

The Weekly Newsletter of Sydney Boys High School

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# From the Principal High Talent

Thomas Wilson (Year 8) was awarded a medal for the highest mark in his Year level in the state for the 2005 Australasian Schools Science Competition. Great work Thomas! High Old Boy Stephen Hunt swam the Strait of Gibraltar in 3 hours 47 minutes last week to set a new Australian Record for the crossing. Stephen swims to raise money and awareness for AIDS sufferers.

### **Latin and Greek Reading Competition**

At Sydney Grammar School last Thursday evening, the Classical Association of New South Wales held the final of the Latin and Greek Reading Competition. Most contestants were schooled in the arts of rhetoric and performed dramatic interpretations of the texts. The section requiring unseen texts to be read after minutes preparation, impressively handled by all finalists. High was represented by Eugene Stadnik and Russell Rahman in the Classical Greek reading contest. The boys performed well but were outshone on the night by a more dramatic rendition of the text. Congratulations to the boys for their efforts and to Ms Werner for preparing them so well. I hope more students are inspired to perform in Latin and Greek to bring these languages to life in an engaging manner.

### New Introductory Classical Greek Course



Thank you to Sam Mason and Carol Werner who have

produced a 50 page introductory course in Classical Greek. They gave up a lot of their time to produce this course. The DET syllabus does not cover stage 4. I am confident that the

LOTE department can build on this beginning and improve student engagement with the classical languages.

# **Bondi Secondary Principals Council Meeting – 29/7/05**



Schools are being questioned about their Healthy Canteens Policy. Is it being implemented fully. At High we have been

gradually introducing the policy over the last 18 months.

From now on, schools will have the cost of insurance work deducted automatically from their accounts. We will need to be very careful when faxing for assistance.

Everyone needs permission to travel. Watch out for excursions interstate, camps, conferences. All staff should send me a group wise email letting me know where you are going, the dates and the mode of transport. Assume permission has been granted.

### Year 11 2006 Curriculum

It has been agreed that Mathematics and English will be aligned in delivery in 2006. In Year 11 2006 there will be 9 English extension classes. There will be 8 mathematics extension classes and a 2unit class. Mathematics extension classes will have 14 periods per cycle and English extension classes 13 periods per cycle. Classes may be reorganised after the first semester examinations. After the Preliminary examinations in the last week of term 3, classes will be reorganised. Entry to extension courses become competitive. Mathematics, Extension 1 and 2 will be limited to 120 places. Extension 1 will be restricted to 72 places.

In English, Extension 2 will be limited to 10 places. Extension 1 will be limited to 80 places. In Year 12, 2007, there will be

5 Extension 1 & 2 Mathematics classes at 18 periods per cycle. There will be 1 2-unit class at 9 periods per cycle. There will be a further 3 extension mathematics classes at 13 periods per cycle. In English there will be 4 Extension classes of 14 periods each, 6 2-unit classes of 9 periods and 1 Extension 2 class of 4 periods. It is expected that the closer alignment of delivery will benefit the parity of esteem between the two subjects and improve access for rigour and remediation interventions in English.

Students in Year 10 should take note of these arrangements. They essentially make Extension English compulsory. The second half of the 1-unit line can accommodate up to 192 mathematics extension students. For students doing 2-unit Mathematics on another line, 'Mind and Morality' 'Problem Solving in Science', 'Studies of Religion' or 'Digital Photography' may be offered.

### **Boys Schools Network Meeting – 28/7/05**

We had our inaugural network meeting for the Sydney Region to discuss matters of common interest. Principals from six boys' high schools shared views about boys education. One school has a full induction cycle for new students, an idea we could take up to address the needs of our 25 new Year 11 students. Schools use focus group researchers to gather data on issues of concern. They out-source research. Further meetings are planned. High will host the next one in October.

