

Newsletter 330 BIG Little Science Centre April 2018

BIG Science

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Plasma Art: A photograph of the 'Lightning' plasma demonstration at the **BIG Little Science Centre** produced this surprising and beautiful image. The display can be found in the 'dark room' that is part of our larger hands-on room.

Gordon Gore Photo

BIGScience

This Newsletter is a publication of BIG Little Science Centre Society
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Back issues of **BIGScience** can be viewed at <<http://blscs.org/newsletters/>>

The **BIG Little Science Centre** is open to the public at these times:

Tuesday to Saturday 10:00 AM to 4:00 PM

CLOSED SUNDAYS and HOLIDAYS

Phone: 250 554 2572 *E-mail* Gord@blscs.org or Susan@blscs.org

Drop-in Visit Rates: Adults (16 to 59) **\$6** Seniors (60 plus) **\$4** Youth (6 to 15 years old) **\$3** Family **\$15**.
Children 5 years old or younger) **Free**

A family membership is \$60.00/year. An individual membership is \$45.00/year. A family membership consists of five directly related people. (This includes any combination of grandparents, parents and children). Individual day rates are:

The Main Benefits of Membership

- Member ID cards for all members
- Free entry to our Exploration Room, events, shows, activities
- FREE or discounted admission to MOST Canadian science centres, including Science World and the H.R. MacMillan Space Centre in Vancouver
- Discounts for Science and Robotics Camps / Clubs in Kamloops
- Voting privileges at the BIG Little Science Centre's Annual General Meeting

Visit our website blscs.org for more details on the benefits of membership.

Drop-in Visit Information

What is a Drop-in Visit?

During drop-in times our hands-on rooms are open for visitors to tour at their leisure. The rooms have approximately 140 stations of hands-on activities to try. We also have an activity or show running Saturdays!

Drop-in Visiting hours

- *Tuesday - Saturday 10:00 - 4:00*
- *Check Facebook or twitter for the latest information.*
For safety purposes we require children under age 16 be accompanied by a minimum number of supervising adults:
 - For children 4 years old and under, 1 adult per every 3 children is required.
 - For children 5 years old to 9 years old, 1 adult per every 5 children is required.
 - For children 10 years old to 16 years old, 1 adult per 10 children is required.

Science Centre Programming Spring 2018

The BIG Little Science Centre is open year round:

Tuesday to Saturday, 10am to 4pm

The Exploration Room is open 10am to 4pm, with over 140 different exhibits to enjoy.

Special shows and activities run at the centre: daily July/August and Saturdays in the school year.

All activities are included with the standard entry fee, unless otherwise stated.

Full activity information is on the website calendar.

Saturday April 21: Beautiful Crystals Lab, at 11am & 1:30pm

Examine many types of gorgeous crystals under microscopes and discover some surprising properties. Grow some crystals right before your very eyes!

Saturday April 28: Super Static Electricity Show, at 11am & 1:30pm

An interactive, fun show that introduces static electricity, explores how it works and produces static in many ways, including using van de Graaff generators. Is it time for your science centre hair-do?

Saturday May 5: Creating Circuits Lab, at 11am & 1:30pm

Using circuit kits to discover how electricity works, you will make circuits to run light bulbs and motors.

Saturday May 12: Mining Day at BIG Little Science Centre, 10am to 3pm

Free entry! Co-sponsored by Kamloops Exploration Group/CIM South Central Branch. Mining, rock ID, gold pan with Yukon Dan, recycle your batteries, large mining vehicles, enter to win a bike, and more.

Saturday May 19: Make an Electromagnet Lab, at 11am & 1:30pm

Use simple electrical materials to build a working electromagnet. How quickly can you transfer nails?

Saturday May 26: Beautiful Light and Colour Show, at 11am & 1:30pm

Discover: many ways of making light; different types of light; properties of light; and rainbows!

Saturday June 2: Bouncing Bubble Lab, from 10:30am to 3:30pm

Get outside for some BUBBLE fun. Discover the shapes that can be made using small bubble instruments and using the giant bubble making equipment. Make and chase flying bubbles to liven up your day.

