Calendar Events

Week 9

Monday September 9  Yr 11 Yearly Exams
                      Yr 12 meet with Principal
Tuesday September 10 Yr 11 Yearly Exams
Wednesday September 11 Yr 11 Yearly Exams
Thursday September 12 Yr 11 Yearly Exams
Friday September 13  Yr 11 Yearly Exams

Week 10

Monday September 16  Yr 10 STW Focus Week
                      P & C Meeting – 7:30pm
Wednesday September 18 Yr 12 Formal Assembly-p4
Thursday September 19  Annual Celebration
Friday September 20    Yr 12 Picnic
                        Last Day of Term

Week 1 – Term 4

Monday October 7     Labour Day Public Holiday
Tuesday October 8    Staff & Students return
                      Commencement Ceremony-p5

Recipient’s of PBL Raffle Prize Draw

<table>
<thead>
<tr>
<th>NAME</th>
<th>Year</th>
<th>Wk/Term</th>
<th>PRIZE</th>
</tr>
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<tbody>
<tr>
<td>Kirsten Paasila</td>
<td>8</td>
<td>Week5/Term 3</td>
<td>$10 iTunes Voucher</td>
</tr>
<tr>
<td>Michelle Hua</td>
<td>10</td>
<td>Week 6/Term 3</td>
<td>$20 iTunes Voucher</td>
</tr>
<tr>
<td>Jordan Howe-Kitiona</td>
<td>7</td>
<td>Week 7/Term 3</td>
<td>$20 EB Games Voucher</td>
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<tr>
<td>Courtney Le</td>
<td>7</td>
<td>Week 8/Term 3</td>
<td>$25 Sanity Voucher</td>
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PRINCIPAL FACTS

Well the end of term draws nigh and with the expected return of our Principal, Mrs Dolstra, next term, things should get back to normal here. I would like to thank Heather Costa for relieving as Deputy Principal for most of this term, and David Ralston for short stints relieving both as Principal while I was on Conference Duties in Sydney and also for relieving as Deputy Principal while Heather Costa was marking HSC Music examinations.

*It is with great pleasure that I announce for the first time in the newsletter, the School Captains and Vice Captains for 2014.*

School Captains: Boys – Sidharth Autar; Girls – Tanya Costillas
School Vice Captains: Girls – Jaanvi Kapadia; Boys – Alex Abdullah

On behalf of the Principal, Mrs Jan Dolstra, the Deputy Principal, Mrs Evelyn Hazzard, myself and all staff and students, congratulations to this wonderful team of Year 11 students who form the core of our Student Leadership Team for 2014. Congratulations also to the wonderful group of student candidates who presented for election. Without exception they were a terrific group of students, all of whom would have been excellent choices for such a prestigious position.

Congratulations also to Tanya Costillas who has been awarded the John Lincoln Australian Merit Award for Community Service. This wonderful award was granted to 21 students across NSW in 2013 for outstanding contributions on a voluntary basis, to their community during the year. Tanya and her family and the Principal are invited to the...
award ceremony in November at Government House where the Governor, Marie Bashir will present her with her award. What an outstanding achievement. The school is indeed very proud of her.

**PBL Tickets – Raffle Prize Draws**
You will notice in this issue of the newsletter, a list of students who have won our recent PBL Raffle draws.

Congratulations to the students who have won the raffle prize draws so far and the names of the next group of winners will be published in our next edition of this newsletter.

**P&C Meeting**
The next meeting will be held on Monday 16 September at 7.30pm. All parents are invited and very welcome.

**Year 12 – 2013 Farewell and good luck for your HSC**
Our current Year 12 have finished their Trial HSC examinations and we farewell them at the end of this term with a number of ceremonies. Parents of Year 12 students and their siblings are invited to their formal assembly on Wednesday, September 18th. Letters of invitation have been sent to parents and further details may be obtained from the front office on 9605 3111. Year 12 will have an informal assembly presented to some of the student body and staff on Tuesday, September 17th, from 2pm. Year 12 final school reports have been finalised and will be issued to students at their formal assembly. Year 12 will enjoy the annual Year 12 picnic on Friday, September 20th.

Year 12 and their parents were sent a copy of the organisation for their final days at school in Term 3 and for their HSC examinations in Term 4 and post HSC celebrations. This letter was also printed in the last edition of this newsletter. Students are reminded to study hard, get plenty of rest, eat healthily and remain focused on their important final HSC examinations.

