

# Take Home Activities Packet



## Offline and Online #MAJAtHome STEAM Activities



SCAN ME

Upon completion of activities, please scan this QR Code to upload your student's work in the prospective folder. Example, 1st grade activities should be uploaded in the "1st Grade" folder. Also, Please be sure to label the upload with the first and last name of the student.

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# At-Home Education Resources

## Lower Elementary (K - 2)

Dear Families,

When children are out of school, they are missing out on important academic activities as well as losing their daily routines and social interactions. To help support both your child's academic learning and mental health, a structured daily schedule is recommended. A schedule should include: academics, physical activity, free play, arts, reading, enrichment activities, and limited screen time. The following are resources for hands-on STEAM activities to keep scholars excited and motivated about learning. Challenge your scholars to complete the daily enrichment activity checklist below.

### Daily Enrichment Activities

- ☐ Physical Activity (Walk, ride a bike, play a sport safely)
- ☐ Read for 30 minutes
- ☐ Offline Enrichment Activity: See Activity Chart
- ☐ Online Enrichment Activity: See Activity Chart (Requires internet access)

## Free Online Learning Resources

### Websites

- [Code.org](https://code.org), [Hourofcode.com](https://hourofcode.com)
- [PBSkids.org](https://pbskids.org)
- [Breakoutedu.com](https://breakoutedu.com)
- [Sciencejournalforkids.org](https://sciencejournalforkids.org)
- [Smoremagazine.com](https://smoremagazine.com)
- [Spaceplace.NASA.gov](https://spaceplace.nasa.gov),  
[NASA.gov/kidsclub](https://nasa.gov/kidsclub)
- [Funology.com](https://funology.com)
- [Scholastic.com/magicschoolbus](https://scholastic.com/magicschoolbus)
- [Kids.nationalgeographic.com](https://kids.nationalgeographic.com)
- [Experiments.withgoogle.com](https://experiments.withgoogle.com)
- [Scratch.mit.edu](https://scratch.mit.edu)
- [Blockly.games](https://blockly.games)
- [EGFI-k12.org](https://egfi-k12.org)
- [Funbrain.com](https://funbrain.com)
- [QuickDraw.withgoogle.com](https://quickdraw.withgoogle.com)

### Apps








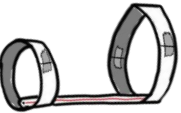

- LEGO Juniors
- LEGO Life
- Weird But True
- Robot Factor
- Mathtopia
- Wonderscope
- Flight Pilot Simulator 3D
- Drawing for Kids
- Stop Motion Animation Studio
- Toontastic 3D
- Cargo-Bot
- iNaturalist
- Tami's Tower
- SkyView
- Khan Academy Kids
- Tynker Junior

### Podcasts

- Bedtime History
- Story Pirates
- Fun Kids Science Weekly
- Stories Podcast
- But Why
- KiDNuZ
- What If World
- Wow in the World
- BrainsOn
- Tumble

