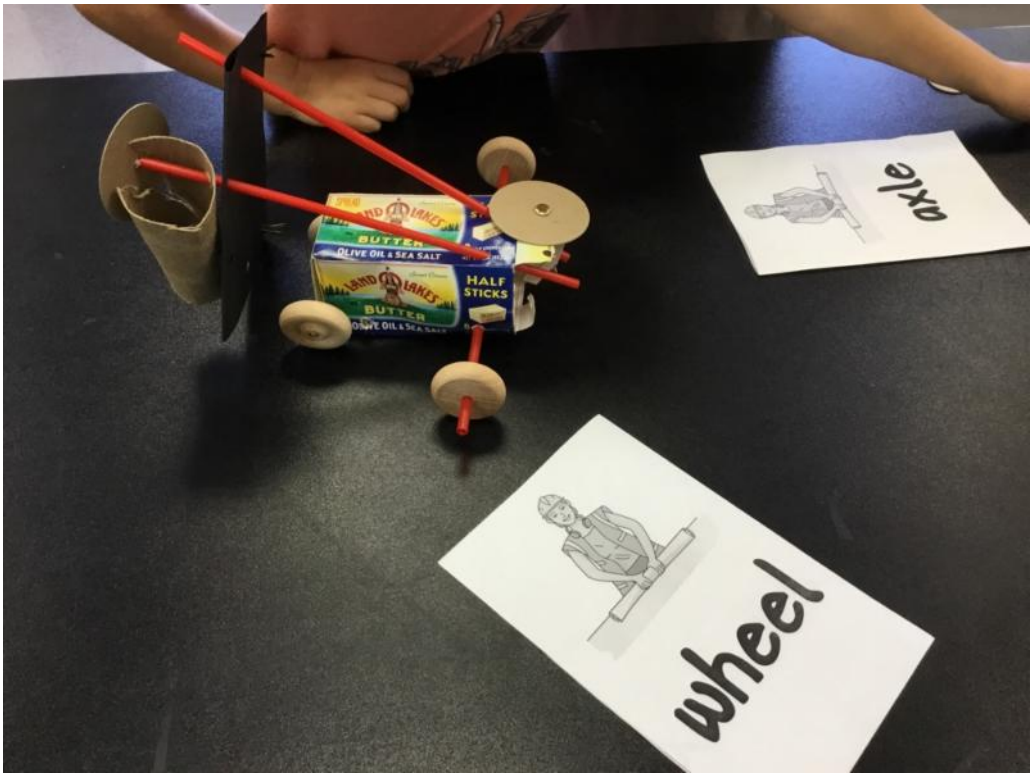
What's Happening in Ms. Magalnick's STREAM Lab at Solana Highlands?

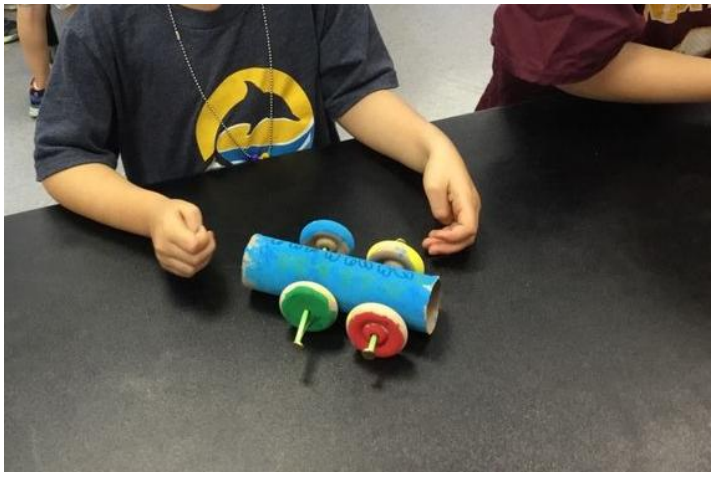


We Can Create Our Own Moving Toys!

Solana Highlands kindergarteners have hit the ground running ... literally!

This fall, our youngest students began their **STREAM (Science, Technology, Research, Engineering, Art, and Math)** journey with an exploration of pushes and pulls, comparing how different strengths and directions of push and pull affect the motion of an object.

Students were introduced to **how** to approach their study just as scientists do-- by communicating, measuring, classifying, observing, and working together.



From marble runs and bowling to magnets and tires, students manipulated and examined the inner workings of moving toys. We spent a week learning about the way wheels and axles interact! Students worked in groups, discussing and making observations about how the body of a moving vehicle would best move using a variety of wheel and axle types, such as straws, brads, wooden and cardboard wheels, along with recycled object bodies including cardboard boxes, water bottles, plastic trays, paper towel rolls and more.

Students considered the evidence they

gathered from their observations and used their reasoning skills to draw conclusions about and deepen their understanding of how and why objects move the way they do.

This guided exploration and play (the “R” in STREAM is for "research", and there’s no better way for young scientists to research than to play) laid the groundwork for introducing kindergarteners to the *Engineering Design Process*, a method they will use to tackle STREAM problems and questions throughout their seven years of elementary school.