Saturday June 9: Super Static Electricity Show, at 11am & 1:30pm

An interactive, fun show that introduces static electricity, explores how it works and produces static in many ways, including using van de Graaff generators. Is it time for your science centre hair-do?

Saturday June 16: The Amazing Magnetism Show at 11am and 1:30pm

A fun show that explores magnetism and gives you some magnetic magic tricks to try out at home!

Saturday June 23: Awesome Air Pressure Show, at 11am & 1:30pm

Air is a force of nature that demands respect; join us for this interactive show to learn why.

Friday June 29 and Saturday June 30: Welcome to SUMMERTIME

Build and Test a Boat, 10:30am to 3:30pm

Get a start to summer by designing a foil boat and testing it in our pool. Loads of learning while trying to support as much weight as possible in your very own boat.

KEVA Blocks & LEGO construction materials, 10am to 4pm

Inside in the cool air continue the construction theme using LEGO and KEVA blocks. Use your imagination to create your own structures right in front of you.

Super Summer Science Camps: STEM themed for all to enjoy

Stay tuned for fantastic science fun for kids of all ages. Dates will be posted soon.

**Looking for an awesome place for a Birthday Party or Event?
Give us a call to discuss the possibilities.**

For more information please contact Susan Hammond: susan@blscs.org, or call 250-554-2572.
BIG Little Science Centre reserves the right to substitute alternate programming if needed.

Spring Robotics Club. We are pleased to be able to offer it Thursdays this spring, from **April 26 to June 7**. Attached is the registration form. Consider joining the club, and carpooling, with friends. Feel free to share this info with others.

3D Design and Robotics Club, Spring 2018

Thursdays from 2:45pm to 4:30pm (since it is a club, children arrive when they can after school)

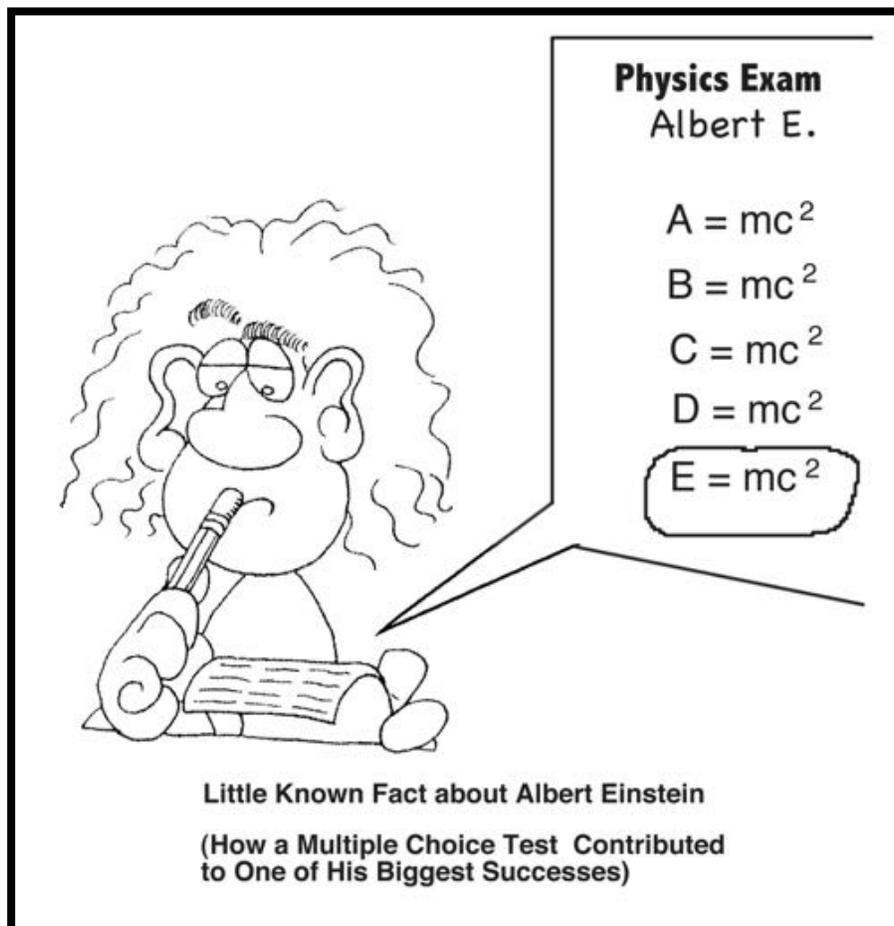
Running seven weeks from April 26 to June 7. Must be aged 9 or older.

