























9th Grade Unplugged: WEEK 1



















FCPS "Learning Unplugged" is a series of activities that promote learning at home *without the use of electronics.*

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div> ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div> MATH:</div> <p>Using the digits 0 through 9 at most one time, fill in the boxes to make the sum of the interior angles of a triangle.</p> <p>__ + __ + __</p> <div> SCIENCE:</div> <p>Apply scientific and engineering ideas to design a device that minimizes the force on an object during a collision. Examples of a device could include a football helmet or a parachute.</p> <div> PE/HEALTH:</div> <p>Keep a food diary for a week. Log each meal, snack, and the number of glasses of water you drink (shoot for 8 glasses of water). Try to eat lots of fruits and vegetables.</p>	<div> ELA COLLECTIONS TEXTBOOK:</div> <p>Read "Once Upon a Time" pages 11-16. What is the theme? Use text evidence to support your theme.</p> <div> GEOMETRY (1 OF 2):</div> <p>A juice company wants a new container design, and you have been commissioned to create it. It should look different from most containers so it will stand out to customers—it could be a prism, cone, pyramid, a combination of more than one type of shape, or any three-dimensional geometric figure you can describe. It needs to have a volume of 16 fluid ounces.</p> <div> SOCIAL STUDIES:</div> <p>Create 6-8 questions around a topic (technology, culture, civic participation, power of government, global connections). Interview two people then record answers and ask follow-up questions. Make a creative product reflective of the question "How does experience influence perspective?" (create a story, make a video).</p> <div> ART:</div> <p>Create a still life drawing, using 3-5 objects from around your room or house and arrange on a flat surface. Add a light source to create strong shadows cast on one side of your objects. Now draw and shade!</p>	<div> ELA CLOSE READER:</div> <p>Read and annotate "Night Calls" on pages 9-18. Pay particular experience to the narrator's relationship with her father.</p> <div> GEOMETRY (2 OF 2):</div> <p>Once you have your design, you'll need to prepare for the company: A prototype of the container, or an image showing what it will look like and what its dimensions will be. Calculations that prove the container will hold 16 fluid ounces. Your mathematical work should be as clear as possible. Remember that you're explaining your design to people who may not be comfortable with math, so you'll need to help them understand where your results came from.</p> <div> SCIENCE:</div> <p>Apply scientific and engineering ideas to evaluate, a device that minimizes the force on an object during a collision. Examples of evaluation could include determining the success of a device at protecting an object from damage.</p> <div> PE/HEALTH:</div> <p>Create your own dance! Invite family members to learn your dance, then have a "dance-off" competition.</p>	<div> ELA CLOSE READER / WRITING:</div> <p>Reread "Night Calls" on pages 9-18. Explain how the narrator's relationship with her father reveals the story's theme. Cite text evidence.</p> <div> ALGEBRA 1:</div> <p>A project was very successful, and the company made more money than expected. You've been asked you to create different methods to distribute bonuses to the 5 employees that directly worked on the project. There is \$8,000 available to distribute. The method for distributing the money will be shared with the entire company. Make a proposal with at least two different methods for your boss to choose from. Describe the advantages and disadvantages of each method. Then give your recommendation and provide an argument in its support.</p> <div> SOCIAL STUDIES:</div> <p>Masks are used for various purposes in different cultures. They may conceal identity, enhance beauty, or provide protection. Create a mask that represents you and write a brief explanation about its meaning.</p> <div> MUSIC:</div> <p>Identify the title, composer, performer, instrumentation of one song. Using musical vocabulary, describe what you hear in detail for each assessment category. Assessment Categories: tone quality, intonation, interpretation, technique, rhythm, and balance.</p>	<div> ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Make a prediction about the theme of the text or the central idea of the text based on textual evidence</p> <div> MATH:</div> <p>Given the point (3,5), use digits 1-9, at most one time, to find a point (__, __) that maximizes the slope of the line that passes through the two points. The slope cannot be undefined.</p> <div> SCIENCE:</div> <p>Apply scientific and engineering ideas to refine a device that minimizes the force on an object during a collision. An example of refinement includes modifying the design to improve the level of protection of the object.</p> <div> ART:</div> <p>Would you like to give thanks to someone who has helped you or done something nice for you? Design a postcard and focus on words and thoughts of gratitude.</p>



