

# The Alberta Science Teacher



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*Cover photo:*

*Kneehill County rainbow, courtesy of Trinity Ayres*

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# Editor's Message

Welcome to 2018! I hope it will be another great year for sharing, wonder and discoveries.

On the cover of this issue of *The Alberta Science Teacher* is a picture I took near Drumheller on one of my many Alberta road trips. I am always in awe of the power and beauty of nature, and I stop to capture the moment whenever possible.

It is important to remind our students to always take the time to observe and wonder. Do your science lessons inspire your students to wonder? How do you provide opportunities for authentic learning?

Consider sharing some of your awe-inspiring moments with other science teachers in the next issue of *The Alberta Science Teacher*. Did you attend

the recent Science Council annual conference and want to let us know about your favourite sessions? Do you have great stories or resources to share? Have you attended a fantastic PD activity? Or have you been doing something creative, innovative or inspiring with your students? If you answered yes, then share your experience with others by submitting an article to [trinity.ayres@cssd.ab.ca](mailto:trinity.ayres@cssd.ab.ca). I look forward to your contributions.

In this issue, we have a variety of pieces, including lesson plans, reflections from a practicum teacher and support materials from experts. Hope you enjoy the read!

Trinity Ayres

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# President's Message

The Science Council recently completed another great conference, "Making Space for Science," which was held November 17 and 18, 2017, in Banff. Planning for next year's conference is well under way, because we will be hosting another joint conference with our Mathematics Council colleagues. Geeks Unite 2.0 will be held in Edmonton on October 19 and 20, 2018. Stay tuned for the launch of the conference website.

In addition to the annual conference, the Science Council is pleased to provide other professional

development opportunities. Have you checked out our website (<https://sc.teachers.ab.ca>) for opportunities related to your specific discipline? If those do not suit you, have you thought about starting a regional book club on a particular science topic? Please contact me about what is possible and how the council might support you.

Are you interested in broadening your teaching and PD expertise? We are always looking for passionate and committed people to join the

Science Council executive. The executive is a group of teachers working on behalf of teachers.

Further, these next few years will be particularly exciting, as we are undergoing a provincial curriculum review. I would love to have a list of people who can attend regional curriculum meetings for K–3, 4–6, 7–9 and 10–12. Perhaps this is the way you can contribute without being away from your classroom for 12–18 days per year.

Finally, a great way to add to your professional expertise is to write articles for *The Alberta Science Teacher*. If you have never submitted an article before, perhaps this is your year to do so. What are you the most passionate about? Have you

tried something in your science classroom that has worked successfully, and you would like to encourage others to try it too? Or have you taken a risk and failed? That, too, would be valuable knowledge and experience to share with your colleagues.

I look forward to hearing from you about any of these matters. You can reach me at [carryl.bennettbrown@ata23.org](mailto:carryl.bennettbrown@ata23.org).

Thank you for all that you do for the students of Alberta and for your contributions to education and to science.

**Carryl Bennett-Brown**

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## Curriculum Development Update

Alberta's current K–12 science curricula range in age from 10 to 21 years old. To ensure student success, we need to ensure that the science curriculum is current, meaningful and relevant for all students.

In October 2016, working groups consisting of teachers and professors began developing subject introductions and scope and sequence drafts in science and five other subject areas (language arts, mathematics, social studies, arts and wellness education).

The curriculum working groups constitute a balanced representation of Alberta's geographic and demographic diversity, including representation from francophone and First Nations, Métis and Inuit teachers.

In September 2017, working groups developed learning outcomes for K–4 science.

A cycle of developing learning outcomes and then reviewing and validating the draft curriculum

elements will continue through December 2022, when development of the six subject areas (K–12) is targeted for completion.

The following are the targeted timelines for ministerial approval of curriculum development:

- December 2018—K–4
- December 2019—Grades 5–8
- December 2020—Grades 9–10 (three subject areas)
- December 2021—Grades 9–10 (three subject areas) + Grades 11–12 (three subject areas)
- December 2022—Grades 11–12 (three subject areas)

Timelines for implementation of the curriculum, once development is complete, have yet to be determined.