**ANNUAL CELEBRATION**
Once again, Macquarie Fields High School will hold its annual celebration day on Thursday, September 19th. Our theme for this year is, “Celebrating Movies as Literature”. Mr Celestino and his team have been hard at work preparing for this exciting celebration and current and immediate past Year 12 students are invited to this event too. Parents and their infant children are also invited to this event but are reminded that there is no parking on schools grounds on the day of this celebration.

**END OF TERM**
Term 3 ends on Friday, September 20th and all students are expected to attend school up to and including the last day of term. Term 4 begins on Tuesday, October 8th – Monday October 7th is a public holiday.

**SCIENCE FACULTY UPDATE**
The Relieving Head Teacher of Science, Mrs Rebecca Ferris has taken maternity leave and we wish her well in this regard. Mr Siddiq Buckley will relieve as Head Teacher of Science in her absence. Mr Ali will relieve as Year 10 Advisor for Mr Buckley.

**Year 11 Examinations**
Year 11 students are currently undertaking their final Preliminary HSC examinations. They will have a formal Commencement Ceremony at the beginning of next term on Tuesday, October 8th. Letters of invitation will be sent to parents of Year 11 students in the next week or so.

*Mr M Tishler*  
*Relieving Principal*
Science Faculty

The Science faculty has been very busy in 2013, with students and staff involved in competitions, challenges, clubs and excursions. We started the year by welcoming several new members of staff to the faculty, including Mrs Padma Somasi, Mr Michael Smallman and Mr Afzal Ali. Each of them has settled in well to the faculty and have brought along enthusiasm and experience.

Spring cleaning came early for the Science faculty. Earlier in the year, the science block was swarmed by eager students keen to get some great resources to assist in their science studies. Students from Years 7 to 12 were welcome to take home some of the faculty’s old textbooks.

Mrs Ferris Relieving Head Teacher Science

International Competition and Assessments for Schools (ICAS) Science examination

Macquarie Fields High School Science students recently sat the International Competition and Assessments for Schools (ICAS) Science examination. The examination assesses students’ skills in the key scientific areas of interpreting data, including observing, measuring and interpreting diagrams, tables and graphs; applying data, including inferring, predicting and concluding, and their higher order skills, including investigating, reasoning and problem solving. We received some fantastic results across all cohorts which is reflective of the strong interest and dedication of some of our students. In particular, congratulations to: Jack Morel, Riz Manter, Kevin To, Benjamin Zhu, Ujjeshi Dhir, Manseeb Mir, Shoaib Farooq, Navid Chowdhury, Abid Arafat and Kristian Mansfield who received a Distinction, placing in the top 10% of students in NSW and ACT. An extra commendation is passed onto Madeline Lowe who placed in the top 1% of students in NSW and ACT, receiving a High Distinction. All participants were presented with a certificate from ICAS. The Science faculty also presented Madeline with a science kit. Well done to all participants.

Mrs Somasi Teacher and Mrs Ferris Relieving Head Teacher Science

Preliminary Biology Field Trip

As part of mandatory assessment all preliminary biology student undertook a field trip of George’s river near King’s park, Ingleburn in Term 2. The students were required to study abiotic and biotic features of the reserve including water and soil quality, along with human impact. It was an excellent opportunity for the students to be involved in a real life experience, measuring the quality of soil, water and air. The Year 11 Biology students also studied native Australian flora and fauna.

Mrs Raheja Preliminary Biology Teacher
University of Newcastle and Rotary, Science and Engineering Challenge

Late in Term 2 several of our Year 10 students were invited to participate in the University of Newcastle and Rotary, Science and Engineering Challenge. Throughout the day students completed a variety of activities where they applied their problem solving and critical thinking skills to solve several science challenges. The students worked well as a team placing fourth overall, and second in the individual bridge building competition.

Mrs Ferris Relieving Head Teacher Science
Aurecon Bridge Building Competition
Three of our 9F students Arwin Gomez, Samuel Gonzalez and Brandon Pangnanouvong represented MFHS at Aurecon Bridge Building Competition held at NSW Art Gallery on 6th August. They put in a lot of effort and time in designing and building their bridge. The competition itself was very stiff and challenging with actual engineers on the panel of judges. They were selected after an intense in class bridge building competition, where team Arwin, Samuel and Brandon came out victors. Although we did not do as well as expected, it was a fun and very enlightening day for us. Well done guys!

Mr Ali MFHS Aurecon Bridge Building Competition Coordinator

In early August, eight Year 10 students were invited to participate in the UNSW Great Engineering Challenge. The competition consisted of students from Years 10 and 11 completing a number of exciting real-life challenges, where they had to apply a lateral thinking approach to solving problems. Our students excelled in the challenges where they developed their understanding of science and engineering, and enhanced skills necessary for engineering including teamwork, effective communication and creative thinking. The students were also provided with the opportunity to network with university students and professionals from Engineers Australia and TransGrid. Abid Arafat, Omar Choudhary, Shadman Rahman, Evita Tran, Kristian Mansfield, Megan Amos, Kasvi Luthra and Vivian Mai worked exceptionally well and placed overall fourth, which was an excellent achievement.