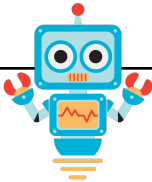



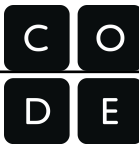









# STEAM Activity Chart: Offline Learning

## Lower Elementary (K-2)

Design Monday	Science Tuesday	Active Wednesday	Engineering Thursday	Fun Friday
Design your personal mission patch! In a large circle draw anything that shows what you are passionate about. Share the patch with your class, teachers, and family.	Scientists 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 time to complete the course. Can you do it faster the second time? Get a family member to try! Share your obstacle course with your class.	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life now. Draw how it will work, share how it will improve your life.	Draw your ideal future city. What areas will keep people healthy and happy? What areas will be fun and entertaining? What laws will you have? 
Create a "How To" skit on the importance of hand washing and how to do it properly. (Or choose another topic of interest).	Which object will float or sink? Use objects that can get wet—toys, utensils, coins, tools - and test whether they float or sink in a container. Guess, test, and record. Discuss with your class.	Play some basketball (or trash can ball)! Record how many baskets you make out of 10. Do it again. How many more/less did you get than the first trial?	Design and build a table using only newspaper, paper, and tape. How much weight can it hold? How can you make it stronger? What designed worked best?	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! What did you see?	Find a quiet place in nature. Bring a journal and record everything you see. 	Design and build a 12" tall structure with only a box of toothpicks and a bag of mini marshmallows 	Use a small bag of candies like M&Ms, make a bar graph showing how many of each color are in the bag. Compare results with friends. 
Design a greeting card using 3D pop up art. 	List 5 non-reusable (you use once and you cannot use again) items in your house. How can you make at least one of them reusable?	Go outside and record as many different insects and mammals as possible. 	Build a raft or boat from aluminum foil. How many coins can it hold? Improve your design and try again.	Look at photos of a natural wonder of the world. Draw or write a story about an ideal vacation there.
Create a hoop glider using a straw and paper strips. How far can you make it go? 	Turn on the water slowly. Brush a plastic comb through your hair 10x. Slowly bring the comb close to the water. What is happening?	Measure your heart beat for 10 seconds. Run around and then measure again. How many beats more did you count in 10 seconds?	Measure five things in your house. Which is the shortest? Which is the longest?	If you were the principal of your school, what rule would you have? Why? How would your rule improve the school community?
Peter Piper picked a peck of pickled peppers. Write your own tongue twister.	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. 	Design and build the tallest tower using only index cards. Place a cell phone at the top and test if it can hold the weight. Record your results.	Trace around your hand and then draw a fictional animal using the shape. Write or tell a story about your animal to a family member or friend.

# STEAM Activity Chart: *Online Learning*

## Lower Elementary (K-2)

Design Monday	Science Tuesday	Coding Wednesday	Engineering Thursday	Fun Friday
<p>Create beats using sounds from the everyday world. <a href="https://experiments.withgoogle.com/drum-machine">experiments.withgoogle.com/drum-machine</a></p>	<p>Check out the latest issue of Smore Magazine: <a href="https://smoremagazine.com">smoremagazine.com</a></p>	<p>Play a coding game at <a href="https://hourofcode.com/us/learn">hourofcode.com/us/learn</a></p> 	<p>Explore engineering careers at <a href="https://EGFI-k12.org">EGFI-k12.org</a></p>	<p>Time to explore the night sky! Download the SkyView app. Can you find a planet or constellations?</p> 
<p>Bring a drawing to life with the <u><i>DRAWING FOR KIDS Games!</i></u> Apps 2 app</p> 	<p>Build a window greenhouse and watch your plants grow. Learn more here: <a href="https://bit.ly/vivifylifescience">bit.ly/vivifylifescience</a></p> 	<p>Download the Cargo-Bot app and program your Bot.</p>	<p>Use the build activity spinner for an engineering challenge: <a href="https://pbskids.org/designsquadd/build/spinner/">pbskids.org/designsquadd/build/spinner/</a></p>	<p>Listen to a story from the Story Pirates. <a href="https://www.storypirates.com/podcast">www.storypirates.com/podcast</a></p>
<p>Conduct an orchestra from your computer. <a href="https://semiconductor.withgoogle.com/">semiconductor.withgoogle.com/</a></p>	<p>Read a science article at <a href="https://sciencejournalforkids.org/">sciencejournalforkids.org/</a></p>	<p>Play a coding game on the Scratch Jr app.</p> 	<p>Explore the NASA website: <a href="https://nasa.gov/kidsclub/">nasa.gov/kidsclub/</a>. Find out about the Mission to the Moon.</p>	<p>Try out the <i>Flight Pilot Simulator 3D</i> app and conquer the skies.</p> 
<p>Create a movie using a Stop Motion Animation studio app.</p> 	<p>Conduct and record an experiment using SciJournal: <a href="https://sciencejournal.withgoogle.com/experiments/">sciencejournal.withgoogle.com/experiments/</a></p>	<p>Play a coding game at <a href="https://studio.code.org">studio.code.org</a></p>	<p>Create a design in LEGO Life app.</p> 	<p>Choose 1 book to read. <a href="https://funbrain.com/books">funbrain.com/books</a></p>
<p>Create your own animated cartoon by downloading the Toontastic App.</p> 	<p>Play a science game from <a href="https://breakoutedu.com/funathome">breakoutedu.com/funathome</a></p>	<p>Play a coding game at <a href="https://blockly.games">blockly.games</a></p> 	<p>Build and test a tower with the Tami's Tower app.</p> 	<p>Can the computer guess your drawing? <a href="https://quickdraw.withgoogle.com/">quickdraw.withgoogle.com/</a></p>
<p>Create your own ant farm! Find a diagram at <a href="https://m.wikihow.com/Build-an-Ant-Farm">m.wikihow.com/Build-an-Ant-Farm</a>. What do you observe?</p> 	<p>Use the iNaturalist app to learn about a new plant or creature and share it with the scientific community.</p> 	<p>Check out the projects at <a href="https://scratch.mit.edu">scratch.mit.edu</a> then create your own game!</p>	<p>Can you cook using the heat of the sun? Learn how to build a solar oven: <a href="https://bit.ly/vivifysolaroven">bit.ly/vivifysolaroven</a></p>	<p>Search "virtual museum tours" to explore famous exhibits from around the world.</p> 



