



Young PSI scientists experimenting in class – see the article inside!

**Important dates for your diary:**

**26<sup>th</sup> January:** ASA Season 2 ends

Secondary Reports sent home

**27<sup>th</sup> January:** Staff training day – NO SCHOOL

**31<sup>st</sup> January:** Coffee with the Primary Principal – What is the PYP? – 8:30 a.m. in the Cafeteria

**3<sup>rd</sup> February:** Secondary Honours Assembly – 8:40 a.m. in the Gym

*'a place where we belong'*

## From the Director

This week I am writing to you from London where I am attending teacher recruitment fairs with both Patricia Puia and Tatz Lopukhin. Sadly, I missed the beautiful snowfall in Kyiv over the weekend but continue to enjoy the British weather instead, which is currently grey skies and rain. I hope that everyone is coping with the snow situation so that work and studies can continue unaffected as far as possible. It is important that the campus remains operational during extreme weather events and I am grateful for the work of the maintenance department this week. Many thanks to Leo Agamian, our Facilities Manager, and his team for the effective clearance, cleaning and repair work on campus!

Now, as with all other international schools we must accept that there will be teachers leaving at the end of the academic year to move back to their home country or to another international school. Thankfully, we have only a small number of teachers leaving the school this year. But as I explained to our staff last week, it is particularly sad to see any of our excellent teachers leave after the contribution that they have made to the lives of our students and the development of PSI in general.

Replacing quality teachers is also not easy and it gives the administration a considerable challenge. Highly skilled international teachers are a rare and sought after commodity in the global marketplace as the number of international school continues to grow, mainly in Asia and the Middle East. PSI must compete for teachers who are also being attracted by larger schools, paying very high salaries, offering excellent school facilities and in locations that can only be described as exotic and tropical.

This week the administration has been addressing this challenge by attending the recruitment fairs organized by Search Associates and (as I write) the Council of International Schools who both hold regular recruitment events attended by over 130 schools and 350 candidates. We can also recruit teachers through wider access to their teacher databases which hold hundreds more files to review, and conduct telephone and skype interviews throughout the recruitment period, which lasts from December to March. These registered candidates are generally well qualified, experienced international school teachers and have very good references from previous employers. We also receive a very large number of applications from teachers who apply for positions advertised on our website.

The process of teacher selection is long and rigorous involving multiple interviews by the administration and often by teaching colleagues also. We carefully review written references and always seek verbal confirmation by a current school administrator and ensure that qualifications are genuine and that police checks are conducted as part of the work visa process. In doing so we try to ensure that the match between our learning goals and teacher expertise is a strong one. Ultimately we know that the success of our students and our school hinges on the quality of the teaching staff and we prioritize the appointment of the best teachers possible for this reason.

I am pleased to report that we are making excellent progress recruiting new and very talented staff this week and we will be delighted to share further details of the new teaching staff for 2012-13 later in the year. Good teachers recognize that PSI is a unique school, based on a thriving community spirit and outstanding commitment to preparing students for a successful future. It delivers a programme of learning that promotes the best values and encourages students to think and apply their understanding to the real world. We promote challenge but also a great sense of reward for our staff and this is what makes us attractive to genuine educators who care about learning.

And finally, I should add that not only am I missing Kyiv's winter beauty this week but also the staff and students, and I look forward to seeing everyone again when I return to school next Tuesday.

Have a great weekend!

Steven Calland-Scoble  
Director

## From the Primary School



With the cold weather upon us I wanted to take this opportunity to remind families of our practices related to cold weather.

1. Children go outside to play if the temperature is warmer than -15. Between -10 and -14 the decision is made based upon the wind chill factor.
2. We also believe that if a child is well enough to come to school they are well enough to go outside. Exceptions are made only in the case of a child recovering from a serious illness.
3. For outdoor play, children need to be properly dressed. While the school encourages children to be independent in dressing themselves, teachers do monitor that everyone will be warm enough.

Our belief that fresh air and exercise is good for our students is rooted in science as well as our cultural perspective. This belief in fresh air, no matter the temperature, is vital for a child's well-being and education, and this is supported by research. In 2009 Shari Wargo wrote, "New findings from biology and education research show that regular exercise benefits the brain in numerous ways. Not only can regular workouts in the gym or on the playground improve attention span, memory, and learning, they can also reduce stress and the effects of attention-deficit hyperactivity disorder and even delay cognitive decline in old age. In short, staying in shape can make you smarter"\*. Children need to run off their energy after working hard inside!

