire" that students could read in or around. Each child got to take home a book and parents were able to take home resources to support their child in Literacy.

Grades 6-12 administrators had their second DOK (Depth of Knowledge) session. They continued to collaborate and calibrate around DOK examples, by using videos and participation in live activities. They began to strategize around introducing walkthroughs to teachers. Some schools have begun their own individual workshops at their schools with staff members.

Secondary Coaches were provided with a DOK session last week which included the same
activities that administrators participated in. This was done to make sure everyone was on the same page. This will also help provide support to teachers from both coaches and administrators.

EdAdvance Update:

- 46% of Middle School Teachers in Math are currently showing strong or some evidence of exploration of big ideas of the unit
- 34% of teachers at the Middle School Teachers in Math demonstrate strong or some evidence student practice of skills from priority standards
- 16% of MS Teachers are currently demonstrating strong or some evidence of student-centered learning

District Professional Learning:

- Curriculum Bootcamp: Session 4
- Continue to work on SS grades 6-8 Unit 5
- EdAdvance Coaches participated in Learning Walks in Pulaski, Slade and Smalley using Look For Tools in ELA, SS and Math for curriculum implementation
- Professional Learning Sessions for Middle Schools have occurred as follows: Pulaski: Bryan and Robin
- Vocabulary Session (Two)
- Social Studies NBU (Content meetings grades 6-8) - 4 Sessions
- Analyzing IAB Data and Driving Instruction- Math and Science teachers
- Using Learning Goals to Plan Adaptations-Math teachers
- Math sessions with each grade level--formalized grade level planning, considering the pacing and priorities, using backwards planning from the assessments to make instructional decisions

Slade:

- Social Studies Unit Unpacking (3 Sessions)
- Building Vocabulary (2 Sessions)

Smalley:

- Grade 3: 5 levels of language proficiency
- Writing samples; Newcomer Toolkit (2 Sessions K and Grade 2)
- Depth of Knowledge - Evaluating teacher questions and student responses (Grade 1 and Grade 3)
- Kindergarten Exploring Unit 4 ELA
- 2nd grade Exploring Unit 4, SIOP
- Fundations

**Additional EdAdvance updates can be found on the district website

Presentation: CSDNB Curriculum Audit Report – Presentation attached
Presented by Ms. Amy Anderson, Ms. Lara Bohlke, and Ms. Ivelise Velasquez

Closing and Adjournment

Ms. Reyes motioned to adjourn at 7:16pm, seconded by Ms. Santana. Motion carried unanimously

CONSOLIDATED SCHOOL DISTRICT OF NEW BRITAIN

Board Memorandum

Submitted by James F Brasile () for approval at the Regular Board Meeting on May 8, 2023.
Senior Leadership Sponsor: Tyrone Richardson Staff Presenter: Brasile or Pearce

Type of Memorandum

Other -

Background and Purpose/Rationale

Student 5.0 is a career launch program offered by ReadyCT, a 501c3 corporation duly organized under the laws of the state of Connecticut. The Student 5.0 program is focused on the design and implementation of an individualized career and learning plan for graduating high school seniors. The Student 5.0 program will provide career readiness workshops and 1:1 dedicated coaching support to students who enroll in the program. Students who enroll in the program will have access to support for up to 12 months, earn a $100 stipend for completing the career readiness workshop series and have the opportunity for a paid internship.

Financial Information

The total is The Student 5.0 program will be provided at no cost to the district because it is fully funded by CareerConneCT. However, this means that participants must be authorized to work in the U.S. because the program is federally funded. and the funding source is N/A

Committee Review

To be reviewed by the Curriculum Committee on April 17, 2023