**Wes Irwin**  
**Alberta Education**

# Resources for Careers in Chemistry

Do you have students who are interested in a future in chemistry? Charles Lucy, a chemistry professor at the University of Alberta, has created the Resources for Careers in Chemistry webpage ([www.ualberta.ca/chemistry/undergraduate-program/resources-for-careers-in-chemistry/](http://www.ualberta.ca/chemistry/undergraduate-program/resources-for-careers-in-chemistry/)). The page, which links to resources related to careers in chemistry and interesting industrial chemistry applications, may be useful to both teachers and students.

The following are some of the resources that have been included:

- Chemistry Careers, College to Careers, American Chemical Society
  - Chemists in the Real World, College to Careers, American Chemical Society
  - York University (Toronto) Careers in Chemistry Panel Discussion, March 2012
  - Royal Society of Chemistry Career Vignettes Series
- Resources in the following categories are also included:
- Forensics Chemistry
  - Industrial Chemicals
  - Metal Production
  - Petrochemical Industry
  - Petroleum Industry
  - Pharmaceutical Industry

**Wes Irwin**  
Alberta Education

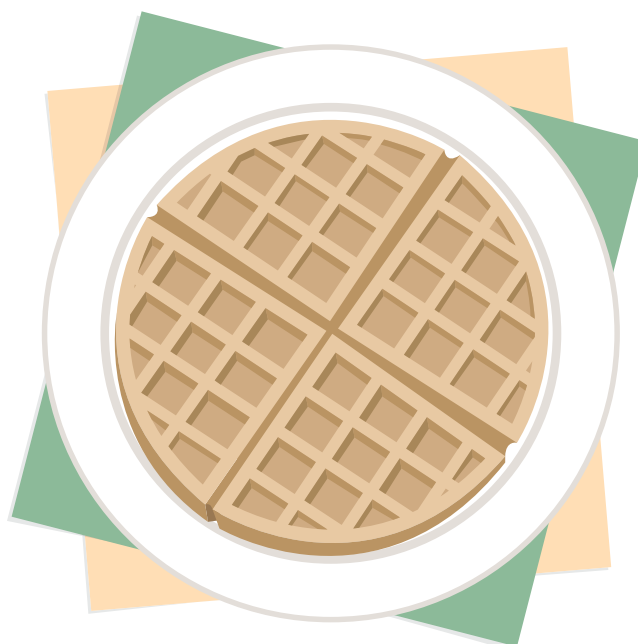
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## Waffles and the Cell

Here is a lesson plan I learned at a science PD session. I have used it in my Science 10 class several times. It is a great hands-on activity for teaching about the processes in a cell by having students make waffles.

You may wish to do this activity in a home economics lab instead of your science lab (to avoid food contamination). I make labels for all the organelles in a cell and put them on the objects that represent them. For example, the garbage can is labelled **LYSOSOME**.

I continually stop the class by asking students to freeze, and then I ask a specific student, "What is your role right now? What cell organelle are you mimicking?" I also get students to change roles for each waffle that is made.





## Lesson Objectives

- Students will understand that each organelle plays a role in the cell.
- Students will understand that no organelle operates in isolation.
- Students will understand that cells are involved in building proteins.

## Cell Processes Activity

- Organelles are represented by stations.
- Organelles must work together to produce waffles.