Furthermore, the unstructured play at recess gives children time to gain control over their world, a crucial step in developing a sense of empowerment and action that the PYP encourages. Jill Vialet writes, "Children who spend most of their leisure time playing Xbox and PlayStation 3, or whose parents won't let them go outside because of safety concerns [or have structured activities after school], haven't learned the basics of safe, healthy outdoor play – how to make rules, follow them, and resolve conflicts." \*\*. Children need time to be children, sitting inside while their friends and peers are outside defeats these lofty goals and does not support the child's emotional development.

Have a good weekend,

Tatiana Lopukhin (Ms. Tatz)

Primary Principal

\* A Fit Body Means a Fit Mind By Shari Wargo Created 2009-05-28 Published on Edutopia  
(<http://www.edutopia.org>)

\*\*"The Elephant on the Playground" by Jill Vialet in *Principal*, November/December 2008 (Vol. 88, #2, p. 38-41)

## Primary School Community: Making Children Happy!

By: Sena and Sofia

4A Student Council Representatives

In December primary school filled up Ms. Tatz's office with a lot of toys! The toys were sent to a children's home in Kiev. Student council representatives are thanking you for all the wonderful toys!

Here are some pictures of the children's home and the kids with their presents.



### **Grade 5 Exhibition: Call for mentors (teachers, parents, community members)**

Each year the Grade 5 students at PSI engage in a unit of inquiry that becomes their Exhibition unit. We often use mentors for small groups to help guide them through this process. Mentors meet with their groups once per week, or as needed, during the 5-6 weeks of the unit. Mentors do not need any prior knowledge of what students are studying. You simply need to be interested in working with this great group of young people. The unit begins the last week of February and ends in the first week of April. Mentors will receive training prior to the beginning of the unit. Let me know if you are interested by sending me an email: [michaelp@psi.kiev.ua](mailto:michaelp@psi.kiev.ua).

Michael Palmer  
PYP Coordinator

During our unit of inquiry “Construction: What’s your Function?” EC students created three-dimensional structures that mirrored a two-dimensional projection. This activity helped students to more deeply examine the way structures can be built. Students reflected on their own structures in their portfolios.



### *WINTER WONDERLAND™!*

*BROUGHT TO YOU BY:*

*P1F! The Greatest charity support group in the school!*

*Hey you! Yeah, you! You feeling like you're down? Need some fun in your utterly boring void of a life? Do you need some spice to make your bland bread existence worthwhile?*

*Well, try coming to THE WINTER WONDERLAND™!*

*It's a fun dance style party for the whole family—grades 3-5 and it only costs 25 HR, that's less than 4 BUCKS!*

*There will be games and PRIZES! AND SNACKS! And the first snack bag is **FREE!***

*The event is on January 30<sup>th</sup> and going from 3:15-4:45 pm! IN THE CAFÉ! THE BEST PLACE **EVER.***

*All the money is going towards supporting a girls' soccer team in a village in Morocco!*

# WINTER



# WONDERLAND

# DANCE



## PSI HOSTED THE KIEV AUTUMN KARATE COMPETITION

On December 4<sup>th</sup>, PSI hosted its first Karate competition, with 30 athletes coming from all over Ukraine to compete.

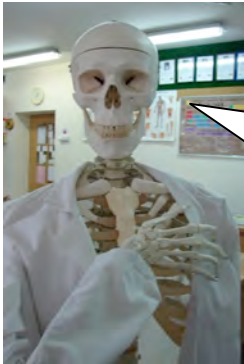
The PSI team consisted of **Kyle Depooter (4A)**, **Erik Vitek (4H)**, and **Lev Novikov (2HJ)**.

Even though the PSI Karate Team has many more competitors, it takes a brave and courageous effort to come out and compete. Congratulations to the 3 boys who fought hard in their matches throughout the day.



Good luck to Kyle Depooter as he heads to Marganets Ukraine January 27-29 to be promoted to his next belt level – Green!





Welcome to the second edition of the PSI Science Quarterly. In this issue we learn more about what our students have been doing in their classes and have a chance to get to know Mrs. Dorothy Knox a little better.

**Kostya:** This is your second year at PSI. What was the most difficult aspect to get used to?

**DK:** Maybe it's the different schedule everyday. Schools in the States mostly have a constant schedule where you attend the same classes everyday. I've posted a color-coded schedule above my desk so I don't forget where to go. Just think about what the kids would say if I didn't show up for class. Learning all of the new educational terminology and the required paperwork for the IB programs has also been challenging but in general teaching is teaching no matter the terminology.