Mrs Ferris Relieving Head Teacher Science

Year 10 students at the UNSW Great Engineering Challenge

Year 12 Senior Science safety device investigation
The cause of disasters can either be natural or due to human activity. Most are preventable and for those that are not, we have developed devices over time to minimise the impact of damage through the use of technology. One such device using technology is the development of a fire alarm commonly found in buildings. As part of the HSC Senior Science: Disaster syllabus, students had to conduct a
first-hand investigation into the construction of a working alarm or safety device.

The students pictured below constructed a working fire alarm that emphasised heat detection. This involved creating a circuit using a transformer, leads, and an electrical bell, Bunsen burner and using a bi-metallic strip. The bi-metallic strip was heated and when the tip made contact with the open end of the lead held by a boss head and retort stand, it formed a complete circuit and triggered the bell (or alarm). This type of alarm is just one of many that we use to keep us safe and avoid potential disasters from happening.

Mr Tang Senior Science Teacher

Year 9 Gifted and Talented

This term Year 9 students enhanced their skills by making different type of volcanoes. This key outcome task combined both creative and research skills. All students worked in a group to research composite, cinder, spatter and shield volcanoes and created a model from an existing volcano, around the world. These were then made to erupt using vinegar and soda bi carbonate to further study how volcanic eruptions differ in different types of volcano.

An excursion to visit IMAX and Powerhouse Museum has been organised for the end of Term 3 for 9G and 10G. This excursion is an opportunity for the Gifted and Talented students to deepen their knowledge of science, engineering and technology, by participating in enrichment activities to further develop their understanding of the universe.

Mrs Raheja G&T Teacher

PULSE@Parkes

On Monday 17 June, about 50 Year 11 and 12 students attended a lecture delivered by Rob Hollow from the CSIRO Astronomy and Space Science (CASS) in the School’s Tiered Learning Space (TLS).

The Parkes Radio Telescope

The event provided students with an overview about the work of the CSIRO and focused on the function of radio telescopes. Students had the opportunity to ask questions and a
maximum of 24 may be offered to participate in an innovative project called PULSE@Parkes at the CSIRO Education Centre next term.

During that visit the students will remotely control the Parkes Radio Telescope (located several hundred kilometres away) and do REAL science in REAL time to make REAL discoveries! They will meet professional astronomers, learn how to control a state-of-the-art telescope, experience some real science and share their research with students from other schools.

Students will observe pulsars and the data they obtain will be analysed to try and determine a number of properties of the pulsars, the post-supernova remnants of dead stars. Their results feed into a growing database used by professional astronomers. They may actually discover a new pulsar or help determine the distance to existing pulsars! The data they collect will also be used by the astronomers for ongoing research. Astronomers from the CSIRO Astronomy and Space Science (CASS) use the data to track the evolution of the pulsars over many years, to test Einstein’s theory of gravity and hopefully find gravitational waves.

*Mr Buckley, Physics Teacher*

**Space Camp**

2013 sees Macquarie Fields High School return to Huntsville Alabama, USA to participate in the NASA Advanced Space Academy. This year Brendon Shum, Radha Jagtap, Swapnil Shinde, Pranith Senatilaka, Namratha Reddy, Mansib Ahmad, Parth Patil, Alekeeya Subramanya, Pooja Salimath and Mrs Somasi will join 31 other participants who will be jetting off in the September holidays to experience NASA training. They will participate in shuttle missions, carry out experiments on the ISS, complete space walks and work the communication in Capcon. Throughout the year, the students, Mrs Somasi and Mrs Ferris have attended several iSTEM (Invigorating Science Technology Engineering and Mathematics) enrichment events including Magnetic Resonance research and rocketry at UWS, robotics, the working laboratory Mars Yards at the Powerhouse Museum, and ANSTO. These enrichment programs have helped develop their skills in science and engineering and have provided them with a great opportunity to network with Australian Scientists.

The participants will also be spending several days in South Korea where they will visit various science centres and experience the cultural aspects of South Korea.

The students and Mrs Somasi are counting down the days to blast off and we wish them all the best luck on their mission to Space Camp!

