Imagine It. Make It.

For All Grades:

Mother's Day Pinch Pots – (<u>The Clay Adventure</u> by Trần Lê Sơn Ý) Students use gray modeling clay to create customized pinch pots.



For Grades K-1:

Do You Wanna Build a Snowman? – Design and build a snowman under certain criteria and constraints.

2D/3D shape building— Build the alphabet/shapes using the provided materials and task cards.

Very Good Hats – (by Emma Straub) Design and build a hat that solves a problem (ex: protection from sun, rain, injury, etc.)

Floating Pots of Gold - Using a list of supplies, STEM groups must create a floating pot of gold that is designed to carry as much gold (pennies) as possible!

The Great Eggscape –(companion activity to <u>The Great Eggscape</u> by Jory John.) Your egg wants to escape! Create a paper plate magnet

maze to help it get from the beginning to the end of your maze. Explores properties of magnets.

Make Some Music – Explore sound by making Easter egg maracas, rain sticks, and paper-plate tambourines.

For Grade 2-3:

Build an Igloo – Use marshmallows and toothpicks to design and build an igloo for the Eskimos!

Sled and Slope - Design and build a sled for 2 riders and a ramp that allows for it to travel the greatest distance.

Rainbow Run - Design a Rainbow Run that showcases both kinetic and potential energy at use. The design must have a single large curve, in the shape of a rainbow.

Rashchenka's Eggs – After reading Patricia Polacco's story, students will create their own eggs by learning about chromatography as an art technique.

Nice Nest - In this challenging spring activity, students must work against a criteria & constraints list and create a nest designed for maximum capacity.

Spectroscopes - Students will explore the science of light, refraction and reflection with this homemade spectroscope - an instrument used to split light into different wavelengths, which we see as different colors of the rainbow.

For Grades 4-5:

Fake Snow Lab – Students will conduct 3 tests with 4 different artificial snow recipes to determine which one is the best.

Frozen Fortress - Design and build a snowball fortress wall with the greatest possible area that will withstand a snowball attack.

Cupid's Arrow - The goal of this balloon physics challenge is to create an arrow out of a balloon. Then, using Newton's third law of motion, have the arrow shoot along a string into a heart.

Spectroscopes - Students will explore the science of light, refraction and reflection with this homemade spectroscope - an instrument used to split light into different wavelengths, which we see as different colors of the rainbow.

Escape from Planet Emoji – Escape from Planet Emoji with your team by completing the ELA lockbox challenges. A great review of English/Language Arts concepts (story elements, summarizing, main idea, figurative language, fact/opinion).

Escape from Emoji Island – Escape from being stranded on Emoji Island by completing the Math Lockbox challenges. A great review of Math concepts (multiplication, division, decimals, fractions, geometry, problem solving).

Grades 6 and up:

Fake Snow Lab – Students will conduct 3 tests with 4 different artificial snow recipes to determine which one is the best.

Frozen Fortress - Design and build a snowball fortress wall with the greatest possible area that will withstand a snowball attack.

WWII Museum - Research, design, and create an artifact to be displayed in a historical museum.