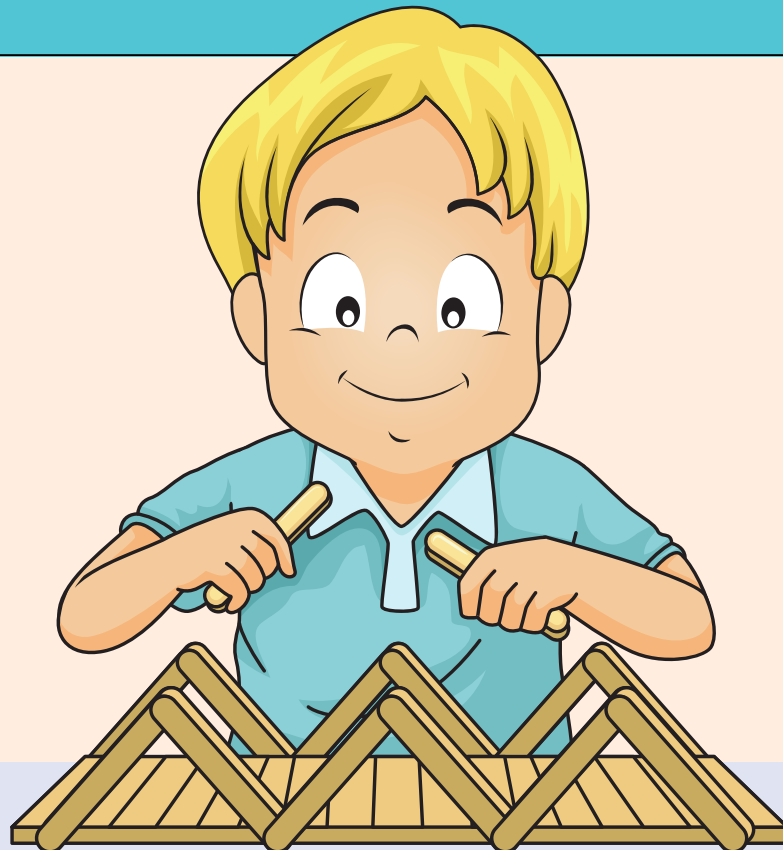


Columbia Gorge

STEM HUB

SCIENCE, TECHNOLOGY, ENGINEERING, & MATHEMATICS

STEM NIGHT KITS



MAKE & TAKE

Make & Take Activities involve consumable materials, so children & families take their creations home!

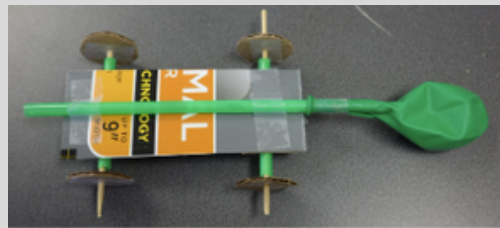


LEGO BUILD

Using random Legos, create anything imaginable, or use the prompt cards for a more complex challenge.

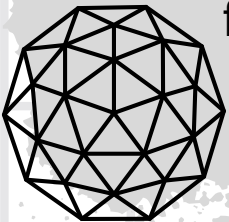
BALLOON POWERED CARS

Using everyday materials and a balloon, power a vehicle to glide along the floor - experiment with different design elements to increase speed and distance.



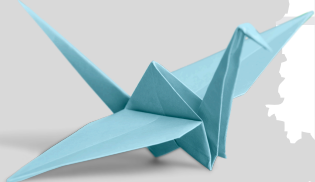
CLAY CREATIONS

Explore architecture by building geodesic domes from toothpicks & modeling clay



ORIGAMI

Follow directions to create origami! Animals, flowers and shapes!



LED FLASHLIGHTS



Experiment with creating a simple circuit LED flashlight.

MAKE & TAKE

Make & Take Activities involve consumable materials, so children & families take their creations home!

COSTUME CREATIONS

Follow the directions to turn a paper bag into a vest or a cape. Then, decorate with any of the materials available.



