ENGINEERING BINGO

Engineering activities that use low-cost supplies you already have around the house and are easy to deploy in a hurry. Have fun with this BINGO-style board of awesome engineering that jives well with social distancing. Share your activities on social media with #EngineeringBINGO and let other families know how they can play along.

Make a boat that can really float. How can you modify your design so that it would be a fun bath toy?	Fold and fly different styles of paper airplanes. How can the science of flight help you design a better plane?	Look closely at various kitchen tools. How do you think they work? How could they be improved?	Transform a room of your house into a castle! What features do you think are most important in real castle designs?	Create the ultimate creative rolling car that can go down a ramp. How many different ideas can you try?
Create a gap that is about 12 inches across. Use different materials to create a simple bridge. How can you determine which bridge is the strongest?	Do batteries really power the world? Go on a scavenger hunt to find things powered by batteries. What kind of batteries can you find?	Transform a sheet of paper into a fan. How many different designs can you come up with? How else can you transform paper?	Louis Braille wanted to make reading easier for other blind people so he created a code of raised dots. Can you write a message in Braille?	Watch a movie about sports. How would you describe the different forms of motion? What needs to happen to move *fast*?
Discover how LEGO bricks are made. Can you use *your* LEGO to make one really big LEGO brick?	Plan and make a model playground. Who will you make a model playground for?	FREE SPACE	Build a car or house entirely out of edible materials. Consider having an edible car race	Design and build a pair of scissors that can cut through dough. What can you use for the blades?
Experiment with freezing different mixtures of water and salt. What do you notice about the amount of salt and the time it takes to freeze?	Build a pendulum by tying a weight on a string. What do you notice about the swing when you change the length? How can you use this as a timer?	Did you know that windshield wipers were invented by Mary Anderson? Experiment with making a model windshield wiper. What would you invent for cars?	Design a town square for the heart of a healthy community. What makes a community healthy and strong?	Make a building with multiple floors. What do you need to do to ensure that the building is stable? Can you install an elevator?
Take apart a click-to-write pen to see if you can get a closer look at the mechanisms that make it work.	Grab three balls, go outside, and simulate a supernova. What do you notice about the maximum height?	Find six things that are held together with screws. Pick one and use a screwdriver to look inside.	Create a tool that helps you measure 6 feet accurately. What makes measuring this distance challenging?	Using *only* paper or index cards, design a tall tower that can support an object. What object will you try to support?

“Inspired by Lindsey Nelson, an engineering educator at Outschool.com. Currently Outschool is offering free live classes to support public school families affected by school closures.