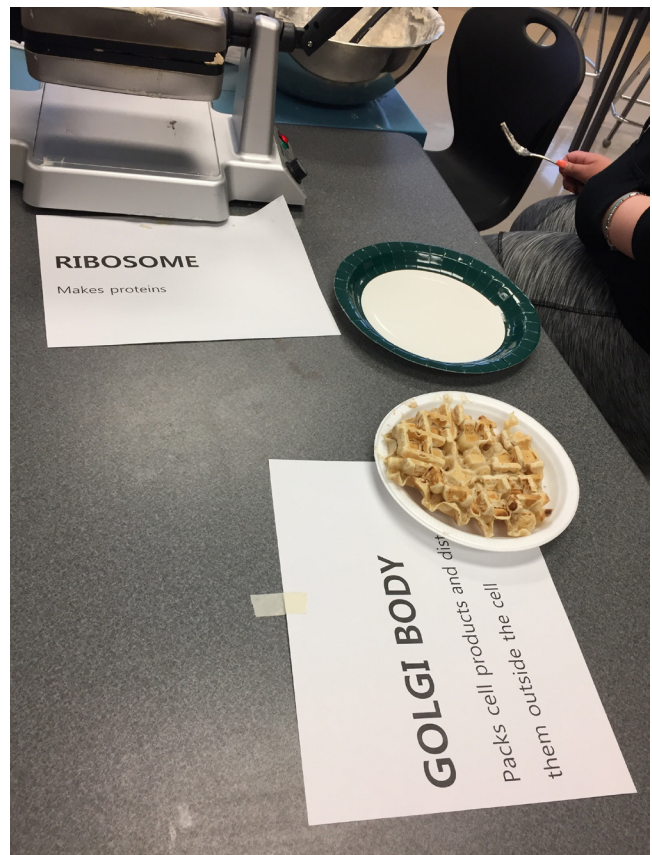
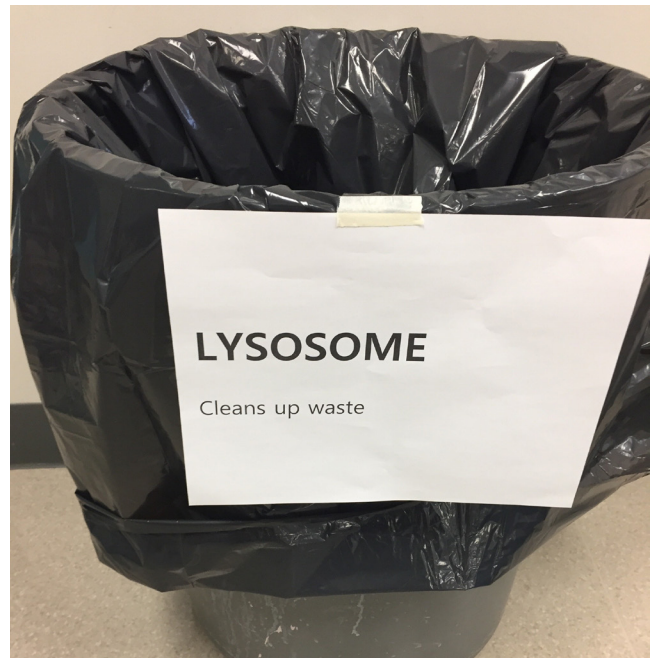
## Organelles Working Together

How do organelles work together to make waffles?

- Nucleus (cookbook)—contains instructions (like recipes) for all the things the cell makes.
- Vacuole (containers with ingredients inside)—serves as the food and water storage area.
- Endoplasmic reticulum (mixing bowl for ingredients)—serves as the passageway that helps form proteins.
- Ribosome (like a waffle maker)—serves as the protein factory. (Yes, waffles are more of a carb than a protein, but the analogy works for the purposes of this activity.)
- Golgi body (packing plant)—serves as the bagging and distribution area. (I get students to put waffles, with icing sugar, in brown paper bags to deliver to admin and other staff.)
- Lysosome (garbage can)—breaks down food and old cell parts.
- Mitochondrion (outlet plug-ins)—converts fuel into usable energy.
- Cell membrane/wall (classroom walls).

Have fun and happy learning!

**Danika Richard**  
Biology Director, Science Council



# High School Science Resources

**N**eed some resources for Science 10, chemistry or biology that include local, recent, world-class science?

Over the past two summers, teachers have been working in research labs across Canada to develop curriculum-linked, easy-to-use, fully developed lessons and resources for use in secondary classrooms. Last year, two teachers worked at the University of Alberta in the lab of an award-winning carbohydrate scientist, Ratmir Derda, to develop resources especially for Alberta schools. The teachers, Quinn McCashin and Jane Diner, are both experienced Alberta science teachers with a passion for learning.

