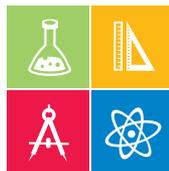


destination
exploration



THE TRAVELING LAB COATS

2018 WORKSHOPS FOR GRADES K-8

> ulethbridge.ca/destination-exploration/tlc

University of
Lethbridge



Science Workshop Topics

Science Sampler! (Gr. K)

This workshop is designed to introduce students to the wonderful world of science and to introduce them to some of the concepts that they will be learning in grade 1.

Reasons for the Seasons (Gr. 1)

Topic: B and E

Students will look beyond themselves and immediate weather in order to discover and investigate that there are larger patterns of change that affect the life habits of many living things. Through hands on activities, students will explore how the changing seasons directly affects the world around us.

Water: The Weightlifting Champion (Gr. 2)

Topic: A and B

Through building and testing students will discover what sinks and floats. Whilst learning the importance of appropriate material choice, students will discuss buoyance through the creation of a boat.

Do You Hear What I Hear? (Gr. 3)

Topic: D

Students will explore the human ear and how we hear, comparing it to other creatures with self-made devices.

Reinventing the Wheel (Gr. 4)

Topic: C

Designing and creating a device that moves is only step one. Students are then challenged with creating a circuit using littleBits to add lights and an electric motor to their device.

A Current Event: Exploring Electricity and Magnetism (Gr. 5)

Topic: A and B

Students will investigate electricity and magnetism through the creation of a littleBits circuit. Using knowledge gained in the creation of their circuits, students will create an electrical device with a purpose. Along the way students will explore conductors, insulators, switches, electromagnets and simple motors.

Galactic Explorers (Gr. 6)

Topic: A, B and C

Students will investigate and learn about objects in the day and night sky. From exploring the principles of flight, to unravelling the mysteries behind the motion of stars, moons and planets; this workshop takes students on a journey that is out of this world.

Heat and Temperature (Gr. 7)

Topic: C

What is the difference between heat and temperature? What effect does combustion have on the temperature of our atmosphere? To answer these questions, students will compare the heat transmission of different materials and describe the effects of heat on the motion of particles, as well as complete an experiment about the greenhouse effect.

Light and Optical Systems (Gr. 8)

Topic: C

These activities aim to get students thinking about light. They will build their own optical devices to help answer the questions: what is light and how does it move. Students will also discover how light is reflected and transmitted by building a laser maze!

Codemakers Technology Workshop Topics

Engaging Engineering (Gr. 1 - 3)

Cubelets are magnetic, snap-together modular robotic pieces that allow you to create a wide variety of robots – using nothing but magnetic cubes! We'll explore how to make robots exhibit different behaviors, test and create new behaviors virtually in Scratch.

Drawing with JavaScript (Gr. 4 – 6)

JavaScript is a computer language that is easy to learn, hard to master. We'll start by making simple shapes, and then expand our toolset to include interactivity on our canvas!

Hackbot (Gr. 7 – 8)

This workshop looks at what Ozobot's and Edison's can do beyond making a track to follow, or scanning a barcode. We will combine track making and color coding with block programming to expand what these bot's can do!

General Information

What is a Traveling Lab Coats Workshop?

Two energetic university students enter the classroom equipped with enthusiasm and supplies for a jam-packed, two-hour science or technology workshop! As a grass roots program from Southern Alberta, our workshops follow the Alberta curriculum.

When are they?

May 1 – June 8, 2018

Choose from two time periods (times are flexible to reflect bell schedules):

Morning (9–11 AM) or

Afternoon (1–3 PM)

Dates are subject to change and are dependent on availability.

How much do they cost?

\$100 | One 120 minute workshop for 1 classroom

Note: If classroom is located beyond a 30km radius of the University of Lethbridge, there is an additional cost of \$50 and you must book a minimum of 2 workshops.

To register, visit: ulethbridge.ca/destination-exploration/tlc

Thank you to our generous sponsors!



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