9th Grade Unplugged: WEEK 2

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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div>ELA CHOICE READING</div> <div>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</div>	<div>ELA COLLECTIONS TEXTBOOK:</div> <div>Read the argument "A Quilt of a Country" on pages 3-8. Summarize the author's claim in your own words.</div>	<div>ELA COLLECTIONS TEXTBOOK:</div> <div>Reread "A Quilt of a Country." Identify at least three examples of evidence (ex: facts, statistics, quotations) and evaluate how the author uses each one to support her claim.</div>	<div>ELA WRITING:</div> <div>Write and support a claim about a positive aspect of your school or community.</div>	<div>ELA CHOICE READING</div> <div>Read for 20 minutes and keep track of your progress. Explain the author's point of view or perspective concerning the central idea of the text.</div>
<div>ALGEBRA:</div> <div>Write at least two linear equations so that the solution of the system of equations of that line and $4x + y = 8$ is (3, -4)</div>	<div>ALGEBRA:</div> <div>Using the integers 0-9 (without repeating any number), create 4 points that could generate a line of best fit with the equation $y = -x + 8$. () () ()</div>	<div>ALGEBRA:</div> <div>Create 3 lines that have the same domain. Then, create 3 more lines that have the same range. Hint: How can we use the x or y axis to help?</div>	<div>GEOMETRY:</div> <div>What is a radius for a circle that has an area of 20 to 25 square feet?</div>	<div>GEOMETRY:</div> <div>What is a radius for a circle that has an area of 20 to 25 square feet?</div>
<div>SCIENCE:</div> <div>Design an experiment to provide evidence that an electric current can produce a magnetic field.</div>	<div>SOCIAL STUDIES:</div> <div>Read an article about COVID-19. How has this virus impacted life for you on a personal level? A community level? A state level? A national level? A global level? What are some long-term effects of this virus?</div>	<div>SCIENCE:</div> <div>Design an experiment to provide evidence that a changing magnetic field can produce an electric current.</div>	<div>SOCIAL STUDIES:</div> <div>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details.</div>	<div>SCIENCE:</div> <div>Design a model to support the claim that Newton's second law of motion describes the mathematical relationship among the net force on a macroscopic object, its mass, and its acceleration.</div>
<div>ART:</div> <div>Do you have a phrase or saying that makes you feel uplifted? Cut the words out of magazines and arrange an encouraging display. Don't have a "go to" phrase? Find generic words, such as "happy," "joy," "inspire," and start with a general display of words.</div>	<div>PE/HEALTH:</div> <div>Burn off extra energy and adapt your environment to your needs by rearranging furniture in your room, ridding your space of old things, and adding your personal art work or motivational words!.</div>	<div>PE/HEALTH:</div> <div>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</div>	<div>MUSIC:</div> <div>Play any selection of music and dance and sway to the beat.</div>	<div>PE/HEALTH:</div> <div>Create a healthy snack art piece! Use healthy foods such as fruits and vegetables!</div>

9th Grade Unplugged: WEEK 3

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FAYETTE COUNTY PUBLIC SCHOOLS

DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
 ELA CHOICE READING: Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.	 ELA CLOSE READER: Read and annotate the blog "Making the Future Better, Together" on pages 3-8. Summarize the author's claim in your own words.	 ELA CLOSE READER: Reread "Making the Future Better Together" and complete 1-9 close reading practice.	 ELA CLOSE READER / WRITING: Explain whether or not the author convinced you that the United States is a nation that cherishes its diversity. Evaluate the effectiveness of the examples and evidence and cite text evidence.	 ELA CHOICE READING: Read for 20 minutes and keep track of your progress. Evaluate the effectiveness of the author's word choice.
 ALGEBRA: Let's say a turkey takes 24 hours per 5 pound to thaw. If your family has a 15-pound turkey in hand, how much time will the turkey take to thaw?	 ALGEBRA: When your student comes home talking about input and output, you know they're learning functions, one of the key mathematical concept for all of high school math. Have them explain the concept to you.	 ALGEBRA: A Rubik's Cube is made up of 27 identical cubes. What is the greatest possible surface area the prism can have after removing 1 or more cubes from the outside? How many cubes (and which ones) would you remove? How could you record the information to help you see a pattern?	 GEOMETRY: Which rectangle is more like a square? Rectangle A is 13 units by 15 units. Rectangle B is 2 units by 3 units.	 GEOMETRY: Which circle is bigger: one with an area of 30 square units or one with a circumference of 30 units? How do you know?
 SCIENCE: Design a device that works to convert one form of energy into another form of energy. Examples of devices could include Rube Goldberg devices, wind turbines, solar cells, solar ovens, and generators. Examples of constraints could include use of renewable energy forms and efficiency.	 SOCIAL STUDIES: Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details. How would it be different if it was a news broadcast? List at least three ways.	 SCIENCE: Build a device that works to convert one form of energy into another form of energy. Examples of devices could include Rube Goldberg devices, wind turbines, solar cells, solar ovens, and generators. Examples of constraints could include use of renewable energy forms and efficiency.	 SOCIAL STUDIES: If you could go back to any point in history, when and where would you go and why?	 SCIENCE: Refine a device that works to convert one form of energy into another form of energy. Examples of devices could include Rube Goldberg devices, wind turbines, solar cells, solar ovens, and generators. Examples of constraints could include use of renewable energy forms and efficiency.
 PE/HEALTH: Create an obstacle course challenge! This can be done with pillows, baskets and furniture for an indoor course, or go all-out and put together a Ninja Warrior style course outside.	 ART: Do you have a box of memorabilia tucked away somewhere (or bits of memorabilia scattered everywhere)? Get organized and give your treasures a facelift by decorating the box you keep them in. Decor can be specific to a set of memories or time period or more general. Decorating a box is also a great way to add to a time capsule or memory box given as a gift.	 PE/HEALTH: Be active today! Try watching TV while standing, reading a book while walking, or helping with chores such as vacuuming and cleaning windows.	 MUSIC: Create your own dance! Invite family members to learn your dance, then have a "dance-off" competition.	 PE/HEALTH: Challenge yourself to drink 8 glasses of water today!