**K:** Has anything surprised you?

**DK:** I think I'm surprised that I know most of the secondary students. My prior school, in Las Vegas, had over 3000 students (Grade 9-12 only). Some years I saw over 200 students every day with around 38 in each class. It was the end of October before I remembered all of their names when I saw them in the halls. Unfortunately, I didn't get to make a real connection to many students. I really like the small class size and close knit school community at PSI.

**K:** I understand that this is your first international teaching job but that you travelled quite a bit while growing up. Where else have you lived?

**DK:** My father was in the military, so we lived all over the US. We were stationed in Ohio, Arizona, California, Nevada, Florida and my favorite, Hawaii. I am proud to say that I have visited 44 out of our 50 states. I still have to visit North Dakota, Michigan, Mississippi, Alabama, Georgia, and South Carolina. So I need to plan a trip to our deep south to add 4 more states to my tally. My goal now is to visit all seven continents, including Antarctica. I can check three of them off of my list.



**K:** What subjects have you taught?

**DK:** In the States, I taught a variety of courses over the years I was there: Biology, Honors Biology, Earth Science, Principles of Science, Chemistry, and Foundations in Science. At PSI, I've taught DP Environmental Systems and Societies, Grade 10 Chemistry, Grade 9 Life Science, Grade 8 General Science, and Grade 7 Environmental Systems.



**K:** What do you like most about teaching?

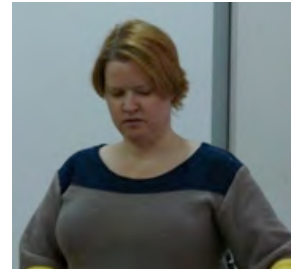
**DK:** I love seeing a student get that "ah-ha" moment when they learn something new. I genuinely love to teach students science because science is so much fun. I want kids to be scientifically literate as they will be the decision makers in the future.

**K:** Least?

**DK:** I think the most frustrating thing about teaching is when you have a student who can excel academically but doesn't. I have had students that were talented enough to easily earn high marks in college level classes but were unmotivated to do so. It makes me sad.

**K:** Apart from teaching what else are you involved in at PSI?

**DK:** I am the adviser for Secondary Student Council. My goals for StuCo this year are to increase our visibility on campus and to get a paper & plastic recycling program off the board. So far this year we have sponsored the Second Annual Miracle Minute charitable fund raiser, a spirit week, and met with administrators as student leaders.



**K:** During / right after University you had some interesting jobs. Care to share them with the PSI community?



**DK:** My first biology research job was grasshopper husbandry. I worked for a professor that was looking at how traits change over time. We fed one population of grasshoppers a "soft" grass diet and another population a "hard" grass diet and collected several measurements on growth. One of my jobs was to rotate a male grasshopper around three females and collect the resulting egg casings. I then hatched the eggs, raised the babies, and collected their molts. I then used a measuring microscope to take various measurements on the molts.

The second biology research job I worked on was looking at using a non-drinkable saline water source as irrigation for turf grass (mainly golf courses). This project lasted for over two years. We irrigated a field with varying concentrations of saline water. Over the two years, we collected 1000s of soil, water, and plant samples that we brought back to our lab and analyzed. We determined the right amount of drinkable water to mix with the non-drinkable source to irrigate golf courses while keeping the grass green and healthy. This research resulted in my earning my Masters Degree.

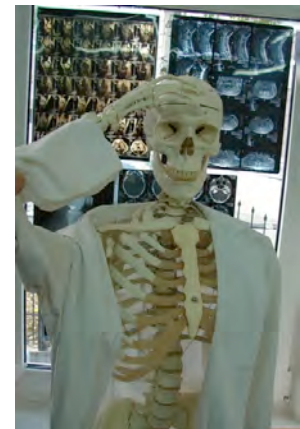
The last research project before pursuing a teaching certification was to try to determine why the beaver population in Lake Mead in Nevada was declining. This involved hours on a small (very small) boat traveling around the lake collecting data on the beaver population and their favorite food (desert willow). We found that the creation of Lake Mead with Hoover Dam altered the flood cycle of the Colorado River, which washed the willow seeds away.