The resources include all the necessary background material, ideas for lessons, embedded videos and step-by-step instructions for activities and can be downloaded at no cost. They are available on the University of Alberta's Centre for Mathematics, Science and Technology Education (CMASTE) website (<https://cmaste.ualberta.ca>) under the Teacher Resources tab or at <http://canadianglycomics.ca/high-school-resources-2/> (direct link).

The following are examples of the resources:

- A webquest that explores the science of vaccinations and how to evaluate evidence. Have your students create infographics, which are becoming increasingly popular for illustrating concepts and allowing students to engage with their creative side. (Biology 20)
- An activity on making a bacterial plasmid. Create the plasmid on paper, cut it to reveal “sticky ends” of the DNA and insert a new gene. The resource tells you how this is being used at the U of A in carbohydrate research so that you can provide students with context as you teach genetic engineering. (Biology 30)
- A webquest activity on cell membranes and cell processes (such as osmosis and diffusion).

Are you tired of teaching this topic every year to Grade 10s? How about an engaging walk through animations, with interactive tasks and goals? (Science 10)

- An inquiry-based wet lab on solvent flow to investigate intermolecular bonding and solutions. (Chemistry 20)
- A case study that uses the thalidomide tragedy as background to investigate isomerism. (Chemistry 30)
- An activity to make models of DNA and viruses to simulate the processes used by the U of A labs to find biologically active molecules. (Interdisciplinary chemistry and biology)
- A lesson using an adapted article. Students often find it difficult in postsecondary studies to adapt to the complexity of scientific journal articles. This lesson using an adapted article designed for high school students will familiarize them with what scientific literature is all about. (Any academic high school course)

These are just the resources developed at the University of Alberta. Many other resources of this type are available that have been developed in British Columbia, Ontario and Quebec. More resources are being developed in labs across Canada and will be posted in September.

Bring this topical, local and current scientific research into your classroom this year. All resources are available for free and are downloadable as editable Word documents in both French and English. If you would like to provide feedback, contact CMASTE at [cmaste@ualberta.ca](mailto:cmaste@ualberta.ca).

This project is sponsored by GlycoNet (a consortium of carbohydrate research labs across Canada) and CMASTE.

**Kerry Rose**  
**Postsecondary Representative,**  
**Science Council**

# Reflections of an Evolving Student Teacher

Analyzing a lesson after it has been enacted is an important task for teachers to undertake in order to support the improvement of teaching and learning for future planning. This is especially so for beginning teachers as they start to understand the implications of what and how they teach. Analysis of teaching can also be daunting, as it is a detailed and intense practice. It also takes a particular kind of mindset to consider one's own practice and critique it for improvement. However, I truly believe that reflection is a critical aspect of future success and the development of teaching practice. Therefore, it is with an acute yet thoughtful mind frame that I delve into analyzing one of my own recent lessons.

Every lesson I plan begins with the Alberta program of studies. The learning objectives I choose directly fulfill student learning outcomes related to particular objectives in the curriculum. Additionally, I always consider specific student needs, such as English-language learners (ELLs) or learning disabilities, to optimize the structure of my lessons. It only makes sense to make students aware of these learning objectives at the beginning of every lesson. I share the student objectives at the start of class as an introduction to “set the scene,” and I recap them at the end to ensure student understanding and to provide informal feedback on students' learning. Every class begins with an outline of the agenda for the day. This informs students of how that class will be organized so that they can be mentally prepared and know what to expect.

I planned a Science 10 lesson on work and energy that would appeal to a variety of students through various modalities, including practical demonstration, interactive whiteboard work,

verbal questioning, personal writing and discussion. (See below for the detailed lesson plan.) I structured my lesson to ensure that it maintained its flow. I wanted to avoid a choppy, disrupted class period that would leave students feeling confused not only about the material but also about what their specified tasks were.