10th Grade Unplugged: WEEK 1

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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div>ELA CHOICE READING: Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</div> <div>GEOMETRY: Using the digits 0 through 9 at most one time, fill in the boxes to make the sum of the interior angles of a triangle. $_ _ _ + _ _ _ + _ _ _$</div> <div>SCIENCE: Develop a model to illustrate the changes in the composition of the nucleus of the atom and the energy released during the process of fission, fusion, and radioactive decay. Emphasis is on simple qualitative models, such as pictures or diagrams.</div> <div>PE/HEALTH: Keep a food diary for a week. Log each meal, snack, and the number of glasses of water you drink (shoot for 8 glasses of water). Try to eat lots of fruits and vegetables.</div>	<div>ELA COLLECTIONS TEXTBOOK: Read "What, of This Goldfish, Would You Wish?" on pages 3-8. What motivates the character? Use text evidence to prove your point.</div> <div>PRE-CALCULUS: In order to determine how effective solar panels would be at various times of the year it is important to know the amount of daylight at a given location. To be able to make easy calculations, it is often not sufficient to just have tables of data, which are readily available online. Find an appropriate function that serves as a mathematical model for the hours of daylight in a location of your choice. Use the model to find the hours of daylight on your birthday.</div> <div>SOCIAL STUDIES: Create 6-8 questions around a topic (technology, culture, civic participation, power of government, global connections). Interview two people then record answers and ask follow-up questions. Make a creative product reflective of the question "How does experience influence perspective?" (create a story, make a video).</div> <div>ART: Create a still life drawing, using 3-5 objects from around your room or house and arrange on a flat surface. Add a light source to create strong shadows cast on one side of your objects. Now draw and shade!</div>	<div>ELA CLOSE READER: Read and annotate "The Wife's Story" on pages 3-8. Trace the narrator's words, thoughts, actions, and interactions throughout the piece.</div> <div>GEOMETRY: A juice company wants you to create a new container design. It should look different from most containers so it will stand out to customers—it could be any three-dimensional geometric figure you can describe. It needs to have a volume of 16 fluid ounces. Once you have your design, you'll need to prepare for the a prototype of the container, or an image showing what it will look like and what its dimensions will be. Calculations that prove the container will hold 16 fluid ounces</div> <div>SCIENCE: Develop a model to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of fusion. Emphasis is on simple qualitative models, such as pictures or diagrams.</div> <div>PE/HEALTH: Create your own dance! Invite family members to learn your dance, then have a "dance-off" competition.</div>	<div>ELA CLOSE READER: Read from Towards a True Refuge on pages 11-14. What is the tone of the excerpt? How does word choice impact the tone?</div> <div>ALGEBRA 2: You're writing a children's book to help readers understand the relative sizes/amounts of things by comparing them to common objects. Choose several related object or amounts that you want to compare, such as the sizes of animals, and choose one or more objects to use to compare them. Some questions to think about: How many of an object are needed to represent what you are comparing? If you scaled an object to different sizes, how big would it have to be to represent each thing you want to compare?</div> <div>SOCIAL STUDIES: Masks are used for various purposes in different cultures. They may conceal identity, enhance beauty, or provide protection. Create a mask that represents you and write a brief explanation about its meaning.</div> <div>MUSIC: Identify the title, composer, performer, instrumentation of one song. Using musical vocabulary, describe what you hear in detail for each assessment category. Assessment Categories: tone quality, intonation, interpretation, technique, rhythm, and balance</div>	<div>ELA WRITING: Write about your true refuge. It can be real or imaginary. Use strong details to describe the place and what makes it a refuge for you.</div> <div>MATH: Given the point (3,5), use digits 1-9, at most one time, to find a point (__, __) that maximizes the slope of the line that passes through the two points. The slope cannot be undefined.</div> <div>SCIENCE: Develop models to illustrate the changes in the composition of the nucleus of the atom and the energy released during the processes of radioactive decay. Emphasis is on simple qualitative models, such as pictures or diagrams.</div> <div>ART: Would you like to give thanks to someone who has helped you or done something nice for you? Design a postcard and focus on words and thoughts of gratitude.</div>



