



THE MAD SCIENCE® DISCOVERY LAB
An 8 week After School Science Club at PBP Community Association

This 8-week after school program explores various topics from the Mad Science Lab. Students will learn while having fun with hands-on activities, stunning demonstrations and inquiry-based discussions. Each class concludes with a Mad Science take-home project* which reinforces the concepts taught and suggests further experiments to try at home. The Mad Science Discovery Lab is made up of the following 8 classes:

All about Animals: Children explore the Animal Kingdom & the science of Zoology by learning about the habitats, adaptations and life cycles of their favorite creatures. Students experiment with animal calls and camouflage, and create their own **Animal Tracks*** to take home.

Life in the Sea: Plunge into the depths of ocean life. Children get hands-on with Marine Biology while learning about different ocean ecosystems, classification and our impact on ocean habitats. The **Anaglyph Sea Puzzle*** lets children create a 3-D coral reef.

Energy Burst: Children are introduced to the law of Conservation of Energy and explore energy transfer & conversion. Pop, jump and flip with hopping, swimming and swinging toys and learn about kinetic & potential energy in rubber band-wound gadgets. The **Catapult*** Take-Home will launch further learning to a greater distance.

Get Connected: Children chat over cables, set up a telephone network and work with radio signals. Students wind through a cell tower relay to track cell phone users. Each student will get their very own **Wired World***, an optical fibre telecommunications model to take home.

Mix it Up: Shake up solutions and explore the physical aspect of chemistry. Children learn how to identify solutions, suspensions and physical mixtures and how to separate mixtures with mechanical and chemical techniques. The **Super Sorter*** gives students the tools to sort out mixtures at home too.

Moving Motion: Children catapult into Sir Isaac Newton's three Laws of Motion. Students will yank a cloth from under dishes, send crash test dummies flying and launch mini-rockets across the room. The twirling **Newton Spinner*** will reinforce action-reaction forces at home.

Radical Robots: Children become wrapped up in the world of robotics while exploring robots, remote control devices and automatons. Students will control an automaton through sound and make a soccer robot score a goal! Each student will also build their own **Robot Hand*** - a human-like end effector.

Super Power Sources: Children explore renewable and non-renewable resources for power generation. Students will use mechanical forces to turn on fans, and find out what makes a battery work. The **Crank'n Shine*** gives children a chance to generate light.



DATES: Mondays, January 22 – March 19, 2018 from 3:45PM – 4:45PM. Ages 6 – 10.
No Class Family Day, February 19.

Fee: PBPCA Members \$110.00 plus gst. Non-Members \$130 plus gst (All supplies included)

To register call 403-281-1908 or email pbpcam@pbpcommunity.ca