My initial demonstration of the Human Table Trick (an activity that involves students physically supporting themselves and others by creating a table-like surface with their bodies) allowed students to be physically active and got them out of their desks. Diverting from their usual seated position gave the students a boost of energy during the last period of the school day, and it also helped engage them in the topic of my lesson: force and work. Demonstrations are an excellent way to gather and hold student attention and to make the material more relatable. While the demonstration was under way, students stood to watch, were keen to volunteer and applauded the efforts of their classmates. Letting students participate in a demonstration increases retention of information and brings the content to life.

My demonstration was followed by a brief Google presentation that involved student note taking and question posing. When students can write their own notes, this not only also allows for further retention of information and serves future study purposes but also gives ELL students a chance to practise their English writing skills. Throughout every lesson I do, I pose a variety of questions at specified intervals to break up the note taking and allow students to practise their critical-thinking skills. These questions are designed to get students to gather factual information, to prompt them to seek



understanding and to encourage exploration of a topic, and they include higher-order questions to promote inference and comparison. I try to relate my questions to previous understandings established in past lessons to ensure that students see the interconnectedness between varying concepts throughout the physics unit of Science 10. The questions also give students another opportunity to interpret information, and I find this particularly helpful for the ELL students. Since some of them struggle with reading and writing skills, the verbal component of the lessons helps them with comprehension of the material and also provides me with an understanding of their learning that their written work may not indicate. The Google presentation for this lesson was shared via a class folder in Google Drive so that students could review the lecture when studying.

All of my lessons are followed by a work period in which students are assigned questions that allow them to practise using and manipulating the formulas introduced during the lesson. The questions are chosen to provide a mix of computational and theoretical problems. Students are not only working on their math skills to complete these questions but also developing their inquiry skills and their communication skills (since students can work together on the questions). I circulate around the classroom to help students with questions and to touch base with students who struggle and even with those who excel. This one-on-one time allows them to ask questions they may have been too shy to pose in front of their classmates. The lesson ends with a brief review of the concepts covered, which I verbally question the students about. I always end the class by asking for any further questions and explaining and reviewing any assigned homework.

My assessment of student learning for this lesson was formative and was completed through observing students' participation in the demonstration and in the discussion during the lesson and through my assessment of how

capable students were of staying on task and completing the practice questions on the whiteboard. If I sensed that any students were struggling throughout the presentation portion of my lesson, I made a conscious effort to talk to them one-on-one during the work portion.

Upon reflection, I believe that this lesson worked well to keep the students engaged and on task. They enjoyed participating in the demonstration in front of their classmates and wanted to attempt the Human Table Trick again and again. The activity related well to the curricular objectives and ignited student interest. However, next time I will find a more spacious area for the demonstration; the front of the classroom provided minimal room for movement, and more space would have allowed for more students to participate and would have made the demonstration more easily viewable by all. I would also recommend informing students, before they volunteer to participate in the demonstration, that the activity will put them in very close proximity to their fellow classmates.

I taught this lesson in the cultural setting of Macao, China. Looking back, I believe that, in explaining concepts, I sometimes chose exemplars that were familiar to me rather than taking into account that the students were not from Canada. This lesson reminded me that teachers must consistently create relevance and applicability to students' lives rather than to their own. Therefore, consideration of the student audience is critical, not only in international teaching but when teaching any group of students. Being aware of the cultural setting and the age and interests of the students will only assist one in becoming a more competent educator.

I learned from this lesson that, wherever possible, teaching should extend beyond our traditional "students sitting in desks" mode of knowledge transmission. Students are happier and more capable of learning when they are actively involved in what they're learning about. When we

use the world around us to demonstrate science concepts, students have an easier time grasping the concepts and can apply this knowledge in a variety of settings. My goal for this lesson was to achieve this. From the formative assessment during the lesson and the summative assessment later in the unit, it seemed that the students understood the concepts and that they were able to demonstrate that understanding. Overall, my Science 10 lesson on work and energy had its peaks—but, as always, I have noted areas for improvement and development for the next batch of students I teach.

I've only recently embarked upon my teaching career, but it is a profession I am both excited and privileged to be a part of. I truly believe that my constant reflection and evolution as an educator and a person will be necessary in order to transform my teaching practice into one that is not only current and competent but also in the best interests of the students whom I have the honour of teaching. It's what I've realized I like best about this profession—the chance to continually sprout and grow.