Next up, students applied their newfound knowledge and skills to design and engineer their own moving toys!

These kinds of experiences open kids’ minds to the science all around them in their everyday lives, even in the toys they play with and build! As a result, our kindergarteners are learning from a tender age that the information, skills, and processes that engineers and scientists use are really for everyone!

Welcome, kindergarteners, to the exciting world of STREAM!

This unit addressed these Next Generation Science Standards for Kindergarten:

K-PS2-1: Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object.

K-2-ETS1-1: Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.

**To learn more about this and other projects,
go to Ms. Magalnick's STREAM Lab website at:
https://sites.google.com/a/sbsd.k12.ca.us/stream-sh/home**

**Check out great STREAM Lab pictures and videos
at @MagogoGadget on Twitter!**

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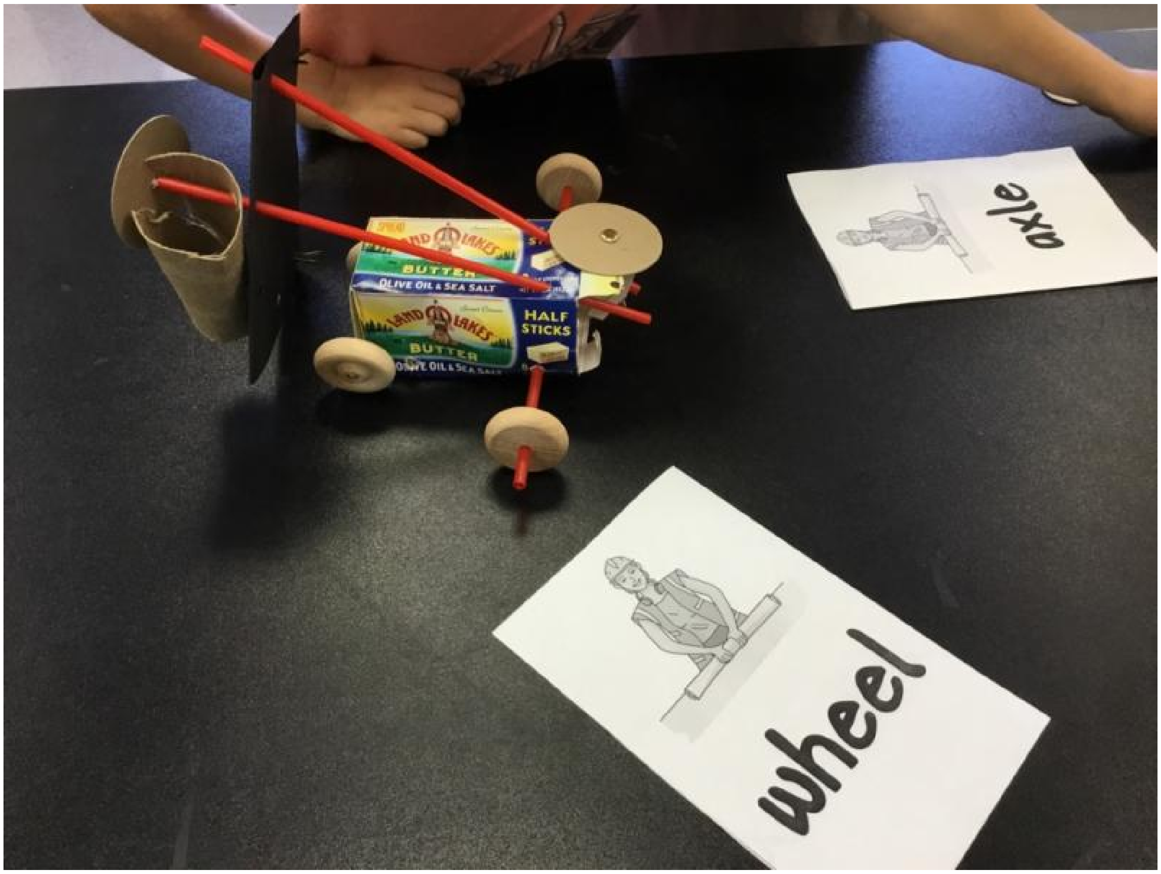

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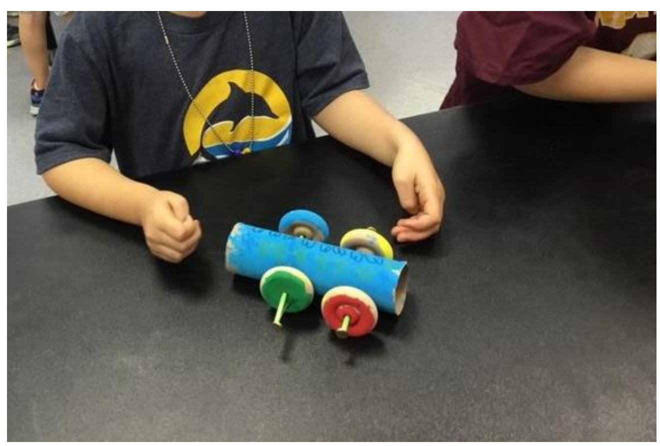

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