You may do one or both of these special programs, over the course of the club session.

Get your robotics geek on to not only design, but **build your own robots**. Then program them to do whatever you want them to. LEGO Mindstorms is the system that is used; incredibly versatile and popular! Build from plans or create your own. This club is for beginners and experts alike, you work at your own pace/level. We provide a kit and computer per child for the whole session.

3D Design is all about learning to use a computer to work in 3 dimensions. We provide a computer. Develop the ability to think beyond the flat, and discover your inner depths and abilities. Each person will have their best creations printed on our 3D printer.

Thank you for your interest. See you at the centre.
Susan



Wildlife at the BIG Little Science Centre

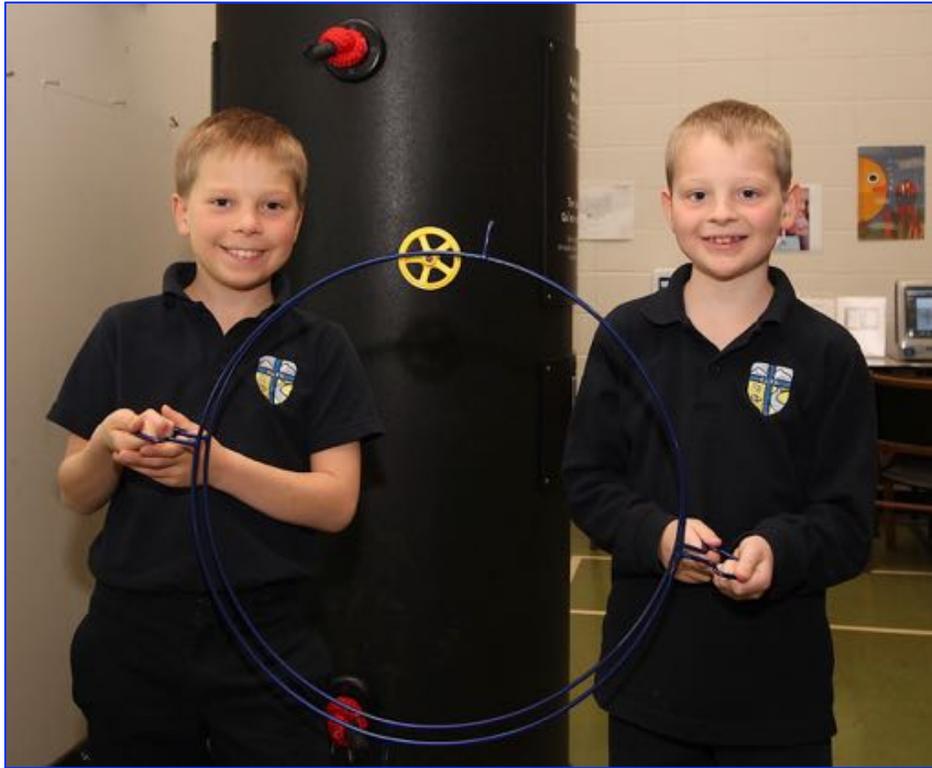


'Sir Duke' the Bearded Dragon

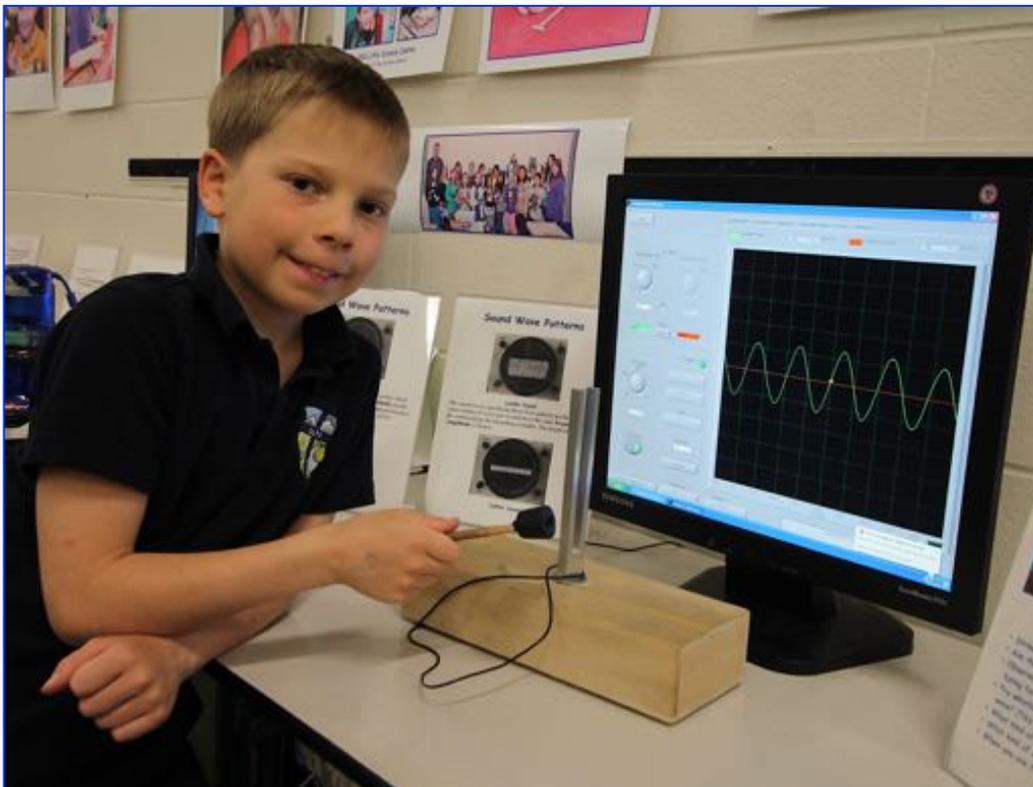


'Lizzie' the Skink

Physics at the BIG Little Science Centre



Nelson and Jordan experiment with a magnetic toy.



Nelson makes waves! Tapping the tuning fork produces pure sound of frequency 256 Hz. A microphone inside the resonating box is connected to an oscilloscope, which displays the wave form beautifully.



Gravity trick: Experienced physics teachers might remember **Professor Julius Sumner Miller's** gravity trick. at the BIG Little Science Centre, visitors don't just "watch things on YouTube"; they get to do things for themselves. There are over 140 hands-on stations where students can learn physics through doing it themselves. **Nelson** became very good at putting the ball in the cup, after a few practice runs.



Something to Reflect On: A brand new addition to the dark room at the BIG Little Science Centre: **The Infinity Mirror**. It works similarly to the **Infinity Box** that has long been at the centre, but is more compact. It contains two parallel mirrors and a circle of tiny white lights. Students of all ages can have fun figuring out how this works.