**K:** Thoughts on living in Kyiv?

**DK:** Kyiv is a beautiful city but I'm not really a city person. I like the abundant parks and green spaces in Kyiv. Most of the cities I've visited do not have as many parks. Ukrainians, for the most part, have been very helpful and patient with our lack of Ukrainian/Russian. On several occasions we have had English speaking Ukrainians come to our "rescue" when we needed assistance.

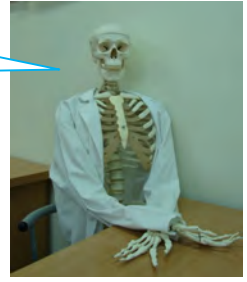
**K:** What do you like to do in your spare time?

**DK:** My first response to this question was "What spare time?". I have two children so my spare time usually involves their activities. I also try to attend PSI events to support my students. Obviously, travel is a common hobby for international teachers. My escape is to read science fiction/fantasy novels.



## Let's take a peek in the PSI Science

Grade 10 Biology has been very busy this quarter. One of their assignments was to read a series of articles about clinical drug trials and then write a short One World essay on what they learned. Below are a few excerpts from their submissions.



Drug trials are a very important part of the medicine – without them many of the medicines would be unhealthy or even mortal to human beings. Before a drug is used on humans, it has to be first tested on animals. Every single drug that is designed to be consumed by humans must pass three testing stages:

1. Safety check. The drug in very small amounts is given to different people, usually individuals with good health. They are monitored all the time in order to find out if the drug is dangerous for humans or if it produces any unwanted side effects.
2. Drug is tested on more people in order to recheck its safety.
3. Thousands of people try the drug in order to observe some large scale side effects or to find the weaknesses of the drug.

-Hubert

Some people even live on the money they get paid by taking part in such experiments because the volunteers are paid quite well. A man named Brandon earned 25 thousand dollars in just 18 months.

-Sona

The ethics behind clinical drug trials is that although there were incidents and people might think it is immoral to experiment on human beings, but then how would we ever know if the drug is safe to be used by humans?

-Kunal

There is an overall misconception about the clinical drug trials. Patients that suffer a disease, for which a drug is being tested, often think that taking part in trials will help them get better. “Hope of being helped motivates many people to enter trials, although the studies have an entirely different purpose – answering scientific questions about safety and efficacy rather than providing therapy for individual participants”, says biochemist and bioethicist Adil Shamoo of the University of Maryland.

-Catherine

Grade 10 Physics was also given a One World assignment and an excerpt from one of the topics can be found below.

### Alternative energy sources Lorraine V.

Almost all of our transportation is fueled by petroleum, whose high energy density gives long-range to cars, boats, and planes. However, the world is searching for alternatives due to the finiteness of petroleum reserves, the unstable governments providing them, and the pollutants emitted by fossil fuel powered vehicles.

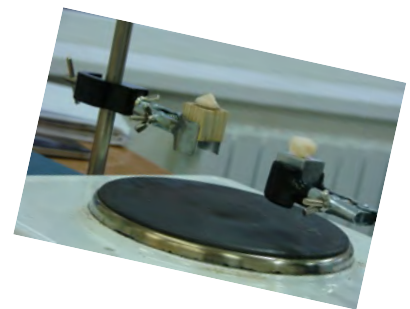
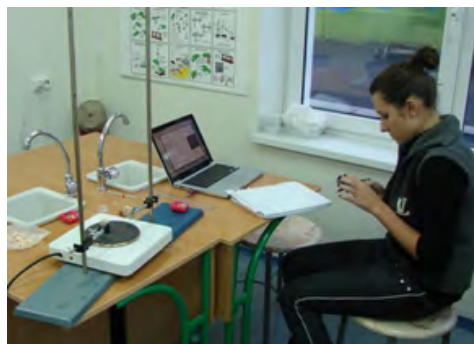


**Another assignment in Bio 10 was to design an experiment that investigated cellular respiration. Here are some of the research questions.**

- How does temperature affect the amount of Carbon Dioxide given off when yeast cells respire?
- To investigate the process of cellular respiration using yeast and different sugar solutions: how yeast reacts with different sugar solutions and with which produces the biggest amount of CO<sub>2</sub>
- How do different types of sugar affect the production of CO<sub>2</sub> in yeast?
- How does the salinity of a seed affect its cellular respiration?
- To determine whether there is a difference in release of carbon dioxide in 4 different types of plant seeds during germination.

