## **Curiosity** A Sneak Peek

Stop at red, go at green! We are engineering our very own traffic signals using LEDs, wires, and a coin cell Glow & Go battery, learning about circuits and electricity along the way. Reach for the stars – or at least the cookies on the top shelf! Using cardboard, string, and pulleys, we will Astro-Arm construct a prosthetic hand that can grasp and lift objects, exploring simple machines and muscles. We are crafting and customizing our own fidget spinners, discovering the mechanics of simple machines and the **Twist & Shout** science of friction and momentum—all while having spinning fun! We are decoding the building blocks of life with colorful beads! We are creating DNA helix chains using pony beads **Blueprint** to represent cytosine, guanine, thymine, and adenine, **Beads** learning about genetics and molecular structures. Time to catapult into physics! We are building our own catapults using popsicle sticks and delving into the **Grand Scheme** principles of trajectory, force, and leverage as we aim for of Flings

accuracy.

Engineering

Science

UNIVERSITY OF WATERLOO



We are raising the roof with engineering! We are designing and constructing a carnival tent, applying their knowledge of load, strength, and structural integrity to create a sturdy framework capable of supporting elephantine-sized weights.

All you had to do was stay(dium)

Alien Ooze

We are getting messy with science! In this squishy chemistry experiment, we are making Oobleck to explore the fascinating world of non-Newtonian fluids and learn about the properties of solids and liquids.



We are preserving the past and saving the future! During a nature walk, we are collecting local foliage and other natural treasures to create our own 'fossilized' keepsakes, learning about conservation and the environmental importance of local ecosystems.

Leaf Lifesaver

Add it up

Speed through addition and subtraction challenges to mark your BINGO card. Be the first to shout "BINGO!" in this fastpaced game that sharpens math skills and stirs up competitive fun under the big top!

We are staying safe online! We are donning headbands, guessing cyber smart clues from our teammates in an exciting game, and learning crucial digital skills like creating strong passwords and practicing safe browsing habits.

**Cyber Smart** 

Energy Rush

We are feeling the power of energy transfer! In this dynamic game, we are racing through an obstacle course to mimic the transfer of kinetic, potential, thermal, and chemical energy, making physics an exciting adventure.



Learning through fun is answering math questions in a Jeopardy-style quiz show, testing our knowledge and quick thinking in an engaging game show format.

Cosmic Calculations

Meteorite Marble Launch Creativity and physics collide as we work in teams to engineer a LEGO marble run to swiftly transport a secured message-bearing marble through intricate pathways, combining teamwork with problem-solving.

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We are coding to collect! Using iPads and Osmo's Coding Awbie Blocks, we are navigating Awbie through mazes to collect strawberries, learning the fundamentals of programming with hands-on interaction.

**Osmo Awbie** 

Ozobotia's Obstacle After a storm hits Ozobotia, we are restoring the city! We are using Ozo-Bots to create paths through a devastated cityscape, coding their bots to navigate obstacles and rebuild their world.

We are experiencing evolution in action! We are playing an outdoor game of rock, paper, scissors, evolving their characters based on wins and losses, illustrating the concept of natural selection in a lively and interactive way.

RPS Evolution Revolution

Smarty Cap

We are discovering our brain's layout! We are coloring and assembling paper hats representing different brain lobes and functions, learning about hemispheric specialization in a crafty and memorable way.