10th Grade Unplugged: WEEK 2





















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<div>ELA CHOICE READING</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read "American Flag Stands for Tolerance" on pages 18-20. Identify the emotional language Allen uses and explain how it proves his point.</p>	<div>ELA CLOSE READER:</div> <p>Read from the Universal Declaration of Human Rights on pages 9-10. Why is the preamble considered a seminal document? Use text evidence to support your response.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read "The Lottery" on pages 25-34. What does the black box symbolize? How does it contribute to the theme of the story?</p>	<div>ELA WRITING:</div> <p>Write a sequel to "The Lottery". What happens after Mrs. Hutchinson screams, "It isn't fair, it isn't right?"</p>
<div>GEOMETRY :</div> <p>What is the least number of geometric markings to show that a quadrilateral is a kite?</p>	<div>GEOMETRY :</div> <p>What is the least number of geometric markings needed to demonstrate that a quadrilateral is a square?</p>	<div>GEOMETRY :</div> <p>What could the lengths of the legs of a right triangle be, such that the lengths of the legs are integers, and the hypotenuse is an irrational number between 5 and 7?</p>	<div>ALGEBRA 2:</div> <p>Create two complex numbers $(a + bi)$ such that the product of your numbers is 67. Each value of a, b must be non-zero. Hint: Are there any real numbers that are not integers? How can we get the imaginary terms to "go away"?</p>	<div>ALGEBRA 2:</div> <p>Make a table with three points in the same line with 1) a slope not equal to zero and 2) and the y-intercept is not a whole number. Write the equation for the line.</p>
<div>SCIENCE:</div> <p>Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature of the reacting particles on the rate at which a reaction occurs. Emphasis is on reasoning that focuses on the number and energy of collisions between molecules.</p>	<div>SOCIAL STUDIES:</div> <p>Read an article about COVID-19. How has this virus impacted life for you on a personal level? A community level? A state level? A national level? A global level? What are some long-term effects of this virus?</p>	<div>SCIENCE:</div> <p>Apply scientific principles and evidence to provide an explanation about the effects of changing the concentration of the reacting particles on the rate at which a reaction occurs. Emphasis is on student reasoning that focuses on the number and energy of collisions between molecules.</p>	<div>SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details.</p>	<div>SCIENCE:</div> <p>Write four balanced chemical equations to support the claim that atoms, and therefore mass, are conserved during a chemical reaction. Emphasis is on using mathematical ideas to communicate the proportional relationships between masses of atoms in the reactants and the products.</p>
<div>ART:</div> <p>Do you have a phrase or saying that makes you feel uplifted? Cut the words out of magazines and arrange an encouraging display. Don't have a "go to" phrase? Find generic words, such as "happy," "joy," "inspire," and start with a general display of words.</p>	<div>PE/HEALTH:</div> <p>Burn off extra energy and adapt your environment to your needs by rearranging furniture in your room, ridding your space of old things, and adding your personal art work or motivational words!.</p>	<div>PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</p>	<div>MUSIC:</div> <p>Play any selection of music and dance and sway to the beat.</p>	<div>PE/HEALTH:</div> <p>Create a healthy snack art piece! Use healthy foods such as fruits and vegetables!</p>



10th Grade Unplugged: WEEK 3





















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<div> ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div> GEOMETRY:</div> <p>Use four dominoes to form a square with the same number of dots on each side.</p> <div> SCIENCE:</div> <p>Construct an explanation for the outcome of a simple chemical reaction of sodium and chlorine based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.</p> <div> PE/HEALTH:</div> <p>Create an obstacle course challenge! This can be done with pillows, baskets and furniture for an indoor course, or go all-out and put together a Ninja Warrior style course outside.</p>	<div> ELA COLLECTIONS TEXTBOOK:</div> <p>Read "Called Out" on pages 51-54. Determine the central idea of the text and write an objective summary of it</p> <div> GEOMETRY:</div> <p>What are some examples of when the Pythagorean Theorem is used in real life?</p> <div> SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details. How would it be different if it was a news broadcast? List at least three ways.</p> <div> ART:</div> <p>Do you have a box of memorabilia tucked away somewhere (or bits of memorabilia scattered everywhere)? Get organized and give your treasures a facelift by decorating the box you keep them in. Decor can be specific to a set of memories or time period or more general. Decorating a box is also a great way to add to a time capsule or memory box given as a gift.</p>	<div> ELA CLOSE READER:</div> <p>Read "Starfish" on page 18. How does the description of the "approaching darkness" change the tone of the poem? Be sure to include text evidence.</p> <div> GEOMETRY:</div> <p>The perimeter of a triangle is 20 units. Using whole numbers, how many sets of side lengths can you find for this triangle?</p> <div> SCIENCE:</div> <p>Construct an explanation for the outcome of a simple chemical reaction of carbon and hydrogen based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.</p> <div> PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, reading a book while walking, or helping with chores such as vacuuming and cleaning windows.</p>	<div> ELA CLOSE READER:</div> <p>Read "Sea Stars" on pages 20-22. How does the author's use of figurative language contribute to the central idea?</p> <div> ALGEBRA 2:</div> <p>The volume of a cube is 2.8 m³. Find the length of its edge to the nearest tenth of a meter.</p> <div> SOCIAL STUDIES:</div> <p>If you could go back to any point in history, when and where would you go and why?</p> <div> MUSIC:</div> <p>Try listening to a new genre of music this week. Using musical vocabulary, describe the instruments you hear.</p>	<div> ELA WRITING:</div> <p>Create your own piece of writing about the relationship between humankind and nature. It can be written in any form - poetry, memoir, short story, etc.</p> <div> ALGEBRA 2:</div> <p>Write the equation of the graph of $y = x^3$ translated 5 units down and 2 units left.</p> <div> SCIENCE:</div> <p>Construct an explanation for the outcome of a simple chemical reaction of carbon and oxygen based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.</p> <div> PE/HEALTH:</div> <p>Challenge yourself to drink 8 glasses of water today!</p>