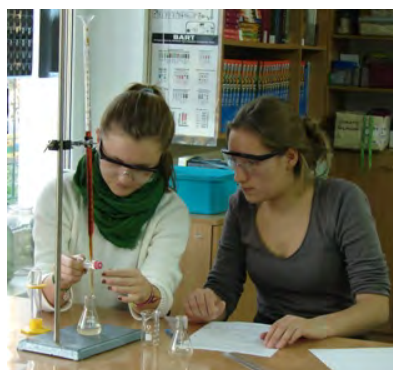


**Grade 10 Physics: the culminating assessment for the thermal physics topic was for students to design a lab investigating heat transfer.**



**Julia melting wax in order to determine the heat conductivity of different substances**

Grade 9 Life Science: At the beginning of the quarter the students learned how to perform a titration as they tried to determine the amount of vitamin C in various juices.

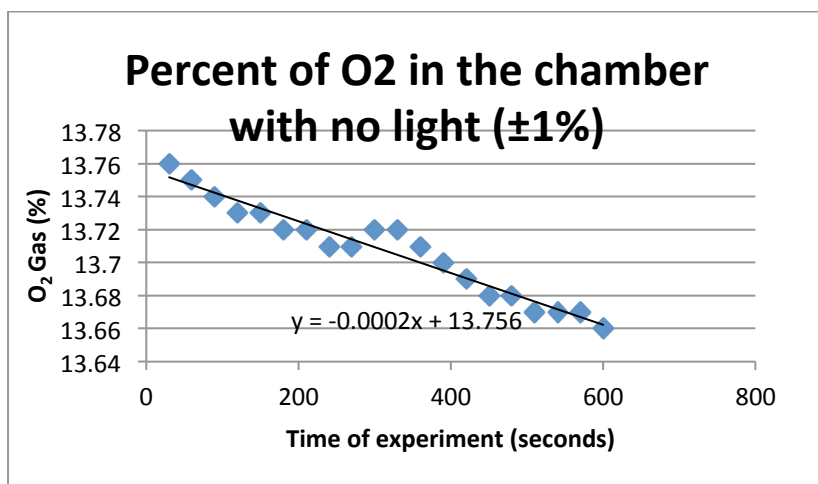


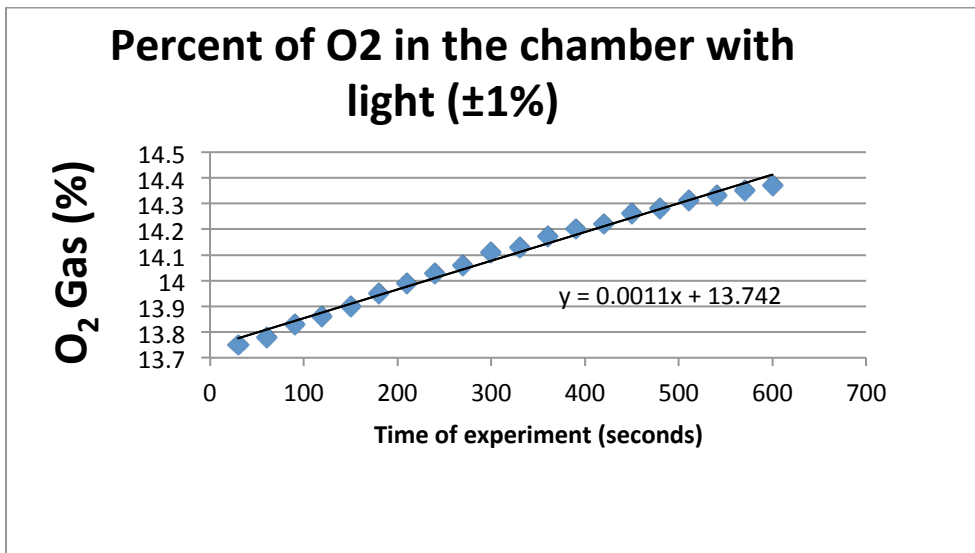
Most recently 9H has been busy learning about genetics, but before this topic, we studied photosynthesis where they were required to design an experiment that looked at how a chosen factor affected photosynthesis. Some of the research questions they came up with are:



- To find out how acidity and bases affect the rate of photosynthesis of the plant.
- How does light intensity affect the rate of photosynthesis?
- To determine how the temperature affects the rate of photosynthesis.
- To investigate the effect of light color (related to wavelength) on the rate of photosynthesis.

