77 Simple STEM Activities for Families #3

- Invent a machine to sort LEGOs
- Find something in your yard from every rainbow color
- Drop 2 items to see which falls fastest (use slo-mo camera if necessary)
- Fold a sheet of paper different ways to see how to make it fall faster
- □ Watch Wall-E
- Track & graph your family's daily garbage output
- Set up a recycling station in your home or school
- Build the longest paper chain using 1 piece of paper & tape
- See how many times you can fold a piece of paper in half
- Plant seeds in a clear water bottle to watch the roots grow
- Make Pixel art using piskelapp.com
- Test the strength of different size rubber bands
- □ "Invent" your own island
- Build a racetrack or obstacle course for toy cars
- Pick up garbage using the <u>Litterati</u> app
- Build a device to safely grab litter
- Read an inventor's biography
- Watch a video from <u>The Slow</u> <u>Mo Guys</u> on YouTube
- Try 5 different recipes for the same type of cookies
- Learn which science words come from Latin language
- □ Make Anamorphic drawings
- Find the area of various chip and cracker shapes
- Make puppets
- Turn a cardboard box into a pet playground
- Set up dominoes and record a video
- □ Find the oldest item in your home
- Draw what you think cars will look like in 10 or 20 years

- Look up Frank Stella art and make your own STEM art
- □ Sort and graph the colors in a bag of M&M's or Skittles
- Put seeds in wet paper towel in a Ziploc bag & hang in a window to sprout
- Compare nutrition facts for food items in your kitchen
- □ Watch October Sky
- Build a famous building in Minecraft
- Make a cardboard pinball game
- Test different foods to see if they float or sink
- □ Learn how movies are made using <u>Pixar In a Box</u>
- Test Double Stuf Oreos to see if they're actually double
- □ Turn an old shirt into a pillow
- Recycle plastic grocery bags into a ball, bag, or artwork
- Draw your favorite movie character in a STEM career
- Make a flip book
- Use the FlipaClip app to make a digital flip book
- Make a zip-line for a LEGO mini-figure
- Design a gadget for a favorite TV character
- □ Play a game of <u>Shut-the-Box</u>
- Put leaves under a sheet of paper & rub over their shape with a crayon
- Paint or draw a picture, build a frame, & hang it on the wall
- Calculate how many books would reach your ceiling or fill your room
- Make a robotic arm using cardboard, straws, & yarn
- Make a prosthetic arm out of LEGOs or other items
- $\hfill\square$ Make art using graph paper
- Build a catapult
- Make hidden messages using lemon juice
- Make your own Diet Coke and Mentos experiment

- Put a chicken bone in vinegar for 5 days & see what happens
- □ Learn to tie knots
- Make a "stained glass" pattern using tape and sidewalk chalk
- Keep track of the cars that go by (how many each hour, what colors, etc)
- See who can find the most polygon shapes in your home
- Pick 10 things (pinecones, stop signs, squirrels, etc) & tally how many you see on a walk
- Construct an igloo out of sugar cubes or mini marshmallows
- Build a ramp for a toy car, then change the angle to make it go faster & farther
- Research different pets before getting one
- Turn paperclips, pen caps, or milk jug rings into pictures
- Watch Spare Parts & build an underwater robot
- Build a marble roller coaster using paper towel tubes
- Make your own song using <u>Chrome Music Lab</u>
- □ Learn to carve a bar of soap with a popsicle stick
- Go for a walk and use an app to identify plants
- Record a bug, butterfly, or spider in slow motion
- Make constellations on the wall by poking holes in a paper cup & shining a flashlight through it
- Make homemade ice cream
- □ Make a model of your home
- Watch <u>Joseph's Machines</u> on YouTube & create your own
- □ Have a cake design contest
- □ Make a Density Column
- Use an inkpad to make fingerprints, then compare to your family
- Chris Woods @dailySTEM dailystem.com/resources

