**Thank you for your interest in booking workshops with Geering Up UBC Engineering & Science for Kids! Our Workshop topics are listed below. For more details on the Workshop topics, please visit http://www.geeringup.apsc.ubc.ca/workshops/.**

**Workshops Overview**

Workshops will run from May 6th to June 11th, Monday to Friday. Areas visited by our workshop teams include Vancouver, Burnaby, Coquitlam, North Vancouver, West Vancouver, Richmond, Delta, Tsawwassen and Surrey, however other accommodations can be arranged.

There are 8 teams of instructors available each day, and each workshop team consists of 2 Geering Up Instructors. We also have dedicated instructors for French workshops. Each workshop lasts between 1h to 1h30. There are 3 workshops available for registration per day per team of instructors. A standard 3 workshop day for a team of instructors would begin with workshop 1 from 9:00 AM to 10:15 AM, workshop 2 from 10:30 AM to 12:00 PM, and workshop 3 from 1:00 PM on. This schedule can be accommodated to fit your school's’ bell schedule.

We bring our own teaching/demo materials, and the enthusiasm and expertise to teach a hands-on STEM workshop! Travel fees apply to schools outside of Vancouver, and help us travel further and reach more schools - please refer to our website or inquire directly at workshops@geeringup.ca for more information.

All workshops are offered in FRENCH! Please note in the school information section if you would like French workshops.

We only require that during the duration of the workshop, teachers remain in the classroom. A typical workshop classroom will vary from 20 to 30 students.

**Pricing for Science Workshops**

Single Workshop: $160

3 Workshop Bundle: $140 each (Total of $420 for all 3)

6 Workshop Bundle: $120 each (Total of $720 for all 6)

**Pricing for Computer Science Workshops**

Single Workshop: $180

3 Workshop Bundle: $150 each (Total of $450 for all 3)

6 Workshop Bundle: $130 each (Total of $780 for all 6)

We offer financial support to schools that qualify as inner city or partially inner city schools.

More information can be given upon request.

**Travel Fees:** apply to all schools outside of Vancouver. This helps offset the cost of vehicle rental and extra staff hours.

*+$15 travel fee per day for schools in Richmond, Burnaby, New Westminster, North Vancouver, West Vancouver*

*+$30 travel fee per day for schools in Delta, Surrey, Coquitlam, Langley, Port Moody*

**Registration is on a first come first serve basis, so contact us as soon as possible to ensure preferred scheduling for your school.**

The list of available Workshop topics can be found below. Workshops have been modified and new ones have been added to be more appropriate to each grade and to be aligned with BC curriculum learning outcomes.

**General Workshops**

|  |  |  |
| --- | --- | --- |
| **Grade Level** | **Workshop Name** | **Workshop Description** |
| Kindergarten | Ecosystems Everywhere | How do living things change to survive in the cold winter versus the warm summer? What do living things need to survive? Join Geering Up and we will explore how living and non-living things interact in their ecosystems and discover what it would take to engineer our own ecosystem. |
| 1 | Molecules Matter | It’s time to find out what makes up you, the ground you’re standing on, and everything else around us on earth. Dive into the world of matter as we learn about its properties with fun projects and demonstrations! This workshop includes experiments that will help us understand the cycles that happen not only in the sky above us but also on land. There is even a project to bring the excitement home with students. |
| 2 | Crazy Chemistry | The world around us is filled with change, even the land we are on right now has changed over time, some of this change is reversible and other changes are permanent. It's time to put on our lab coats and become scientist to discover what causes these changes to occur and why some cannot be undone. |
| 3 | Thermal Theatrics  | How does thermal energy travel from place to place? Why do some materials heat up faster than others? How do molecules act as they get warmer? In this workshop we explore the three methods of thermal energy transfer and learn how to harness the power of heat! |
| 4 | Elemental Energy | Join Geering Up for a fun and energetic workshop that will explore all the different phases of matter and the different forms of energy. We will learn about the different properties of matter around us and discover how they can be changed by adding or removing energy. |
| 5 | Oh My Organs | Let’s learn how some of the organ systems in your body work together to keep you alive! It’s time to get hands on with digestion and respiration! Join Geering Up as we explore the different parts of the digestive system, and learn about the organ system that keeps you breathing. |
| 6 | Phenomenal Forces | Through hands on and interactive activities, demonstrations and a quick lesson, students will discover how Newton’s three laws work together to influence the motion of objects. Students will also learn about gravity and other forces that can be combined to create motion and those that keep objects in place. |
| 7 | Charge Up | Get ready to dive into a microscopic world filled with atoms of all different types and learn how electricity fuels our lives. Watt do you know about electricity? It’s time to learn about how electric circuits work, and build some of your own. We will spark your interest as we generate positive ideas about circuits and clean energy. |