## Science 10 Lesson Plan on Work and Energy

Class: Science 10

Grade: 10

Topic: Work and Energy

Unit B: Energy Flow in Technological Systems

### Intents/Objectives/Purpose

*Outcomes from the Program of Studies (Pedagogic Purpose)*

- 2.1, 2.2, 2.3, 2.8, 2.12

### *Specific Intentions*

- Students will define *force* and how it relates to *work*.
- Students will compare *work* and *energy*.
- Students will mathematically calculate work, force and energy.

### *Safety*

- During the Human Table Trick demonstration, ensure that there is enough space for the students and chairs.
- Remind students to be respectful of those participating in the demonstration and warn them that they will have to use their core strength to maintain their positions.

### Activities (85 Minutes)

#### *Administration/Homework (5 minutes)*

- Attendance

#### *Resources*

- Computer
- Class roster on Gibbon

#### *Introduction/Advanced Organizers (5 minutes)*

- Review of concepts from yesterday:
  - Force—What is a force? (Answer: The push or pull on an object.)  
What is the proper unit for force? (Answer: The newton.)
  - Free-body diagrams—draw one on the board to refresh content.
- Review the agenda for the day so that students understand the flow of the class.
- Review the class objectives (provided in the Google presentation).
- Inquire about any student questions or concerns and address them.

#### *Resources*

- Computer
- Google presentation—“Force/Work”

#### *Clarifying/Creating Understanding/Concept Development (40 minutes)*

- Begin the Google presentation “Force/Work.”
- Give students time to answer the journal question of the day (found in the Google presentation). Students should answer this question in their journals only.
- Do the Human Table Trick demonstration with student volunteers (see box). Ask students to

explain how this trick works, using the word *force*. Allow students time to propose answers.

- Continue on to the topic of work in the Google presentation.
- Have students come up to the whiteboard to complete practice questions on the associated slides. Emphasize the use of proper units and formula manipulation.
- Give students time to copy down notes, and continually ask them if they have any questions.

### Human Table Trick Demonstration

Adapted from [www.stevespanglerscience.com/lab/experiments/human-table-trick/](http://www.stevespanglerscience.com/lab/experiments/human-table-trick/).

Find four student volunteers. Set up four chairs in a square. The chairs must be close enough that a person can sit in a chair, lie backward and have the shoulders resting on another chair.

1. Have four students sit in the chairs. The students must have their feet on the ground.
2. Instruct the students to lie backward, resting their shoulders on the legs of the person behind them. Warn them that they will have to use their core strength to maintain their position.
3. One by one, remove the chairs from under the students.
4. The students should remain in the reclined position, despite lacking the support of the chairs.
5. Before the students collapse, replace the chairs and let them sit up.

### Resources

- Computer
- Google presentation—"Force/Work"
- Student notebooks
- Student journals
- Four chairs

### Guided Practice/Seatwork (25 minutes)

- Assign questions 5, 6, 7, 8, 9 (first part), 11 and 13 from page 161 of the *Science Focus 10* textbook.
- Circulate among students to address their questions and concerns about the lecture and the textbook questions.
- If students finish the assigned questions, they may continue working on their journal questions.

### Resources

- *Science Focus 10* textbook
- Student journals

### Solitary Practice/Homework

- Students complete the assigned textbook questions.

### Conclusion

- Briefly summarize the concepts below verbally:
  - A *force* is defined as a push or a pull on an object.
  - Whenever a force ( $F$ ) moves an object through a distance ( $d$ ) that is in the direction of the force, then work ( $W$ ) is done on the object.
  - The formula for work is  $W = Fd$ .
  - There are three conditions for work: (1) movement, (2) force and (3) the force and distance the object travels must be in the same direction.

### Review/Assessment

- Formative assessment of students through observation of the demonstration and discussion/participation during the lesson.
- Upcoming summative assessment of Section 1.0 test.

