

Engineering BINGO (Grades 6-8)

<p>Make a boat that can really float. How can you modify your design so that it would be a fun bath toy?</p>	<p>Fold and fly different styles of paper airplanes. How can the science of flight help you design a better plane?</p>	<p>Look closely at various kitchen tools. How do you think they work? How could they be improved?</p>	<p>Transform a room of your house into a castle! What features do you think are most important in real castle designs?</p>	<p>Create the ultimate creative rolling car that can go down a ramp. How many different ideas can you try?</p>
<p>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?</p>	<p>Do batteries really power the world? Go on a scavenger hunt to find things powered by batteries. What kind of batteries can you find?</p>	<p>Transform a sheet of paper into a fan. How many different designs can you come up with? How else can you transform paper?</p>	<p>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?</p>	<p>Watch a movie about sports. How would you describe the different forms of motion? What needs to happen to move <i>fast</i>?</p>
<p>Learn about a STEM career. Tell us what career you chose and what interests you the most about this career.</p>	<p>Plan and make a model playground. Who will you make a model playground for?</p>	<p>FREE SPACE</p>	<p>Build a car or house entirely out of edible materials. Consider having an edible car race</p>	<p>Design and build a pair of scissors that can cut through dough. What can you use for the blades?</p>
<p>Watch this video of Dominoes Falling. Can you build a domino falling chain reaction, or create something else that causes a chain reaction? Share.</p>	<p>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?</p>	<p>Did you know that windshield wipers were invented by Mary Anderson? Experiment with making a model windshield wiper. What would you invent for cars?</p>	<p>Design a town square for the heart of a healthy community. What makes a community healthy and strong?</p>	<p>Make a building with multiple floors. What do you need to do to ensure that the building is stable? Can you install an elevator?</p>
<p>Take apart a click-to-write pen to see if you can get a closer look at the mechanisms that make it work.</p>	<p>Grab three balls, go outside, and simulate a supernova. What do you notice about the maximum height?</p>	<p>Find six things that are held together with screws. Pick one and use a screwdriver to look inside.</p>	<p>Create a tool that helps you measure 6 feet accurately. What makes measuring this distance challenging?</p>	<p>Using <i>only</i> paper or index cards, design a tall tower that can support an object. What object will you try to support?</p>