# At-Home Education Resources

## Upper Elementary (3 - 5)

Dear Families,

When children are out of school, they are missing out on important academic activities as well as losing their daily routines and social interactions. To help support both your child's academic learning and mental health, a structured daily schedule is recommended. A schedule should include: academics, physical activity, free play, arts, reading, enrichment activities, and limited screen time. The following are resources for hands-on STEAM activities to keep scholars excited and motivated about learning. Challenge your scholars to complete the daily enrichment activity checklist below.

### Daily Enrichment Activities

- ☐ Physical Activity (Walk, ride a bike, play a sport safely)
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- [Sciencejournalforkids.org](https://sciencejournalforkids.org)
- [Smoremagazine.com](https://smoremagazine.com)
- [NASA.gov/kidsclub](https://nasa.gov/kidsclub)
- [Tinkerbad.com](https://tinkerbad.com)
- [Funology.com](https://funology.com)
- [Kids.nationalgeographic.com](https://kids.nationalgeographic.com)
- [Experiments.withgoogle.com](https://experiments.withgoogle.com)
- [Scratch.mit.edu](https://scratch.mit.edu)
- [EGFI-k12.org](https://egfi-k12.org)

### Apps




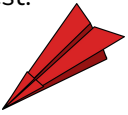

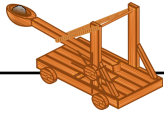

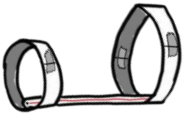

- Flight Pilot Simulator 3D
- Stop Motion Animation Studio
- Hopscotch Programming
- JigSpace
- Cargo-Bot
- iNaturalist
- Tami's Tower
- SkyView
- Bridge Constructor FREE
- Tynker Junior

### Podcasts

- Fun Kids Science Weekly
- Stories Podcast
- But Why
- KiDNuZ
- What If World
- Wow in the World
- BrainsOn
- Tumble

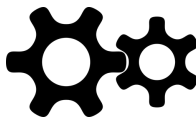
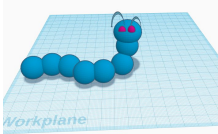









# STEAM Activity Chart: Offline Learning

## Upper Elementary (3-5)

Design 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.	Scientists want to understand the world around us. Write 5 WHY or WHAT questions to learn more about something in nature.	Create an obstacle course. Get a family member to try! What is the shortest amount of time it takes to get through the course?	Engineers solve problems to improve our lives. Brainstorm an invention that can improve your life. Draw how it will work.	Make leaf art! Place a leaf under a sheet of paper and rub a crayon over the leaf to reveal its print. 
Create a "How To" skit or poster on the importance of hand washing and how to do it properly. Or choose another topic. 	Virtually (or in person) visit a zoo and make observations about 10 different animals feet and ears. Make a chart for comparison. What is similar? What is different?	Play some basketball (or trash can ball)! Measure how many baskets you make out of 10. 	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. 
Make a floor plan of your room on grid paper (or blank paper). Measure the dimensions and draw items to scale. Calculate the area.	Place a small ball on top of a large ball and drop them together. Watch how energy is transferred!	Find a quiet place in nature. Bring a journal and record everything you see. 	Design and build a catapult with household item to knock over a tower of cups. 	Go outside and take a photo of as many different birds, insects, and mammals as possible. Get goofy with it. How many animals can you find?
Use items you would throw away or recycle and make something useful. Name your product, describe its function, set a price, and create a slogan. Share with your class.	Find a leaf on a plant, wrap it in a plastic bag and secure it with a rubber band. After a few hours water will appear! This is the plant's version of sweating.	Go on a nature walk (safely) and take notes on the vegetation and wildlife you see. Notice the different habitats for different animals in your neighborhood.	Create a zip line for a small action figure to travel down from at least your shoulder height.	Look at photos of a natural wonder of the world. Draw or write a story about a vacation there. 
Create a hoop glider using a straw and paper. How far can you make it go? 	Take a pencil and scribble in a square to create a graphite "ink pad". Press your finger in the graphite and then on a sheet of paper to look at your fingerprint!	Measure your heart beat for 10 seconds. Do jumping jacks and then measure again. What is the difference?	Build a raft or boat from aluminum foil. How many coins can it hold? Improve your design and try again.	Survey your family for these genetic traits: dimples, attached earlobes, ability to roll tongue, and right thumb goes on top when clapping hands.
Search newspapers, internet, or magazines for an interesting story about science. Tell your family about it at dinner and share it with your class.	Go outside and write down your weather observations. What do the clouds look like? Can you tell what direction they are moving?	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?	With a family member, discuss a significant historical event that happened to them. How did this event impact their life? What did they learn?