Chelsey St Louis

# Testing the Predictive Power of Models in Physics 20 with a Vertical Cannon Cart

One challenge I face in my high school physics classroom is trying to get students to connect one day's learning to another. It seems like there's a lot of short-term memory loss present in introductory physics.

To get students connecting their thinking from one day to the next, I have tried out a cool demo, which I stole from Rhett Allain (2017), an associate professor of physics at Southeastern Louisiana University. It uses a vertical cannon cart, which can be pushed to move with horizontal uniform motion while also firing a small ball in the air vertically.

I've done this demo for my students many times on a horizontal surface. I ask them to predict what will happen. Will the ball land in front of, behind or right back in the cart? I try to take the thinking a step further, asking students not only what they predict but also for what reasons. Many students are willing to take a guess at where the ball will fall; fewer are comfortable offering their rationale. Even fewer can back up their claims using physics—even after being introduced to uniform and accelerated motion in two dimensions. So, I review the following:

- Both the ball and the cart move with identical horizontal uniform motion.
- The vertical accelerated motion of the ball up and down has no effect on its horizontal motion.

Then, most students understand that the ball should land back in the cart.

The idea I've lifted from Allain takes this same experiment and adds a twist from later in Physics 20: the incline plane. What would happen if you took the same vertical cannon cart and fired it

while moving down an incline? Would the ball still land in the cart?

This is a good question to ask students after performing the first demo. It's not essential that you pose the question after teaching inclined planes (although it may help), but you should have talked about vector components by the time you do this demo.

Here's an explanation I might like to hear from a student after I present this demo:

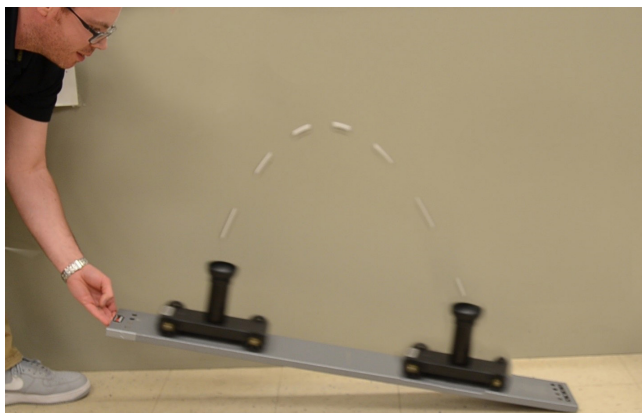
In the first demo, the ball landed back in the cart because it had uniform motion in the horizontal direction, just like the cart. Because they had equal horizontal uniform motions, they should move an equal distance horizontally, despite the vertical motion of the ball, and meet back up after the ball lands.

Today, the cart accelerates in a direction parallel to the ramp (which is different from before), but the ball also accelerates parallel to the ramp. The ball and cart should move through the same parallel to the ramp displacement. The ball accelerates perpendicularly to the ramp (which, from the perspective of the incline, is not that different from the ball moving straight up and down), but this does not affect the motion parallel to the ramp. As the ball and cart have moved through equal displacements down the ramp, the ball should fall back into the cart.

And, as it turns out, it does.

A more complete analysis can be made by breaking the acceleration due to gravity into components and substituting them into





kinematics formulas to prove that the displacements will be equal for the cart and the ball. But I'm just happy if students can remember an idea from yesterday and apply it to something different (but the same) tomorrow.

## Reference

Allain, R. 2017. "The Wacky Physics of Firing a Ball out of a Moving Cart." *Wired*, April 21. [www.wired.com/2017/04/wacky-physics-firing-ball-moving-cart/](http://www.wired.com/2017/04/wacky-physics-firing-ball-moving-cart/) (accessed February 20, 2018).

**Brad Langdale**  
Spruce Grove Composite High School

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# CELL at St Joseph Catholic High School

Many may be familiar with the Personalized Self-Directed Learning (PSDL) model used at Edmonton's St Joseph Catholic High School. The flexibility in student and teacher timetables has allowed for the development of a lab enrichment program. The Centre for Excellence in Laboratory Learning, or CELL, provides lab enrichment through student-driven inquiry projects. The program combines science curriculum with student interests and allows students to earn career and technology studies (CTS) credits in a range of disciplines. The program has also been adapted over the years to partner with the school's International Baccalaureate (IB) program. It also partners with the science courses to allow students an alternative way to complete their lab finals.