The graphs below (created by Gabi) present the data on how the presence or absence of light affected the amount of oxygen gas produced during the presence of light and the amount of oxygen absorbed when our plants did not receive light.





**Grade 9 Physical Science: One of the main tasks this quarter was a One World assignment. Two examples of topics that students in 9K looked at can be found below.**

### The Future of Eye Liquid Glasses

According to the World Health Organization (WHO) currently in the world 153 million people have poor or no eyesight due to no access or unaffordable prices (Katherine Harmon, 2009). Many don't mind wearing glasses or contacts; however, it's a luxury in many areas, especially for people in developing countries. It's a fact that glasses, contacts and eye surgery are expensive solutions. With the liquid filled eyeglasses invented by a British physicist Josh Silver, the problem can be solved in the near future by giving vision to the poor.

Facts about the new Liquid Eye Glasses

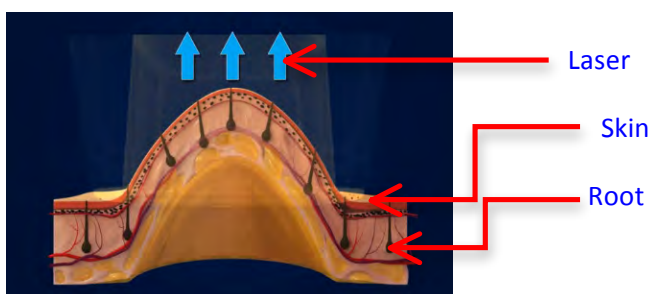
- Over 153 million (that's 153 000 000) are affected by not having access to eye care because it's too expensive.
- The new liquid filled glasses should only cost \$1 each.
- The glasses allow the wearer to 'tune' them to his or her own eyesight needs.
- In the UK there is one eye care specialist for every 4500 people, in sub-Saharan Africa the ratio is 1:1 000 000



*Figure 1: Zulu man who was able to get back to kneading with the Eye-Liquid Glasses*

<http://www.slipperybrick.com/2008/12/eyeglasses-that-are-instantly-adjustable/#more-15479>

- Elizabeth B



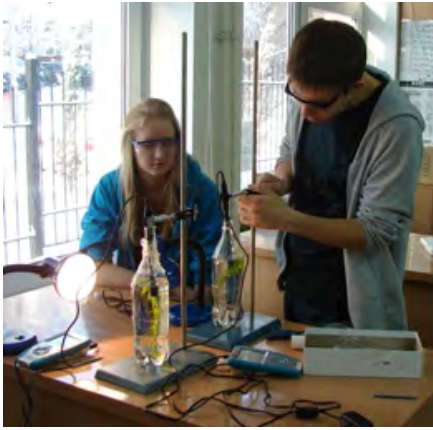
Maria S

### LASERS FOR HAIR REMOVAL

#### Introduction

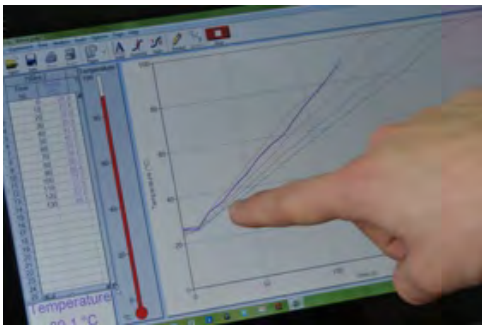
From 1917, when Albert Einstein first discovered the theory of "Stimulated Emission" until today, lasers have been evolving.

**LASER** stands for **L**ight **A**mplification by the **S**timulated **E**mission of **R**adiation. Lasers can be used to permanently remove unwanted hair, so we don't need to use wax or shave anymore.



**Higher level Biology 11** completed the ever popular topics of cellular energetic. One of the assessment tasks was “to investigate Photosynthesis.” You may be thinking... they did that in grade 9 too and you would be correct. The level of the experiment in DP Biology needs to be quite a bit higher and the analysis far more sophisticated. Isn't that right, Elliott? ☺

**DP Physics Grade 12** recently performed a lab that measured the specific heat capacity of water.



**Fantastic results**



**Katya collecting her data**



**Soon to be damaged temperature sensor :'(**

**Science 6** has been studying the exciting geological feature of **VOLCANOES!** Take a look at their posters.



# PTA News

Week Ending 26 January

Blimey, winter has finally arrived with all this snow and now plummeting temperatures! This is only my second winter and I don't remember it getting so cold last year... it's supposed to drop to minus 20 over the weekend... get out your thermals!