11th Grade Unplugged: WEEK 1





















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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div>ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div>ALGEBRA 2:</div> <p>Imagine that you're writing a children's book and you want to help readers understand the relative sizes or amounts of some things by comparing them to more common objects that they would be familiar with. Choose several related objects or amounts that you want to compare, such as the sizes of animals, and choose one or more objects to use to compare them.</p> <div>SCIENCE:</div> <p>Watch and/or read news stories about COVID-19. Explain what you've learned about evolution, variations in traits, cause and effect, patterns, and stability and change, connects to what you read/watched. Consider the following questions in your explanation: What is the evolutionary evidence that the virus is spreading human to human?</p> <div>PE/HEALTH:</div> <p>Keep a food diary for a week. Log each meal, snack, and the number of glasses of water you drink (shoot for 8 glasses of water). Try to eat lots of fruits and vegetables.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read From Walden on pages 207-216. What is the author's purpose in writing this? How do you know?</p> <div>PRE-CALCULUS:</div> <p>In order to determine how effective solar panels would be at various times of the year, it is important to know the amount of daylight at a given location. To be able to make easy calculations, it is often not sufficient to just have tables of data, which are readily available online. Find an appropriate function that serves as a mathematical model for the hours of daylight in a location of your choice.</p> <div>SOCIAL STUDIES:</div> <p>Create 6-8 questions around a topic (technology, culture, civic participation, power of government, global connections). Interview two people recording answers and asking follow-up questions. Make a creative product reflective of the question "How does experience influence perspective?" (create a story, make a video).</p> <div>ART:</div> <p>Create a still life drawing, using 3-5 objects from around your room or house and arrange on a flat surface. Add a light source to create strong shadows cast on one side of your objects. Now draw and shade!</p>	<div>ELA CLOSE READER:</div> <p>Read from Nature and from Self-Reliance on pages 41-46. Write an objective summary of each essay.</p> <div>MATH:</div> <p>What is the greatest volume you can make with a rectangular prism that has a surface area of 20 square units?</p> <div>SCIENCE:</div> <p>Watch and/or read news stories about COVID-19. Explain what you've learned about evolution, variations in traits, cause and effect, patterns, and stability and change, connects to what you read/watched. Consider the following question in your explanation: Why does having a high mutation rate allow a virus to spread?</p> <div>PE/HEALTH:</div> <p>Create your own dance! Invite family members to learn your dance, then have a "dance-off" competition.</p>	<div>ELA CLOSE READER:</div> <p>Read "Spoiling Walden: Or, How I learned to Stop Worrying and Love Cape Wind" on pages 47-54. How does text structure impact the overall message of the essay?</p> <div>PRE-CALCULUS:</div> <p>Gritz-Charlston is a 300-unit luxury hotel. All rooms are occupied when the hotel charges \$80 per day for a room. For every increase of x dollars in the daily room rate, there are x rooms vacant. Each occupied room costs \$22 per day to service and maintain. What should the hotel charge per day in order to maximize profit?</p> <div>SOCIAL STUDIES:</div> <p>Masks are used for various purposes in different cultures. They may conceal identity, enhance beauty, or provide protection. Create a mask that represents you and write a brief explanation about its meaning.</p> <div>MUSIC:</div> <p>Identify the title, composer, performer, instrumentation of one song. Using musical vocabulary, describe what you hear in detail for each assessment category. Assessment Categories: tone quality, intonation, interpretation, technique, rhythm, and balance.</p>	<div>ELA WRITING:</div> <p>Create a brochure about the importance of protecting nature. Include illustrations or graphics and incorporate quotes from the readings.</p> <div>MATH:</div> <p>Find the radius of a circle where the area of the circle and the circumference of the circle are equal. Is there more than one possible answer?</p> <div>SCIENCE:</div> <p>Watch and/or read news stories about COVID-19. Explain what you've learned about evolution, variations in traits, cause and effect, patterns, and stability and change, connects to what you read/watched. Consider the following questions in your explanation: What factors seem to make the virus good at jumping barriers to infect human populations?</p> <div>ART:</div> <p>Would you like to give thanks to someone who has helped you or did something nice for you? Design a postcard and focus on words and thoughts of gratitude.</p>



11th Grade Unplugged: WEEK 2





















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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div>ELA CHOICE READING</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div>MATH:</div> <p>Arithmetic sequences are number patterns with a common difference. Create a sequence with missing numbers and try it out on a family member!</p> <div>SCIENCE:</div> <p>Construct an explanation based for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <div>ART:</div> <p>Do you have a phrase or saying that makes you feel uplifted? Cut the words out of magazines and arrange an encouraging display. Don't have a "go to" phrase? Find generic words, such as "happy," "joy," "inspire," and start with a general display of words.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read from "Song of Myself" on page 178. Analyze Whitman's style, including evidence that he is writing in free verse. Why do you think he writes in free verse?</p> <div>MATH:</div> <p>Geometric sequences are number patterns with a common ratio. Create a sequence with missing numbers and try it out on a family member!</p> <div>SOCIAL STUDIES:</div> <p>Read an article about COVID-19. How has this virus impacted life for you on a personal level? A community level? A state level? A national level? A global level? What are some long-term effects of this virus?</p> <div>PE/HEALTH:</div> <p>Burn off extra energy and adapt your environment to your needs by rearranging furniture in your room, ridding your space of old things, and adding your personal art work or motivational words!.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read from "Song of Myself" on pages 181-182. To what sense does the imagery most appeal? How does it further Whitman's purpose?</p> <div>MATH:</div> <p>Simplify $(x + a)(x + a)$.</p> <div>SCIENCE:</div> <p>Construct a model to show how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <div>PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</p>	<div>ELA CLOSE READER:</div> <p>Read "I Hear America Singing" and "A Noiseless Patient Spider" on pages 37-40. What is the theme for each poem? Cite evidence to support your theme.</p> <div>MATH:</div> <p>Use the slope formula to find the slope between points $(-3, 5)$ and $(1, 5)$. How can you now determine the equation of the line?</p> <div>SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details.</p> <div>MUSIC:</div> <p>Play any selection of music and dance and sway to the beat.</p>	<div>ELA WRITING:</div> <p>Rewrite "I Hear America Singing" for today's America. What do you hear? Create your poem in a similar style to Whitman's.</p> <div>MATH:</div> <p>Motion problems should be solved using the correct distance formula. Lewis drives his car at 68 mph. Without stopping, how long will it take him to travel to St. Louis from Lexington? What other variables should be considered when estimating the travel time?</p> <div>SCIENCE:</div> <p>Use your model to show how the change in the structure of DNA can affect the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <div>PE/HEALTH:</div> <p>Create a healthy snack art piece! Use healthy foods such as fruits and vegetables!</p>