*Mrs Somasi Teacher, future astronaut in training and Mrs Ferris Relieving Head Teacher Science*
Science Club
Don’t be too shocked or surprised if you notice our MFHS students covered in slime, extracting DNA or working on the launching of rockets in flight and learning about aerodynamics. It’s just about our newest mad scientists! Science Club has been very busy this year, running every Thursday during lunch.

Science club has been designed to provide students with ample opportunities to explore great ideas and concepts in Science and have lots of fun while doing so. Some of the topics suggested by the club members were rocketry, chemistry and anatomy involving dissections. These have been explored through research, discussion and performing first-hand investigations.

A keen Science Club member about to launch a water rocket

Our members are also keen in agriculture where they have showed their skills in preparing garden beds and planting seeds. Bok choy, broccoli, coriander, beetroot and shallots are some of the few plants sown this year. These have grown to earn us a good produce.

Now that spring is upon us, Science club will be looking forward to our silkworm eggs hatching and we will be amateur entomologists as we study insects and the techniques involved in insect collecting.

Mr Ali, Ms Raheja and Mrs Somasi Teacher and Science Club coordinator

Science Club students working in the Agriculture plot

Junior Science
Students of 7S demonstrated many effects of electrostatic forces (static electricity) using a device known as a Van de Graaff generator. This was part of the Stage 4 “Feel the Force” unit in Science. Initially the students in 7S were scared to experiment with such an device which generated electricity. The pictures demonstrate that during the experiment, the hairs of the students stood up since the hair follicles repel each other due to the charge being transferred from the large metallic dome of the Van de Graaff to the student. Everyone was fascinated by the device, as the majority had never observed the device and experienced such ‘force’. The first student on the chain touched a metal device and everyone involved in the chain received a small zap.
Students in 8M and 8A have worked enthusiastically in Science performing experiments. One aspect of the syllabus deals with the applications and uses of Science in relation to use of energy. Students identify objects that possess kinetic or potential energy. The students got very excited (like electrons) when they learnt they had to use cars…..real ones. The activity was highly engaging and student-centred. The students had to plan their investigation, think critically and analyse to vary their experiment using different toy cars and heights. They experimented with toy cars, trucks: large and small, ramps and metre rulers. They had to find the distance travelled by a toy car when it was rolled from a ramp at various heights. Finally, they presented their information using appropriate graphs to record, understand and solve the problem.

9M is busy completing an assessment task based on plate tectonics which involves making a 3D model on the formation of volcanoes and the major plate boundaries. The simulation of the red or blue (students used food colour) lava oozing out of the volcano during eruption due to the combination of bicarbonate soda and vinegar was a great surprise for the students.

Mrs Somasi Teacher
Hands on High School
Science faculty took part in Hands on High School program. The program was led by Ms P Raheja and facilitated by Mrs P Somasi. Parents were given a brief overview about the diverse opportunities offered in Science such as participating in various challenging events, engineering experience and competitions. They were also informed about the science staff’s commitment to developing creativity and higher order thinking skills. Lastly parents were given a first hand experience of a biology lesson, showcasing our very new digital microscope.

Ms P Raheja Teacher

Keep parents reliving their High School experiences
Experience Life As An Overseas Teenager with WEP!

From Sarah in the USA:
I am having the best time of my life!! The New York orientation was incredible! I am so happy that it is part of the program. It was a great way to see another part of America and experience new cultures by talking to the other exchanges students. I was not expecting there to be so many of us!! There was a total of 53 of us from Belgium, France, Italy, Germany and just 3 of us Aussies. My host family are so nice and caring and they have been great. I started volleyball with my host sister a few days before school which was good because then I knew people before school started. My first day of school was like walking into an alien spaceship! Everything was so different and it was weird not wearing a uniform. Everyone there was so nice and welcoming and it wasn't hard to make friends. Overall the first month has gone way too fast and I wish I was staying for a year!! I have already made unforgettable experiences and if the rest of my time is like this month I never want to leave!!

Find Out More!
WEP's not-for-profit student exchange programs give secondary students the opportunity to choose from over 20 countries to live and study for a summer, semester or even a year. Our programs are designed to fit into the academic schedule to complement your secondary studies with an international exchange experience!

Upcoming Information Sessions
Wed, 11 September (7:30-9pm) - Sydney
Wed, 12 September (7:30-9pm) - Brisbane
Tues, 17 September (7:30-9pm) – Melbourne

Request Information
If you cannot attend a WEP information session, please don’t worry. We’re only a phone call away. If you would like to go overseas or invite an exchange student into your family, simply request a FREE information pack, including our brochure, fee sheet and FREE application form:
- visit www.wep.org.au
- email info@wep.org.au
- call 1300 884 733