The CELL program began in 2014 under Mick Sahib and then under department head Kevin

Engel, and it has grown with the contributions of all members of the science department who have been involved, especially Sabahete Jacaj and Dorothy Zulinski, who are the lab instructors. The school's PSDL model means that students have access to a fully equipped science lab, to the lab instructors and to at least one science teacher at all times, which allows them to work on their projects when they can fit it into their timetables. Projects may be completed over a couple weeks, or they may evolve and be completed over an entire semester.

Students can come into CELL with an idea in mind for their projects, or they can use one of many jumping-off points in biology and biotechnology, chemistry, physics, animal behaviour, or forensics. Once students or groups of students have determined their projects, they

work with the teachers and instructors in the department to work through all the hurdles that come up in the inquiry process. The nature of CELL, coupled with the PSDL model, allows for projects to be adapted to meet the level of each student. Students who are interested in learning more about a topic covered in one of their courses may do a simple project over a couple weeks. Students who are very interested in science, and who are planning to pursue postsecondary science, may complete a more comprehensive and cross-discipline project that they work on through the semester. Students can choose a project that aligns with the curriculum of a science course they are enrolled in, or they can pursue a project that goes beyond their course or in another direction entirely.

Student projects vary greatly. A Physics 20 project might involve building a roller coaster for a ball bearing, and calculating kinetic and potential energy at various points of the roller coaster. A biology project might involve plating bacteria and using sunscreen to see how much UV radiation it blocks. Students have also completed projects involving DNA transformation in bacteria to insert the green fluorescent protein gene into

*E. coli*. A chemistry project might involve using Fourier transform infrared (FTIR) spectroscopy to identify different compounds based on their spectra, or looking at how the concentrations of different solutions can affect conductivity.

The CELL program has also partnered with the University of Alberta's Centre for Mathematics, Science and Technology Education (CMASTE) to bring a scanning electron microscope to St Joe's and allow students to complete CELL projects using scanning electron microscopy and X-ray spectroscopy.

At St Joe's, the CELL program also connects with the IB program. Students complete their internal assessment (IA) projects for their IB science courses through the CELL program, which is adapted to meet all the IA project requirements specified by the IB program.

The CELL program has been very well received by St Joseph Catholic High School students who have taken advantage of the extra lab experience to enrich their high school learning experience and to begin building the foundation of lab skills that will serve them in postsecondary education and other pursuits.

**James Slattery**

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please go to  
<https://sc.teachers.ab.ca>.

## Publishing Under the *Personal Information Protection Act*

The Alberta Teachers' Association (ATA) requires consent to publish personal information about an individual. *Personal information* is defined as anything that identifies an individual in the context of the collection: for example, a photograph and/or captions, an audio or video file, and artwork.

Some schools obtain blanket consent under FOIP, the *Freedom of Information and Protection of Privacy Act*. However, the *Personal Information Protection Act* (PIPA) and FOIP are **not** interchangeable. They fulfill different legislative goals. PIPA is the private sector act that governs the Association's collection, use and disclosure of personal information.

If you can use the image or information to identify a person in context (for example, a specific school or a specific event), then it is personal information and you need consent to collect, use or disclose (publish) it.

Minors cannot provide consent and must have a parent or guardian sign a consent form. Consent forms must be provided to the Document Production editorial staff at Barnett House together with the personal information to be published.

Refer all questions regarding the ATA's collection, use and disclosure of personal information to the ATA privacy officer.

Notify the ATA privacy officer immediately of **any** incident that involves the loss of or unauthorized use or disclosure of personal information, by calling Barnett House at 780-447-9400 or 1-800-232-7208.

Maggie Shane, the ATA's privacy officer, is your resource for privacy compliance support.

780-447-9429 (direct)

780-699-9311 (cell, available any time)