11th Grade Unplugged: WEEK 3





















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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div>ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div>MATH:</div> <p>Go outside and find a fire hydrant. What is the shape of the nut on a fire hydrant (be as specific as possible), and why was it designed in that shape?</p> <div>SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from new genetic combinations through meiosis.</p> <div>PE/HEALTH:</div> <p>Create an obstacle courses challenge! This can be done with pillows, baskets, and furniture for an indoor course, or go all-out and put together a Ninja Warrior course outside.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read "Thomas Jefferson: The Best of Enemies" on pages 141-146. Create a Venn diagram comparing Jefferson and Hamilton.</p> <div>MATH:</div> <p>Use a ruler to create a 6 in. \times 8 in. rectangle on a piece of paper. Cut out the rectangle, then cut it along the diagonal. Use the two triangular pieces to create four new shapes. After making each shape, list the most specific name of that shape and its perimeter.</p> <div>SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details. How would it be different if it was a news broadcast? List at least three ways.</p> <div>ART:</div> <p>Do you have a box of memorabilia tucked away somewhere (or bits of memorabilia scattered everywhere)? Get organized and give your treasures a facelift by literally decorating the box you keep them in. Decor can be specific to a set of memories or time period, or more general. Decorating a box is also a great way to add to a time capsule or memory box given as a gift.</p>	<div>ELA CLOSE READER:</div> <p>Read "Petition to the Massachusetts General Assembly" on pages 27-28. Summarize the purpose and premises of Hall's argument.</p> <div>MATH:</div> <p>Using only the digits 2, 3, 4, and 5 and the two mathematical symbols + and = only one time, we can create a mathematical equation: $3 \text{ squared} = 4 + 5$. Use, once only, any different four digits 0 through 9 and the two mathematical symbols – and = and a number as an exponent to create a mathematical equation.</p> <div>SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from viable errors occurring during replication.</p> <div>PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</p>	<div>ELA CLOSE READER:</div> <p>Read "Abigail Adams' Last Act of Defiance" on pages 29-34. What problem did Abigail confront and what was her solution? Be sure to cite text evidence in your response.</p> <div>MATH:</div> <p>A Super Ball rebounds half the height from the height it is dropped. One day, a mathematics teacher drops a Super Ball from the roof of the school. If the roof is 32 feet off the ground, what is the total distance (up and down) that the ball will have traveled when it strikes the ground for the sixth time?</p> <div>SOCIAL STUDIES:</div> <p>If you could go back to any point in history, when and where would you go and why?</p> <div>MUSIC:</div> <p>Try listening to a new genre of music this week. Using musical vocabulary, describe the instruments you hear.</p>	<div>ELA WRITING:</div> <p>Think of a problem facing the world today. Create a petition to the Kentucky legislature identifying the problem and proposing a solution.</p> <div>MATH:</div> <p>If the mean, median, and mode are all equal for the set {3, 4, 5, 8, x}, what is the value of x? Describe how you found your answer.</p> <div>SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from mutations caused by environmental factors.</p> <div>PE/HEALTH:</div> <p>Challenge yourself to drink 8 glasses of water today!</p>