Anyway, there is a reason I am talking about the weather, not just because I am British! With these plummeting temperatures the roads and sidewalks are freezing over incredibly quickly. As a parent that walks to school with her children (and for those that are sensible enough not to try and park right at the school gates) can those of you that do drive right to the gate or even like to park right at the gate PLEASE take extra care as children slip and slide in this weather. Plus windscreens are not so clear and it's more easy to reverse into a child (as this nearly happened to my daughter this week). So please, if you or your drivers do park or stop outside school be extra careful before there is a nasty accident.

## JAMES BOND EVENING

We now have a confirmed date and venue for our James Bond Evening – Saturday 24<sup>th</sup> of March at the Radisson Hotel. So start polishing your tuxedo's (or speedo's if you can get away with it... Daniel Craig??) and practicing your moves! It's going to be a fantastic night with a great dinner, the fabulous PSI basket raffle, a band, dancing, maybe even a tiny optional James Bond trivia quiz... who knows! Please make sure you bring your basket contributions and give them to your class parent.

## DATES FOR YOUR DIARY

January 27<sup>th</sup> – Teacher Training Day. No School

January 31<sup>st</sup> – PYP Coffee morning with Miss Tatz. 8:30 in the Cafeteria

February 7<sup>th</sup> – Next PTA meeting. 8:45 in the Cafeteria

February 18<sup>th</sup> – Half Term begins

February 27<sup>th</sup> – Back to school

March 24<sup>th</sup> – James Bond Party

Please remember to check the PTA website each week:

[www.psi.kiev.ua/community/pta/](http://www.psi.kiev.ua/community/pta/)

Contact our PTA President, Amal Barmoro at:

[ptapresident@psi.kiev.ua](mailto:ptapresident@psi.kiev.ua)

# MENU

Semester 2



Week	4	30/01	31/01	1/02	2/02	3/02
Starter Option 1		Fresh Vegetables (Sticks)	Fresh Vegetables (Sticks)	Fresh Vegetables (Sticks)	Fresh Vegetables (Sticks)	Fresh Vegetables (Sticks)
Starter Option 2		Cauliflower Soup	Minestrone Soup	Pumpkin Soup	Spinach Soup	Pea Soup
MAIN COURSE	Meat dish & garnish Option 1	Macaroni-Cheese Bake with Ham	Danish Meatballs & Potato Mash	Chicken Cakes with Pasta and Vegetables	Chili con Carne & Rice	Pizza & Chips
	Vegetarian Option 2	Macaroni-Cheese Bake	Vegetable Chili & Potato Mash	Zucchini-Potato Bake	Cheese Soufflé	Vegetarian Pizza & Chips
Dessert		Yoghurt or Fresh fruits or Cake	Yoghurt or Fresh fruits or Cake	Yoghurt or Fresh fruits or Cake	Yoghurt or Fresh fruits or Cake	Yoghurt or Fresh fruits or Cake
		Juice	Juice	Juice	Juice	Juice



*Bread and drink water will be available daily*  
 \* Portions depend on the age group



день

# Валентина

## kids' Valentine's day для детей

16:00 2012  
12 фев/feb

200 грн. (1-3 года), 380 грн. (от 4 до 13 лет) При покупке билетов до 20.01.2012 или при покупке 2 билетов - скидка 10 % При покупке 5-ти билетов - 6-ой в подарок!!!

200 (1-3 years old) 380 (4 -13 years old) Early bird discount – 10 % before 20.01.2012 quantity discount – 10 % (for more than 2 tickets) Buy 5 tickets and get 1 free!!!

**ADULTS MUST ACCOMPANY**  
СОПРОВОЖДЕНИЕ ВЗРОСЛОГО ОБЯЗАТЕЛЬНО

\*если Вы по каким-то причинам не смогли прийти на праздник, Вы можете обменять свой билет на следующий детский праздник

\*if you can not come to the party for any reason, you can exchange this ticket for our next party

- зимний гольф с призами
- поделки-валентинки
- украшение печенья
- угощения
- фото на память
- праздничная лотерея
- ...и много других сюрпризов

- winter golf with prizes
- valentine's crafts
- cookie decoration,
- games and fun
- food & drinks
- free photo
- beautifully decorated facility!

для детей от 1 до 13 лет

welcomes all kids  
from 1 to 13 years old



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