

1 st Nine Weeks				2 nd Nine Weeks			
Estimated Weeks	DCI	Suggested CCC	Suggested SEP	Estimated Weeks	DCI	Suggested CCC	Suggested SEP
3	7.PS1.1 7.PS1.5	6 1	Developing & using models Analyzing & interpreting data	4.5	7.LS1.1 7.LS1.3 7.LS1.2	4 1 7	Developing & using models Engaging in argument from evidence Planning & carrying out controlled investigations
4	7.PS1.2 7.PS1.3 7.PS1.6	3 1 2	Analyzing & interpreting data Engaging in argument from evidence Developing & using models	4.5	7.LS1.4 7.LS1.5 7.LS1.9 7.LS2.1	4 4 4 5	Developing & using models Constructing explanations & designing solutions Planning & carrying out controlled investigations Developing & Using Models
2	7.PS1.4	5	Analyzing & interpreting data				
3 rd Nine Weeks				4 th Nine Weeks			
Estimated Weeks	DCI	Suggested CCC	Suggested SEP	Estimated Weeks	DCI	Suggested CCC	Suggested SEP
5	7.LS1.6 7.LS1.7 7.LS1.8	2 2 5	Engaging in argument from evidence Obtaining, evaluating & communicating information Constructing explanations & designing solutions	6	7.ETS2.1	3	Constructing explanations & designing solutions
4	7.LS3.1 7.LS3.2 7.LS3.3	6 2 1	Obtaining, evaluating & communicating information Developing & using models Analyzing & interpreting data	3	7.ESS3.1 7.ESS3.2	7 1	Analyzing & interpreting data Engaging in argument from evidence

[7th Grade Standards](#)

[Description of SEPs and CCC](#)

[TN Ready Blueprint](#)

[Sample TNReady questions](#)

Tentative Testing Window- April 17th- May 5th

1 st Quarter	DCI	CCC	SEP	Chp. In Book	Sequence of Lessons
Unit 2- Atoms and the Periodic Table 15 lessons	7.PS1.1- Develop and use models to illustrate the structure of atoms, including the subatomic particles with their relative positions and charges 7.PS1.5- Use the periodic table as a model to analyze and interpret evidence relating to physical and chemical properties to identify a sample of matter.	Patterns Structure and Function	Developing & using models Analyzing & interpreting data	Chp. 1.1- Describing Matter (PS 1.5) Chp. 1.2- Classifying Matter (PS 1.1, 1.2, and 1.3)* Chp 3.1- Introduction of Atoms (PS 1.1) Chp. 3.2- Atoms, bonding, and The periodic Table (PS 1.1 and 1.5) Chp. 3.3 – Ionic Bonds- (1.1, 1.5, and 1.2)* Chp. 3.4- Covalent Bonds- (1.1, 1.5, and 1.2)* Chp. 3.5- Bonding in Metals (1.1, 1.5, and 1.2)*	1. Matter 2. Atoms 3. Periodic Table 4. Bonding
Unit 1- Matter* Start here! 20 Lessons	7.PS1.2-Compare and contrast elemental molecules and compound molecules. 7.PS1.3-Classify matter as pure substances or mixtures based on composition.	Scale, proportion, and quantity Patterns Cause and Effect	Analyzing & interpreting data Engaging in argument from evidence Developing & using models	Chp 1.2- Classifying Matter (PS 1.2 and 1.3) Chp. 1.3-Measuring Matter (PS 1.6) Chp 1.4- Changes in Matter (PS 1.4 and PS 1.6)	

	7.PS1.6-Create and interpret models of substances whose atoms represent the states of matter with respect to temperature and pressure.			Chp. 2 (all PS 1.6)- States of Matter, Changes in State, and Gas Behavior Chp. 3.3 – Ionic Bonds- (1.1, 1.5, and 1.2)* Chp. 3.4- Covalent Bonds- (1.1, 1.5, and 1.2)* Chp. 3.5- Bonding in Metals (1.1, 1.5, and 1.2)*	
Unit 3-Chemical Reactions 10 lessons	PS 1.4- Analyze and interpret chemical reactions to determine if the total number of atoms in the reactants and products support the Law of Conservation of Mass.	Energy and Matter	Analyzing and Interpreting Data	Chp. 4- Observing Chemical Reactions, Describing Chemical Reactions, and Controlling Chemical Reactions	
2nd Quarter	DCI	CCC	SEP	Chp. In Book	Sequence of Lessons
Unit 4- Cells 22 Lessons	7.LS1.1- Develop and construct models that identify and explain the structure and function of major cell organelles as they contribute to the life activities of the cell and organism.	Systems and System Models Patterns Stability and Change	Developing & using models Engaging in argument from evidence Planning & carrying out controlled investigations	Chp. 5.1- Discovering Cells/ Cell Theory (LS 1.3) Chp. 5.2- Looking Inside Cells- (LS 1.1, 1.3, and 1.4) Chp. 5.3- Chemical Compounds in Cells	Organic Molecules (Chp. 5.3) Discovering Cells/Cell Theory (Chp. 5.1) Cell structure (chp 5.2) Cell Transport (chp. 5.4)