12th Grade Unplugged: WEEK 1


















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<div>ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div>MATH:</div> <p>Nate is prescribed a 250 mg dose of antibiotic, taken every 12 hours for 20 days, for an ear infection. Nate wants to know how much of the drug will be in his body over the course of the 20 days. He does some research online and finds out that at the end of 12 hours, about 4% of the drug is still in the body. What quantity of the drug is in the body right after the first dose, the fourth does?</p> <div>SCIENCE:</div> <p>Brainstorm a list of ways humans impact natural systems in Lexington. Choose one from your list to research. From your research, develop a plan to submit to the LFUCG about how to mitigate the effects that humans have had on that natural system.</p> <div>ART:</div> <p>Write your name in bubble letters. Decorate each letter in your name to represent part of your personality. You can let colors, designs, textures, etc. to represent who you are.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read "The Wife of Bath" on pages 77-88. What is the theme of this tale? Use text evidence to prove this is the theme.</p> <div>ALGEBRA 2:</div> <p>Imagine that you're writing a children's book and you want to help readers understand the relative sizes or amounts of some things by comparing them to more common objects that they would be familiar with. Choose several related objects or amounts that you want to compare, such as the sizes of animals, and choose one or more objects to use to compare them.</p> <div>SOCIAL STUDIES:</div> <p>Create 6-8 questions around a topic (technology, culture, civic participation, power of government, global connections). Interview two people recording answers and asking follow-up questions. Make a creative product reflective of the question "How does experience influence perspective?" (create a story, make a video).</p> <div>PE/HEALTH:</div> <p>Below you will find a list of healthy and active choices:</p> <ul style="list-style-type: none">• Clean your room• Jumping jacks• Make up a dance• Lunges	<div>ELA CLOSE READER:</div> <p>Read "The Pardoner's Prologue" on pages 19-21. What is ironic about the Pardoner? Cite text evidence.</p> <div>PRE-CALCULUS:</div> <p>In order to determine how effective solar panels would be at various times of the year it is important to know the amount of daylight at a given location. To be able to make easy calculations, it is often not sufficient to just have tables of data, which are readily available online. Find an appropriate function that serves as a mathematical model for the hours of daylight in a location of your choice.</p> <div>SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from new genetic combinations through meiosis.</p> <div>PE/HEALTH:</div> <p>Create your own dance! Invite family members to learn your dance, then have a "dance-off" competition.</p>	<div>ELA CLOSE READER:</div> <p>Read "The Pardoner's Tale" on pages 23-32. List examples of irony throughout the text.</p> <div>MATH:</div> <p>The perimeter of a triangle is 20 units. Using whole numbers, how many sets of side lengths can you find for this triangle?</p> <div>SOCIAL STUDIES:</div> <p>Masks are used for various purposes in different cultures. They may conceal identity, enhance beauty, or provide protection. Create a mask that represents you and write a brief explanation about its meaning.</p> <div>PE/HEALTH:</div> <p>Keep an exercise diary for a week. Try to get twenty minutes of exercise each day. Make a list of all the exercises that you do each day. See if your family will exercise with you! Add up your total minutes for the week. How close to 140 total minutes were you?</p>	<div>ELA WRITING:</div> <p>Create your own tale, similar to The Canterbury Tales. It can be about you, someone you know, or completely fictional.</p> <div>GEOMETRY:</div> <p>Review What is true about the sum of any two sides of a triangle compared to the third side?</p> <div>SCIENCE:</div> <p>Build a device that works within given constraints to convert one form of energy into another form of energy.</p> <div>ART:</div> <p>Identify the title, composer, performer, instrumentation of one song. Using musical vocabulary, describe what you hear in detail for each assessment category. Assessment Categories tone quality, intonation, interpretation, technique, rhythm, and balance.</p>



12th Grade Unplugged: WEEK 2





















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<div>ELA CHOICE READING</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div>MATH:</div> <p>From birth, a person blinks an average of 25 times per minute when awake. Assume that you sleep exactly 8 hours a day and that each year is exactly 365.25 days long. On your next birthday, approximately how many times will you have blinked since your birth? Express your answer to the nearest million blinks.</p> <div>SCIENCE:</div> <p>Construct an explanation based for how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <div>ART:</div> <p>Do you have a phrase or saying that makes you feel uplifted? Cut the words out of magazines and arrange an encouraging display. Don't have a "go to" phrase? Find generic words, such as "happy," "joy," "inspire," and start with a general display of words.</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read "My Father's Sadness" on pages 109-110. Find three examples of figurative language. Explain both the literal and figurative meanings.</p> <div>MATH:</div> <p>Find the sum of all the two-digit multiples of 6 whose digits sum to 6. For example, 24 is a multiple of 6, and the digits 2 and 4 sum to 6.</p> <div>SOCIAL STUDIES:</div> <p>Read an article about COVID-19. How has this virus impacted life for you on a personal level? A community level? A state level? A national level? A global level? What are some long-term effects of this virus?</p> <div>PE/HEALTH:</div> <p>Burn off extra energy and adapt your environment to your needs by rearranging furniture in your room, ridding your space of old things, and adding your personal art work or motivational words!</p>	<div>ELA COLLECTIONS TEXTBOOK:</div> <p>Read from A Vindication of the Rights of Woman on pages 113-118. Identify the claim and counterargument and the evidence to support them.</p> <div>MATH:</div> <p>Our base-ten numeration system consists of ten digits. The base-two numeration system uses two digits, 0 and 1. List the digits in the base-eight numeration system.</p> <div>SCIENCE:</div> <p>Construct a model to show how the structure of DNA determines the structure of proteins which carry out the essential functions of life through systems of specialized cells.</p> <div>PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</p>	<div>ELA CLOSE READER:</div> <p>Read "Pink Think" on pages 33-36. What words and phrases best suggest the author's perspective on pink think? Cite textual evidence in your response.</p> <div>MATH:</div> <p>Find the three greatest whole numbers less than 200 such that each number has an odd number of factors.</p> <div>SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details.</p> <div>MUSIC:</div> <p>Play any selection of music and dance and sway to the beat.</p>	<div>ELA WRITING:</div> <p>Create your own poem about an important person in your life. Be sure to include information about the role they have played in your life and at least three examples of figurative language.</p> <div>MATH:</div> <p>If 1 blue equals 3 greens, 6 reds equal 3 blues, and 3 yellows equal 9 reds, then 10 yellows will equal how many greens?</p> <div>SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from mutations caused by environmental factors.</p> <div>PE/HEALTH:</div> <p>Create a healthy snack art piece! Use healthy foods such as fruits and vegetables!</p>



