**Hey Students, we miss you!**

We hope you and your families are staying well and healthy during these interesting times. We want to support you best as science learners in this time away by ***1) giving you access to the remaining grade-level manuals*** *and* ***2) giving you options to do hands-on investigation and explore your own personal curiosities and interests in science.***

As for #1: We will be posting the Lab Manuals (and some supporting materials) on Unified Classroom in the upcoming weeks. A good goal we encourage you to meet is to complete one Unit manual per month, moving through one section in the text each week. We will continue to use Unified Classroom and Remind to notify you of newly posted materials and suggested timelines. (Please email your teacher if you’d like to be added to Remind.)

As for #2: We have learning experiences below for you to choose from as you study at home in the upcoming weeks and we encourage you to try one investigation and one choice research item each week in addition to your lab manual reading section. Being the student scientists that you are, we encourage you to track your progress on your self-directed studies. Three options you can choose from to track your work are…

1. A physical notebook

OR

1. An online “notebook” (created as slides in Microsoft PowerPoint or a Word Document*). If you do the online notebook/powerpoint, you may choose to type written responses or insert pictures and videos of your work*

OR

1. Share a picture/video and caption of your work on instagram with the hashtag **#chestnuttag**

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| **Outdoor Investigation** | **Indoor Investigation** | **Choice Research!** |
| **Night Sky Observation:** Download the app “Sky View” to help you view constellations and planets and step outside at night! Record 3-4 sentences describing what you identify, especially if you catch the March 24 Elongation of Mercury and Venus. | **Kitchen Scrap Plant:** Save a food scrap (potato, onion, green onion), pot it, and measure its growth rate! Graph its growth over time. (Counts as an activity for each week you track growth.) | **Selfie Vocab Scavenger Hunt:** Identify the upcoming units’ vocabulary (posted by your teacher) in the real world, snap or draw a selfie with the word, and explain the scientific meaning of the word. (Doing 4 words counts as an activity for the week.) |
| [**Moon Phase Journal:**](https://spsma-my.sharepoint.com/personal/silversk_springfieldpublicschools_com/Documents/7th%20Grade%20Science/General%20Materials/Enrichment%20Options/moon_journal.pdf) Track the date and appearance of the moon for a month! Record the moon’s appearance AND record the phase each day. Check your work using the link below. (A tracker is on Unified; counts as an activity for each week you keep it up.) <https://www.timeanddate.com/moon/phases/> | [**Build a Raft Challenge**](https://spsma-my.sharepoint.com/personal/silversk_springfieldpublicschools_com/Documents/7th%20Grade%20Science/General%20Materials/Enrichment%20Options/Raft_Directions.jpg)**:** A sad stone landed on a deserted island and wants to go back home! Build a raft for the stone using ONLY natural materials you found around the house and test it in your tub/sink! The raft must hold the stone and float for 1 minute. Be sure to use safety and respect nature! (Directions on Unified.) | **Food & Science:** Explore the science behind cooking and how certain foods taste so good! (Bonus if you COOK, too!) Record 3-4 sentences explaining the science you discover <https://www.acs.org/content/acs/en/education/students/highschool/chemistryclubs/activities/food-and-chemistry.html> |
| [**Outdoor Scavenger Hunts:**](https://spsma-my.sharepoint.com/%3Ab%3A/g/personal/silversk_springfieldpublicschools_com/EWEEtkybUFBJmg65LQLuBUIBuYN5FdX5vYxfkRjOHfpGTg?e=WbOlmb) Go outside and sharpen your observation skills in earth, life, or physical science! Directions at: <https://www.teacherspayteachers.com/Product/FREE-Outdoor-Science-Scavenger-Hunts-Distance-Learning-5333924> | [**Modeling Life:**](https://spsma-my.sharepoint.com/personal/silversk_springfieldpublicschools_com/Documents/7th%20Grade%20Science/General%20Materials/Enrichment%20Options/life_science_models.pdf) Make a poster or model of an ecosystem, designer alien, organ, or food web. Directions at: <https://www.teacherspayteachers.com/Product/FREE-Life-Science-Projects-Distance-Learning-5333945> | **Open research!** Use the links below to practice a skill or research a topic you’d like to learn more about! Record 3-4 new findings about a chosen topic <https://www.ixl.com/science/><https://www.ck12.org/student/> |
| **Yard Ecosystem:** Find a spot outside. Describe the ecosystem and classify it as aquatic or terrestrial. Describe the climate of the area, the current weather conditions, and geography. List all the components of a particular ecosystem. Then classify at least 5 living (biotic) and 5 as nonliving (abiotic) on a T-chart. | **Explore the Science of Diverse Skin Colors:** Why Did Darker and Lighter Human Skin Colors Evolve? Research and record your findings in as a CER paragraph.<https://www.discovermagazine.com/planet-earth/why-did-darker-and-lighter-human-skin-colors-evolve> | **Science Stories:** Listen to a science podcast episode and record a summary of what you learned:1. <https://www.brainson.org/>
2. <http://www.sciencepodcastforkids.com/>
3. <https://www.startalkradio.net/show/>
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| **Water Mapping:** Go on a scavenger hunt to find fire hydrants, storm drains, and other neighborhood water infrastructure. After mapping your findings, recall, research and record where your neighborhood’s water supply comes from and where it goes after being used.  | **Pet Observations:** Closely observe your pet’s activities. Identify its inherited traits, acquired physical traits, instincts, and learned behaviors. What external (e.g. claws) and internal structures (e.g. lungs) does it have for survival and what are their functions? Can you teach your pet to do something? Create a profile for your pet that records this information! | **Modeling Phenomena**: Complete a Middle School Simulation/ Investigation in one of the links below. Make a claim about the principle being demonstrated in the model and cite evidence and vocabulary from the model to explain how it works.1. <https://phet.colorado.edu/en/simulations/category/by-level/middle-school>
2. <https://learn.concord.org/>
3. <https://www.pbs.org/wgbh/nova/labs/>
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| **Engineering a Solar Oven:** What size/design solar oven best cooks a s’more? Read, design, test, refine, and retest! Record your results. <https://climatekids.nasa.gov/smores/> | **Where do New Viruses Come From?** Watch, learn, and record your findings.<https://www.youtube.com/watch?v=NJLXdsO1GBI&feature=youtu.be&fbclid=IwAR3xl3dSnW6cUpSLGKhZ-H8i8lZWY02i4ziAbC8Rg3QTrG_YRhf7RMTNarQ> | **Scientific Process:** Follow your scientific process steps to explore a question of your choice! What is the tastiest sugar: lemon juice: water ratio in lemonade? How does salt affect the freezing point of water? |

Please reach out to your science teacher with any questions. We are happy to find creative ways to support your individual interests during this time. Don’t hesitate to email or ask for a phone call seeking clarification, motivation, or guidance.

Keep learning & exploring!

-Ms. Bailey, Ms. Silvers, & Mr. Lessard