	<p>7.LS1.3- Evaluate evidence that cells have structural similarities and differences across kingdoms.</p> <p>7.LS1.2- Conduct an investigation to demonstrate how the cell membrane maintains homeostasis through the process of passive transport.</p>			<p>(Organic Molecules) (PS 1.2 and LS 1.5)</p> <p>Chp. 5.4- Cell Transport (LS 1.2 and LS 1.5)</p>	
<p>Unit 5- Cell systems, Photosynthesis and Respiration, and</p> <p>22 Lessons</p>	<p>7.LS1.4- Diagram the hierarchical organization of multicellular organisms from cells to organism.</p> <p>7.LS1.5-Explain that the body is a system comprised or subsystems that maintain equilibrium and support life through digestion, respiration, excretion, circulation, sensation (nervous and integumentary) and locomotion (musculoskeletal).</p> <p>7.LS1.9-scientific explanation based on compiled evidence for the processes of photosynthesis of cellular respiration, and anaerobic respiration in the cycling of matter and</p>	<p>Systems and System Models</p> <p>Energy and Matter</p>	<p>Developing & using models</p> <p>Constructing explanations & designing solutions</p> <p>Planning & carrying out controlled investigations</p> <p>Developing & Using Models</p>	<p>Chp.6.1- Photosynthesis (LS 1.9)</p> <p>Chp 6.2- Respiration (LS 1.9)</p> <p>Chp. 10, 11, 12</p> <p>Teach all systems except Lymphatic, endocrine, immune, and reproductive systems (LS 1.4 and 1.5)</p> <p>Chp. 9.7-Cycles of Matter (LS 2.1)</p>	<p>Cycling of Matter (chp. 9.7)</p> <p>Photosynthesis (Chp 6.1)</p> <p>Respiration Chp. 6.2)</p> <p>Body Organization (11.1)</p> <p>System Interactions (11.2)</p> <p>Homeostasis (11.3)</p> <p>Systems (you pick the order)</p>

	<p>flow of energy into and out of organisms. 7.LS2.1- Develop a model to depict the cycling of matter, including carbon and oxygen, including the flow of energy among biotic and abiotic parts of an ecosystem.</p>				
3rd Quarter	DCI	CCC	SEP	Chp. In Book	Sequence of Lessons
<p>Unit 6 – Reproduction 25 Lessons</p>	<p>7.LS1.6- Develop an argument based on empirical evidence and scientific reasoning to explain how behavioral and structural adaptations in animals and plants affect the probability of survival and reproductive success. 7.LS1.7- Evaluate and communicate evidence that compares and contrasts the advantages and disadvantages of sexual and asexual reproduction. 7.LS1.8- Construct an explanation demonstrating that the function of mitosis for multicellular organisms is for growth and repair through the production of genetically identical daughter cells.</p>	<p>Cause and Effect Energy and Matter</p>	<p>Obtaining, evaluating & communicating information Developing & using models Analyzing & interpreting data</p>	<p>Chp 6.3 (LS 1.8)- Mitosis/Cell Division Chp. 10. (1.6 and 1.7) Chp. 12 (1.7) Chp 9 (1.6 and 1.7)</p>	<p>Sexual vs. Asexual Reproduction (focus on increasing genetic diversity) Cell Division/Mitosis Adaptations- we need to look into what exactly needs to be covered because it currently takes two chapters</p>

<p>Unit 7 20 lessons</p>	<p>7.LS3.1- Hypothesize that the impact of structural changes to genes (i.e., mutations) located on chromosomes may result in harmful, beneficial, or neutral effects to the structure and function of the organism. 7.LS3.2- Distinguish between mitosis and meiosis and compare the resulting daughter cells. 7.LS3.3- Predict the probability of individual dominant and recessive alleles to be transmitted from each parent to offspring during sexual reproduction and represent the genotypic and phenotypic patterns using ratios.</p>	<p>Structure and Function Cause and Effect Pattern</p>	<p>Obtaining, evaluating & communicating information Developing & using models Analyzing & interpreting data</p>	<p>Chp 7- Inheritance (LS 3.2 and 3.3) - Meiosis - Punnett squares - Heredity vocabulary Do not need to complete Modes of Inheritance Chp 8- DNA and mutations (LS 3.1, 4.3, 3.3)</p>	<ol style="list-style-type: none"> 1. Meiosis (focus on comparison to mitosis and end result in the four daughter cells). Stages of names are not necessary 2. Genetics vocabulary 3. Punnett Squares 4. Structure of DNA 5. Mutations (a focus on changes in genes lead to a change in function). Will need lots of practice with these question types.
<p>4th Quarter</p>	<p>DCI</p>	<p>CCC</p>	<p>SEP</p>	<p>Chp. In Book</p>	<p>Sequence of Lessons</p>
<p>Unit 8 15 lessons</p>	<p>7.ESS3.1- Graphically represent the composition of the atmosphere as a mixture of gases and discuss the potential for atmospheric change. 7.ESS3.2- Engage in a scientific argument through graphing and translating data</p>	<p>Patterns Stability and change</p>	<p>Analyzing & interpreting data Engaging in argument from evidence</p>	<p>Chp. 13 (ESS 3.1)- 13.1 (components of the atmosphere), 13.3- layers of the atmosphere Chp. 14 (ESS 3.2)- 14.1 (measuring climate change), 14.2-Human</p>	<p>Components of atmosphere Layers of atmosphere Climate change Greenhouse gases (emphasis on how changes affect climate and how humans have</p>

	regarding human activity and climate.			activities (greenhouse gases)	contributed to those changes).
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