Science Crossword 2

by Dr. David Mckinnon

1		2		3		4		5		6		7		8
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11							12				13			
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24		25		26					27					
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Clues

Across

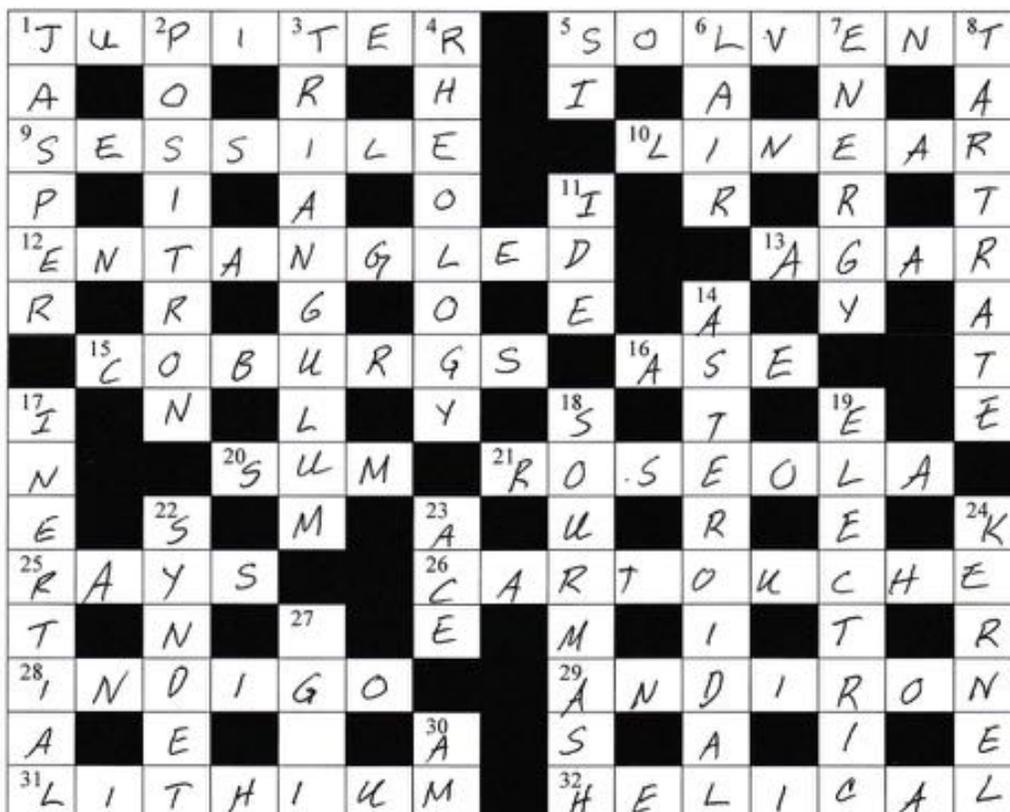
- 1) Describing clones DNA (11)
- 7) Prefix showing a Nitrogen replacing a Carbon in a molecule (3)
- 9) Subatomic particle of three quarks (6)
- 10) Nutrition supplement (7,1)
- 11) AKA edema (6)
- 12) Phenomenon shown by light of receding stars (3,5)
- 15) Savoury flavour (5)
- 16) Belgian city (7)
- 20) George I was this of Hannover (7)
- 22) Bacteria use them to move (5)
- 24) Mixtures of metals with mercury (8)
- 27) Intrusive igneous rock (6)
- 28) Known for his hypothesis about molecules in a mole (8)
- 29) Little plant-sucking bugs (6)
- 31) See with it (3)
- 32) The 'e' in e.coli (11)

Down

- 1) One of the alkali metals (8)
- 2) Salt from CO₂ and water (9)
- 3) Light from our satellite, or home brew whisky(9)
- 4) Symbol for element #49 (2)
- 5) Describing digestive system (12)
- 6) Common amphibians (5)
- 7) Defense of not being there (5)
- 8) Sodium feldspar (6)
- 13) Possessive female (3)
- 14) Compounds that interconvert by H movement (10)
- 17) Australian trees (9)
- 18) Piscatory guide (5,4)
- 19) Oxide of element # 12 (8)
- 21) She of diamonds, a play by Mae West(3)
- 23) Roof of the mouth (6)
- 25) Battery terminal (5)
- 26) Shiny stuff on ceramics 5)
- 30) Symbol of element #2

Solution to Science Crossword 1

by Dr. David McKinnon



Comical Critters Collection
Gordon R. Gore



"You can't be afraid of heights, Olivia. You are an OSPREY!"