12th Grade Unplugged: WEEK 3

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DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
<div> ELA CHOICE READING:</div> <p>Read for 20 minutes and keep track of your progress. Write questions about or a summary of what you read.</p> <div> MATH:</div> <p>Find three numbers greater than 0 and less than 20 such that when the number is spelled in English it satisfies all the following three conditions: 1. It does not begin or end with a vowel. 2. It does not begin with S. 3. It does not end with N.</p> <div> SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from new genetic combinations through meiosis.</p> <div> PE/HEALTH:</div> <p>Create an obstacle course challenge! This can be done with pillows, baskets, and furniture for an indoor course, or go all-out and put together a Ninja Warrior course outside.</p>	<div> ELA COLLECTIONS TEXTBOOK:</div> <p>Read "Wild Peaches" on pages 486-487. What words help you visualize the landscape? What theme is expressed in the poem? How does the structure contribute to the theme?</p> <div> MATH:</div> <p>Will makes a 14-inch-diameter pizza, which includes a 1-inch wide crust. DeKwan wants to make a 10-inch-diameter pizza with the same percent of crust as Will's pizza. To the nearest tenth of an inch, approximately how wide will be the crust on DeKwan's pizza?</p> <div> SOCIAL STUDIES:</div> <p>Read a current event news article and summarize it. Make sure to include the central idea and at least three supporting details. How would it be different if it was a news broadcast? List at least three ways.</p> <div> ART:</div> <p>Do you have a box of memorabilia tucked away somewhere (or bits of memorabilia scattered everywhere)? Get organized and give your treasures a facelift by decorating the box you keep them in. Decor can be specific to a set of memories or time period, or more general. Decorating a box is also a great way to add to a time capsule or memory box given as a gift.</p>	<div> ELA COLLECTIONS TEXTBOOK:</div> <p>Read "Spring and All" on page 488. How does the poem depart from traditional forms of poetry? Cite specific evidence from lines 1-8 and cite the feelings evoked.</p> <div> MATH:</div> <p>Suppose that you win a prize if you draw a red marble from a bag. Assuming that each marble is equally likely to be drawn from a given bag, which bag would allow you the greater probability of drawing a red marble in one try: bag A, which has 1 red marble and 1 blue marble, or bag B, which has 50 red marbles and 50 blue marbles?</p> <div> SCIENCE:</div> <p>Make and defend a claim based on evidence that inheritable genetic variations may result from viable errors occurring during replication.</p> <div> PE/HEALTH:</div> <p>Be active today! Try watching TV while standing, read a book while walking, or help with chores such as vacuuming and cleaning windows.</p>	<div> ELA CLOSE READER:</div> <p>Read "Pastorals" on pages 119-121. What is each poem saying about the relationship between humankind and nature? Include text evidence in your response.</p> <div> MATH:</div> <p>How many distinct isosceles triangles exist with a perimeter of 99 inches and side lengths that are positive whole numbers?</p> <div> SOCIAL STUDIES:</div> <p>If you could go back to any point in history, when and where would you go and why?</p> <div> MUSIC:</div> <p>Try listening to a new genre of music this week. Using musical vocabulary, describe the instruments you hear.</p>	<div> ELA WRITING:</div> <p>Create your own piece of writing about the relationship between humankind and nature. It can be written in any form - poetry, memoir, short story, etc.</p> <div> MATH:</div> <p>Did you know the field of epidemiology -- the study of the spread of infectious disease -- relies heavily on calculus. Such calculations take three main factors into account: those people who are susceptible to a disease, those who are infected and those who have already recovered. Calculus can be used to determine how far and fast a disease is spreading, where it may have originated and how to best treat it.</p> <div> SCIENCE:</div> <p>Build a device that works within given constraints to convert one form of energy into another form of energy.</p> <div> PE/HEALTH:</div> <p>Challenge yourself to drink 8 glasses of water today!</p>



High School

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Gratitude Journal: Rather than focusing on what we wish for or the difficulties in our life, it can be helpful to begin each day with a shift in perspective. Grab a notebook for journaling (or start a digital journal). Each day, write the date and 3 things for which you're thankful.

Some days this will be easier than others. Sometimes you'll have to stretch your mind to identify things for which you have gratitude. But focusing on those things can set the tone for your day.

Ex: March 15, 2020

Today I am thankful...

1. That I have the ability to see to read this paper.
2. That I have a friend like Jay.
3. That I have food in my fridge.



Perspective Taking: Talk with your student about the cultural and experiential impacts on behavior. Discuss how different cultures or upbringings may impact a person's behavior.

Talk openly about differences among cultural groups but avoid making over-generalized statements that may be taken as racist, sexist, or otherwise discriminatory.

Discuss: How can our own life experiences impact the way we view the world, shape their personality, and interact with the people around us? Why is it important to have the skills to identify and respect the perspective of others-- even when their ideas or beliefs are different from our own?



Self-Regulation: Talk with your student about the definition of self-regulation (a proactive self-directed process for attaining goals, learning skills, and accomplishing tasks). Have your student write a brief definition in their own words. Share the examples below with your student and ask them if it is an example of self-regulation and why or why not.

Ex. 1: You realize that you forgot to study for your test so you cram five minutes before it starts (no, missing the proactive and process parts of the definition).

Ex. 2: Your mom sets a timer and tells you to work on your homework until the timer goes off (No, missing the self-directed part of the definition).

Ex. 3: You write down all of the homework that you need to complete and check it off your list as you finish it (Yes, this is proactive, self-directed, and a process for accomplishing tasks).



Self-Compassion: Have your student reflect on the following quote-- "I must learn to love the fool in me-- the one who feels too much, talks too much, takes too many chances, loves and hates, hurts and gets hurt, promises and breaks promises, laughs, and cries."
--Theodore Isaac Rubin

Consider how practicing self-compassion is important to our overall well-being. Have your student write about their thoughts or engage in a discussion with you.