**Computer Science Workshops**

For computer science workshops, we will be providing laptops for the students to use for the workshop. Please indicate below if wireless internet and wall sockets are available on location.

|  |  |  |
| --- | --- | --- |
| **Grade Level** | **Workshop Topics** | **Workshop Description** |
| K-3 | A-Maze-Ing Bots | Small, smart and capable! These are all characteristics that make Ozobots a fantastic learning experience for students interested in robotics! In this workshop, students will be introduced to how robots process incoming information into actions. |
| 1-4 | Circuit Circus | Electricity is all around us but how do we control it? In this workshop, students will be introduced to electronics and programming with Circuit Playground boards. |
| 4-7 | Innovation Generation | Students will be put to the test through bringing their creative ideas to solve challenges faced by their local communities. The workshop will culminate in a design and build challenge where youth will bring their ideas to life with the help of 3D printers! |
| 5-7 | Meaningful Measurements | Understanding the natural world can sometimes mean creating tools to measure the things we are interested in. Students will build a physical interface to mimic a real-life meteorology problem, and will write simple programs which will interact with the interface to collect data. They will make predictions to understand the physical system they are simulating. |

**Please tick the boxes relevant below if you are booking a computer science workshop:**

* I will have wireless internet available on location
* I will have wall sockets available to charge laptops

**Please fill out all relevant information below, and return this document along with any extra information to** **workshops@geeringup.ca****! Missing information will lengthen the registration process.**

* I want to book workshops in French

**School Information**

|  |  |
| --- | --- |
| **School Name** |  |
| **School Address** |  |
| **Primary Contact** |  |
| **Primary Contact E-mail** |  |
| **Primary Contact Phone** |  |
| **Special Considerations**  |  |
| **How did you hear about us?** |  |

**General Elementary Workshops**

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| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Workshop Name** | **Available in French?** | **Available outside of Metro Vancouver?** | **Number of Workshops Wanted** | **Special Instructions** |
| Kindergarten  | Ecosystems Everywhere | Yes | Yes |  |  |
| Grade 1  | Molecules Matter | Yes | Yes |  |  |
| Grade 2  | Crazy Chemistry | Yes | Yes |  |  |
| Grade 3  | Thermal Theatrics | Yes | Yes |  |  |
| Grade 4  | Elemental Energy | Yes | Yes |  |  |
| Grade 5  | Oh my Organs | Yes | Yes |  |  |
| Grade 6 | Phenomenal Forces | Yes | Yes |  |  |
| Grade 7 | Charge Up | Yes | Yes |  |  |

**Elementary Computer Science Workshops**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade Level** | **Workshop Name** | **Available in French?** | **Available outside of Metro Vancouver?** | **Number of Workshops Wanted** | **Special Instructions** |
| K-3 | A-Maze-Ing Bots | Yes | Yes |  |  |
| 1-4 | Circuit Circus | Yes | Yes |  |  |
| 4-7 | Innovation Generation | Yes | Yes |  |  |
| 5-7 | Meaningful Measurements | Yes | Yes |  |  |

**Final step!** Please let us know your preferred day/time for each workshop you are registering for.

**Workshop Registration Details**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Preferred Workshop Date** | **Preferred Time****(eg 10-11:30 am)**  | **Teacher Name** | **Class Grade** | **Workshop Name** | **In French?** | **Class Size** | **Special Considerations** |
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