### **Library Campaign – State MPs**



High students live in 48 state electorates. The Year Groups are asked to organise the letter writing campaign for their Years, particularly in – Maroubra (135), Kogarah (121), Auburn (67), Canterbury

(63), Heffron (54), Georges River (53), Strathfield (51), Bankstown (49), Drummoyne (49) and Marrickville (40). MPs need to know how many students would benefit from a new library. If you need MP contact details or the pro forma letter, call the school and speak to Robyn on ext 114 or Caroline on ext 146. Given the recent change of leadership in the state ALP, we have a good opportunity to make our new library an issue for the next election. [NB There will be two new MPs – Maroubra and Marrickville. Once they are elected letters might have impact.

### **Plain English Speaking State Final**

Tom Kaldor represented High in the last 6 in the state in this contest. It is a very prestigious event with a high standard of oracy. All the prepared speeches were polished and entertaining. Tom did a great job in the impromptu section on the topic "The Knives Are Out". While not successful in the final, Tom kept alive High's strong record in public speaking contests over the last three years. Well done, Tom.



### **GPS** v Kings

Starting with the good news first, on Friday night our boys performed well against Kings in debating. 8A opposed the

proposition that women's sports should be given equal recognition. Chris Evans, Beau Greenslade and Stephen Garafano avoided the politically incorrect line of bagging the standard and appeal of women's sports, in favour of an affirmative action twist — that women's sports should have more than equal media recognition to tip the scales more towards equilibrium. King's could not handle this argument and stuck to their prepared line that equal recognition should be based on the notion that the sports were the same, they were just as entertaining, only the gender of the participants varied. High won on the weight of substantive material.

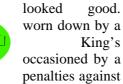
In first grade High opposed the argument that the Australian Government should limit Medicare funding to IVF programs. King's proposed that the funding should be cut by half, because the procedures were non essential and that there were better ways to solve the problem of childless couples – such as adopting African orphans. In an almost flawless display, Gabriel McManus, Tom Kaldor and William Clegg destroyed the King's line on moral, political and practical grounds. They argued for the rights of Australian couples to biological parenting, advocated adoption of Australian orphans first, opposed uprooting the best African orphans and assimilating them into a foreign culture and defended a citizen's right to access to a medical intervention to correct a disability like any other disability. I was very impressed by the tightness of their teamwork and the apparent cogency of their arguments. They were fluent, confident and engaging.

Next day at King's, High had a hard day at GPS football. The second XI struggled to penetrate a

tight King's defence. Both sides moved the ball around but couldn't put one in the net. In the first grade game High was never coordinated in attack and were out-muscled in defence. King's dominated the air heading back goal kicks into our half. In response our long balls were nodded back to the keeper. Our boys couldn't find feet with passes. Burak Akinci was injured at half time and had to come off. In the second half King's gained in confidence and our boys grew frustrated. Lapses of concentration cost us goals. We did not get into the game and lost 0-3.

The social 3<sup>rd</sup> XV played hard in the forwards but squandered the little possession they did have by kicking it away. When they kept the ball in the

forwards they
They were
weight of
possession,
string of 5



them. They weakened towards the end of the first half and let in a try. The same scenario occurred in the second half. Our boys penetrated when they had the ball but they never got the necessary field position to apply pressure for long.

In first grade our boys were jumped early by the King's tactic of spinning the ball very wide to their star outside centre who engineered a couple of tries. Pat McDonnell hit back with his usual blind side scrum move to score wide out. Sandy Cunningham converted with a good kick. After that, the King's side again exploited the defensive gaps in the backline to run in more tries. At half time it was 38-7 and things did not look promising. To their great credit our boys fought back in the second half, winning the half 12-5 with tries to Cameron Conway and Damitha Fonseka. It was a spirited performance from a side still weakened by injury.

### **Sydney Boys Building Fund Term Deposit**



Next week we will be clearing all our accounts and investing everything we can get into a term deposit for our new library. The previous one matures

on August 12. We aim to roll it over with a sizable injection of funds. If you would like to help, please donate now.

### Dr K Jaggar

### **Rugby Committee Meeting Summary**

The fifth meeting of the SBHS Rugby Committee for 2005 was held on 27/7/05. The following is a summary of the meeting:

**Attended:** Rob Fetherston, Serdar Bolen, Kel O'Keefe, J Mittleheuser, Judy Fetherston, Derry O'Rouke, Adrian Vertoudakis, John Bull, G Stein.