FOIL BOATS

Using foil, create a boat that can hold weight and still float - experiment with boat design and weight.



CATAPULTS

Using simple materials, build a model catapult and then improve the design for increased distance & speed.



3DODDLER

Use the 3Doodler pen to create 3D art and structures straight from your imagination.



FREE BUILD

Free Build Activities allow children & families to explore open-ended building materials - using their imagination or build cards to guide them.



LEGO

BRISTLE BLOCKS

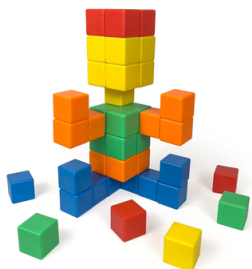


RODS & BALLS

K'NEX



MAGNETIC BLOCKS

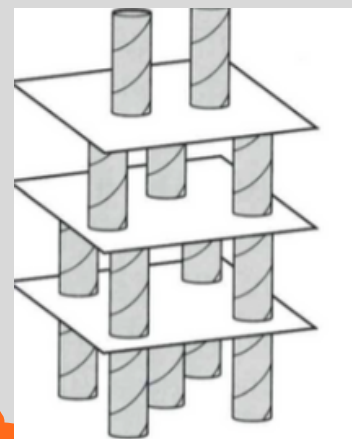


MAGNETIC TILES



TUMBLING TOWER

Using cardboard tubes and cardboard squares, learn how engineers build structures that are strong & stable!



CHALLENGES

Challenge Activities provide children & families with an activity that has specific constraints & goals.

BEE BOT ROBOTS

Build a maze out of popsicle sticks and then code the robots to move through the maze.



CUP PYRAMID

Work in teams to build a cup pyramid – but with a twist! You can't use your hands!



BIRD NEST

Using only the materials provided, build a nest to hold 3 eggs (marbles).



HOUSE OF CARDS

Discover building with just playing cards – uncover strengths in different card configurations.



STEM CAREERS

STEM Careers Activities allow children & families to learn about STEM Careers through exploration!

BOXING BEANS

Experiment with package design to determine the most efficient way to hold a product.

STEM Career:
Advanced Manufacturing



DOMINO DIVING BOARD

Make a cantilever and gain a better understanding of how engineers help us to “hang out” safely.

STEM Career: Architecture

GLUE IS THE CLUE

Demonstrate how composite materials are used in engineering to make something stronger.

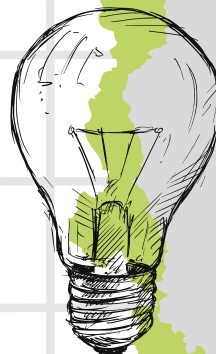
STEM Career:
Engineering



SNAP CIRCUITS

Experiment with Snap Circuits electrical components. Kit includes directions for projects.

STEM Career: Electrical

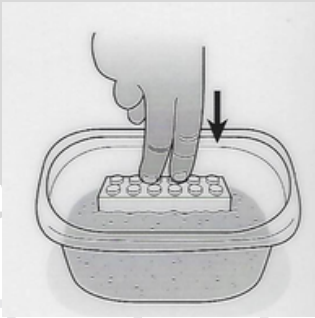


STEM CAREERS

STEM Careers Activities allow children & families to learn about STEM Careers through exploration!

SOLID GROUND

Demonstrate how different Earth materials hold up to pressure.
STEM Career: Geology



LET'S COMMUNICATE

One partner builds a simple structure, then provides verbal directions for another person to build the same structure.
Computational Thinking



THRILL SEEKERS

Work together to move marbles through plastic tubing, much like a rollercoaster.
STEM Career: Aerodynamics



STEM FUN

STEM Fun Activities are quick & easy experiments for children & families to enjoy together!

ANCIENT ARCHITECTURE



Follow Lego-like instructions to build arches and domes. Historical information provided, too!

INSPIRED BY NATURE

Match human-made contraptions with those that match nature! Discover how nature inspires engineers & inventors!

MAKE IT LOUD



Experiment with how different materials influence sound, using a cardboard tube.