



## Collège Garden City Collegiate Report to the Community

Science - November 2019

University of Manitoba WISE Kid-netic Energy Program Presentation

On November 8<sup>th</sup>, a presenter from the WISE Kid-netic Energy Program visited Ms Gajda's grade 9 classroom to lead the group in two chemistry activities. The students first learned about polymer chemistry and made bouncy balls.





**Collège Garden City Collegiate  
Report to the Community**





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In the second part of the presentation, the students performed some acid-base chemistry in a bag. The resulting reaction caused a sealed Ziploc bag to expand rapidly as it filled with carbon dioxide gas, and, in some cases, burst to the glee of the students.





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### Sciences: Grade 12 Biology - October 2019

Ms. Kwiatkowski's Bio40S class went to Assiniboine Park Zoo to study endangered species and conservation strategies.



### Sciences: Grade 9 Science - November 2019

#### University of Manitoba WISE Kid-netic Energy Program Presentation

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### Sciences: Grade 9 Science – November 2019

During “All-Day Period” Day, Ms. Ringer’s grade 9 science students learned about chemistry and the signs a chemical change has taken place. They worked with students from the WISE (Women in Science and Engineering) program at the University of Manitoba. They even got to make and take home their own chemically manufactured bouncy ball!





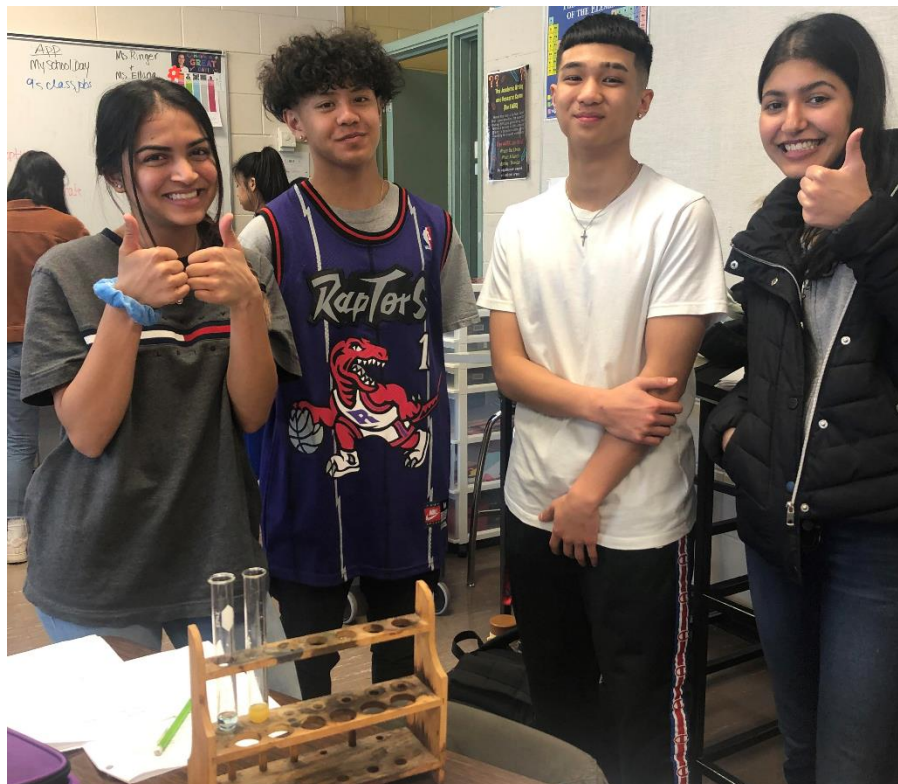
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Students in Ms. Ringer's grade 9 science class learned about electricity and electrical circuits. They worked with students from the U of M's WISE program.



### Sciences: Grade 11 Biology – November 2019

Students in Ms. Ringer's Bio30S class are learning about biochemical testing and the importance of having a control when working in the lab. They tested everyday food items to see what organic compounds are made of.