# STEAM Activity Chart: *Online Learning*

## Upper Elementary (3-5)

Design Monday	Science Tuesday	Coding Wednesday	Engineering Thursday	Fun Friday
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<p>Create your own 3D design on <a href="https://www.tinkercad.com">www.tinkercad.com</a></p> 	<p>Build a window greenhouse and watch your plants grow. Learn more here: <a href="https://bit.ly/vivifylifesience">bit.ly/vivifylifesience</a></p> 	<p>Download the Cargo-Bot app and program your Bot.</p>	<p>Use the build activity spinner for an engineering challenge: <a href="https://pbskids.org/designsquad/build/spinner/">pbskids.org/designsquad/build/spinner/</a></p> 	<p>Try out the Flight Pilot Simulator 3D app and conquer the skies.</p>
<p>Conduct an orchestra from your computer. <a href="https://semiconductor.withgoogle.com">semiconductor.withgoogle.com</a></p>	<p>Listen to this science show about space <a href="https://bit.ly/supernova8">bit.ly/supernova8</a></p>	<p>Play a game at <a href="https://hourofcode.com/us/learn">hourofcode.com/us/learn</a></p>	<p>Explore the NASA website: <a href="https://nasa.gov/kidsclub/">nasa.gov/kidsclub/</a>. Find out about the Mission to the Moon.</p>	<p>Choose 1 book to read. <a href="https://funbrain.com/books">funbrain.com/books</a></p> 
<p>Create a movie using Stop Motion Animation studio app.</p>	<p>Download the JigSpace app to learn about the solar system.</p> 	<p>Play a coding game at <a href="https://studio.code.org">studio.code.org</a></p>	<p>Build and test bridges with the Bridge Constructor FREE app</p> 	<p>Create a song! <a href="https://creatability.withgoogle.com/keyboard/">creatability.withgoogle.com/keyboard/</a></p>
<p>Read this story and then draw your own robot creation. <a href="https://bit.ly/robotstory7">bit.ly/robotstory7</a></p>	<p>Play a science game from <a href="https://breakoutedu.com/funathome">breakoutedu.com/funathome</a></p> 	<p>Build a game on the Tynker Junior app.</p>	<p>Download the JigSpace app to learn how a quadcopter (drone) works!</p>	<p>Can the computer guess your drawing? <a href="https://quickdraw.withgoogle.com">quickdraw.withgoogle.com</a></p> 
<p>Watch the video "Inventions from Nature" and create a poster to advertise your own animal inspired invention. <a href="https://bit.ly/animalinvention">bit.ly/animalinvention</a></p>	<p>Use the iNaturalist app to learn about a new plant or creature and share it with the scientific community.</p> 	<p>Check out the projects at <a href="https://scratch.mit.edu">scratch.mit.edu</a> then create your own game!</p>	<p>Can you cook using the heat of the sun? Learn how to build a solar oven: <a href="https://bit.ly/vivifysolaroven">bit.ly/vivifysolaroven</a></p> 	<p>Search "virtual museum tours" to explore famous exhibits from around the world.</p>