Summer Packet

Gr 7 Science (moving to 8th grade)

Ms. Davino

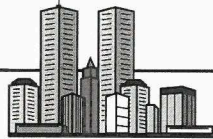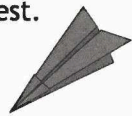# 2024-2025

Choose 5 in a row: You can do either online activities or hands on activities

Enrichment Activity Chart: *Offline Learning*
Middle School

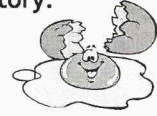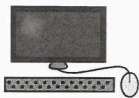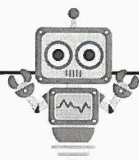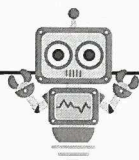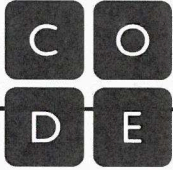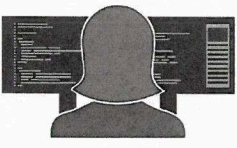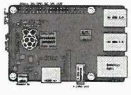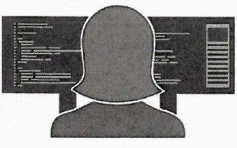| Create Monday	Science Tuesday	Active Wednesday	Engineering Thursday	Fun Friday
Create your personal mission patch! In a large circle, draw (or use clippings) to represent things you are passionate about.	Scientist want to understand the world around us. Write 5 WHY or WHAT questions to learn more about something in nature.	Create an obstacle course. Calculate your average time to complete the course over a series of 5 attempts. Get a family member to try!	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life. Draw how it will work.	Draw your ideal future city. What areas will keep citizens healthy and happy? What laws will you have?
Create a skit or poster on the importance of hand washing and how to do it properly.	Which is the best invisible ink? Write 3 messages using milk, lemon juice, and vinegar. Allow to dry. Heat up the paper with a blow dryer to see message appear.	Play some basketball (or trash can ball)! Measure how many baskets you make out of 10. Calculate your percentage accuracy.	Design and build a table using only newspaper or paper and tape. How much weight can it hold? How can you make it stronger?	Host a paper airplane contest.
With the help of an adult, cook lunch or dinner. Measure out the ingredients. How would you double or halve the recipe?	Place a small ball on top of a large ball and drop them together. Watch how energy is transferred!	Players must keep two balloons up in the air with just one hand and the other hand is kept behind their backs. The last player with two balloons still going wins.	Design and build a catapult with household item to knock over a tower of cups. Calculate percentage accuracy.	Use a small bag of candies like M&Ms, find the ratio of each color to the total candies in the bag.
Make a greeting card using 3D pop up art.	List 5 non-reusable items in your house. How can you make at least one of them reusable?	Go outside and record as many 10 different insects and mammals.	Design and build a roller coaster from paper, paper plates, and tape. How long can you keep a ping pong ball moving?	Draw or write a story about your ideal vacation.
Create a hoop glider using a straw and paper. How far can you make it go?	Find a quiet place in nature. Bring a journal and record everything you see.	Measure your heart beat for 10 seconds. Convert to beats per minute. Run around and then measure again. What is the percentage increase?	Create a zip line for a small action figure to travel down from at least your shoulder height. Calculate the speed (distance divided by time) of the zip line.	Survey your family for these genetic traits: dimples, attached earlobes, ability to roll tongue, and right thumb goes on top when clasping hands.
Peter Piper picked a peck of pickled peppers. Write 2 of your own tongue twisters.	The tongue map theory states that different areas of your tongue sense different tastes. Look-up this theory. Create an experiment to prove or disprove it.	Create your own dance workout routine. Teach to a family member.	Imagine you only have one leg. Design a prosthetic leg using household items. Test it out! How do you make it comfortable? How would it attach to your body?	Design a device to keep a water balloon or egg from breaking when thrown against a wall or dropped from a second story.

Enrichment Activity Chart: *Online Learning*
Middle School

Create Monday	Science Tuesday	Coding Wednesday	Engineering Thursday	Fun Friday
Create beats using sounds from the everyday world. experiments.withgoogle.com/drum-machine	Read the latest issue of Smore Magazine: smoremagazine.com	Play a coding game at hourofcode.com/us/learn	Explore engineering careers at EGFI-k12.org	Time to explore the night sky! Download SkyView. Can you find a planet or constellations?
Create your own 3D design on www.tinkercad.com	Build a window greenhouse and watch your plants grow. Learn more here: bit.ly/vivifylifescience	Download the Cargo-Bot app and program your Bot.	Use the build activity spinner for an engineering challenge: pbskids.org/designsquad/build/spinner/	Try out the Flight Pilot Simulator 3D app and conquer the skies.
Conduct an orchestra from your computer. semiconductor.withgoogle.com/	Read a science article at https://sciencejournalforkids.org/	Play a coding game at studio.code.org	Take a virtual field trip of Johnson Space Center in Houston: boeingfutureu.com/virtual-field-trip	Discover your strengths by taking this quiz: thrively.com/registration
Create a movie using Stop Motion Animation studio app.	Conduct and record an experiment using SciJournal: sciencejournal.withgoogle.com/experiments/	Check out the projects at scratch.mit.edu then create your own game!	Watch these Rube Goldberg examples: bit.ly/rubegoldexample Create your own!	Build a new eco-friendly city wallaceandgromit.com/games/sustainable-shaun
Create digital art, a website, or a game: projects.raspberrypi.org	Play a science game from breakoutedu.com/funathome	Build a game on the Tynker app.	Watch: bit.ly/NASAartemis Explore NASA's Mission to the Moon: nasa.gov/joinartemis/activities-videos.html	Can the computer guess your drawing? quickdraw.withgoogle.com/
Create your own ant farm! Find a diagram at m.wikihow.com/Build-an-Ant-Farm. What do you observe?	Use the iNaturalist app to learn about a new plant or creature and share it with the scientific community.	Create a free account on Code Combat and play the game: www.codecombat.com	Can you cook using the heat of the sun? Learn how to build a solar oven: bit.ly/vivifysolaroven	Search "virtual museum tours" to explore famous exhibits from around the world.