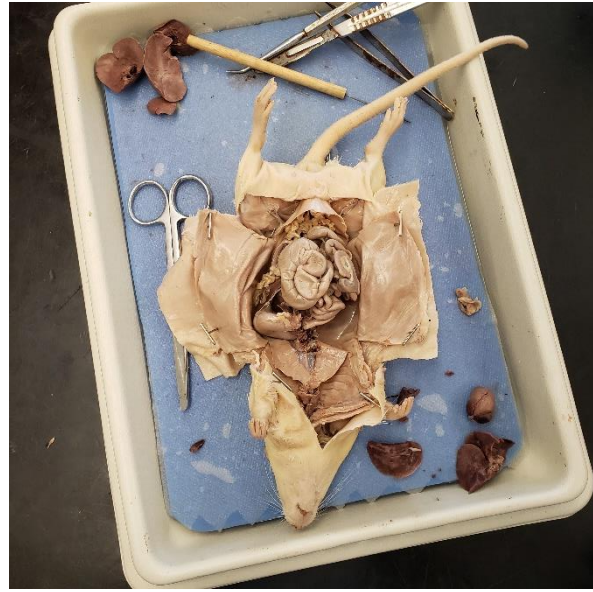
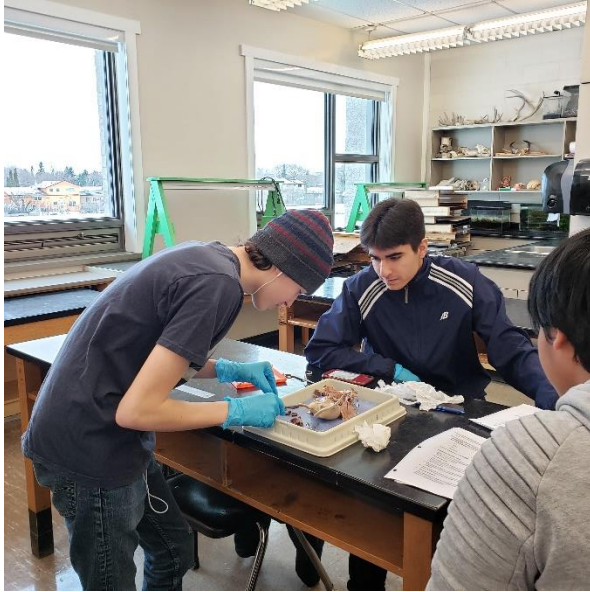




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**Sciences: Grade 11 Biology – November 2019**

Students in Ms. Kwiatkowski's Bio30S class are learning about anatomy and physiology of the rat. Major systems are studied during this dissection.



Using simulated chyme (liquified food found in stomach), students conducted a series of experiments to test for nutrient content (carbohydrates, polypeptides and lipids).





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### Sciences: Grade 12 Biology - November 2019

Students in Mr. Woo's Bio40S class are dissecting an American Mink (*Neovison vison*) during "All-Day Period" Day. They are learning about characteristics that relate to all mammals, as well as, comparative anatomy and physiology. Previously, students had dissected mushroom, squid, and grasshopper as part of the biodiversity unit.



### Sciences: Grade 12 Chemistry – November 2019

Students in Mr. Woo, Ms. Thompson and Ms. Biluk's Chem40S classes learned about the chemistry of photography by building pinhole cameras. They then applied redox reactions to develop their negatives. (To see the positive image, invert the colour on the screen or on your smart phone.)

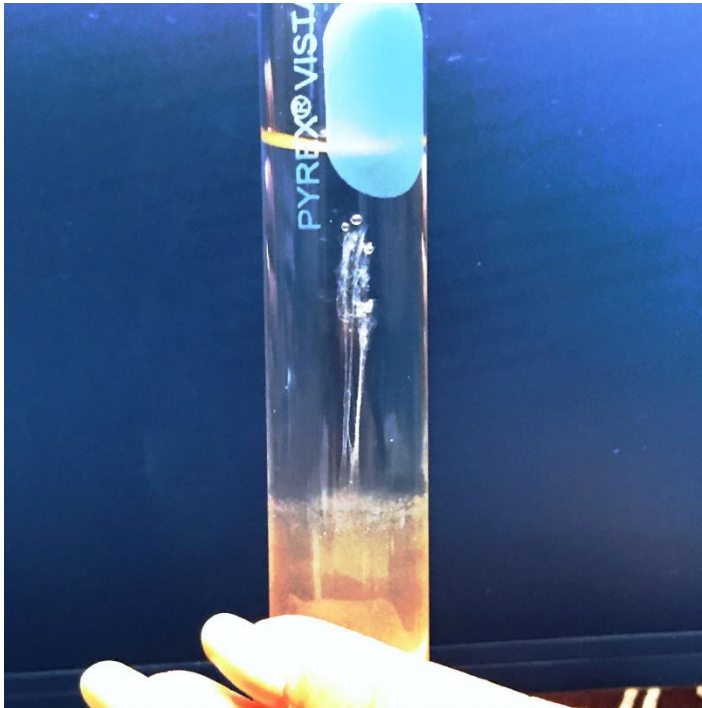






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### Sciences: Grade 12 Biology - December 2019



Students in Mr. Woo's Bio40S class learned how to extract DNA from both cheek cells and strawberry cells using simple household chemicals (salt, detergent, & water to make an extraction buffer; contact lens solution and meat tenderizer to break down proteins and; isopropyl alcohol to precipitate the DNA).

### Sciences: Grade 12 Chemistry - January 2020

Students in both Mr. Woo and Ms. Thompson's Chem40S classes attempt to solve a mock murder mystery involving titration experiments and solubility tests as part of their Chem40S practical lab exam.

