


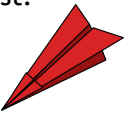

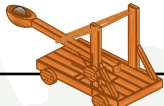





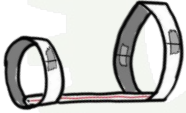
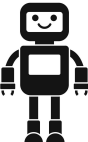





STEM/Makerspace Day!

Upper Elementary (3-5)



Create	Science	Active	Engineering	Fun
Welcome to today's mission...Act like a scientist/engineer all day! No matter the activities you choose...Make a plan, try it out, reflect and make changes...Just like a scientist/engineer!				
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. 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 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. 	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!	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. 	Collect objects of many different colors and make a bar graph showing how many of each color are in the bag. 
Make a greeting card using 3D pop up art. 	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 plants version of sweating.	Go outside and record as many different insects and mammals as possible. 	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. Explain how technology could help you 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?	Create a zip line for a small action figure to travel down from at least your shoulder height.	Survey your family for these genetic traits: dimples, attached earlobes, ability to roll tongue, and right thumb goes on top when clasping hands.
Draw a robot invention. What would it do? 	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 invention from their lives. Ask them, how did it impact their life? What did they learn?