- End of season dinners: Senior dinner confirmed as Flat top BBQ No 1 selection with sirloin steaks and gourmet sausages. Junior dinner confirmed as Chef's choice selection similar to previous years. Valda Roser offered linen and centre pieces. Coaches, helpers and Principal to be invited as Committee guests.
- P & C compliance: The proformas have been received. The required information will be gathered and forwarded to the P&C after the AGM.
- Two emails had been received by the Principal from St Joseph's supporters congratulating our 1<sup>st</sup> XV on their never give up attitude and sportsmanship during last Saturday's match.
- The Treasurer reported that all outstanding items had been paid. Current balance is approximately \$8800. Further invoices were passed on at the meeting from S Bolen, G Stein and the school canteen which were paid at the meeting.
- **Bunning's BBQ:** J Mittleheuser will be attending Saturday's Bunning's BBQ to get an idea of what's involved so we will be prepared for our day on 15/10/05.
- **High BBQ prices:** Given the quality and price of our hamburgers compared to other GPS schools, an increase in the hamburger price should be considered for next season.
- High/Syd. Uni raffle: The ARU has refused to give us permission to sell tickets outside Telstra Stadium. S Bolen to pursue other options. Still 8 weeks left to sell tickets. J Mittleheuser to talk to R Outterside for his thoughts.
- Rugby office-bearers for 2006: All positions will become vacant at the next meeting 31/8/05 (AGM). All rugby parents should consider taking up positions especially those currently held by parents of Year 12 players.

G Stein MIC Rugby

### FROM THE WEIGHTS ROOM

Term 3 has seen a marked increase in enrolments with many continuing on from last term and quite a few new enrolments. New plyo-metric boxes have been made (courtesy of the DT department), and are being put to good use by all those looking to increase their athleticism i.e jump higher/run faster.

There haven't been many entries for the Gym Motto/Logo Competition so let's see if we can fire up a few more inspirational ones.



Protein drinks are selling well with demand far exceeding supply. This should be fixed shortly.

If you are looking towards the 4th term with your chosen sport in mind you should be preparing now, especially in regards to your Strength and Conditioning. Muscle/Strength/Athleticism gains cannot be achieved once the regular sporting season begins. These must be reached beforehand and maintained throughout the season. I suggest starting at least 8 weeks (minimum) before regular team training begins if you are looking to pack on some extra muscle and increase your strength. The ball's in your court if that's what you want so I'll see you in the weight's room, sooner rather than later.

Please also take note that on Monday and Wednesday mornings any rowers in the gym will be given 'right of way'. Basketball will also be given a 'right of way' time as well in the near future as will other sports. This doesn't mean you can't come but it does mean that as this group have to get through a lot of work, you will need to make way for them on equipment at all times. Afternoons on all days are fairly quiet so you may like to change your gym times where possible.

### **Rowing**



A new strength and conditioning program has commenced so all rowers take

note. You will be required to attain a higher level of strength than previous years and to achieve this, time has to be put into learning some specific lifting techniques. If you don't want to get left behind the bunch then you better hurry up as some have been preparing for weeks already. Monday morning, Wednesday morning and Thursday

lunch time (12.30-1.30) have been put aside for rowers where they will be given 'right of way' in the weights room. You should be working in pairs and arriving early to beat the 8am rush. And remember as the saying goes,

"THE HARDER YOU SWEAT IN PEACE THE LESS YOU BLEED IN WAR"

### ATHLETICS REPORT



Blue skies and a blazing sun welcomed the Sydney High Athletics team to the Sydney East Regional athletics carnival on Monday and Tuesday of this week.

Twenty two athletes came out to Homebush to represent the school and were poised to put in some dominant performances. With Captain of Athletics and star long distance runner Paul Watzlaff unable to compete due to injury, the heavy burden was placed upon James Barker and Edward Ovadia. In true High spirit they came out top, both running in very dominant performances in the 1500m with Barker claiming 1st and Ovadia 2nd. Barker then backed up the following day to win the 3000m with Ovadia running a close fourth. The future of High long distance also ran very well with U16 runner Ali Amin running 3rd in the 1500m. However it was not just the running in which High showed their prowess, Joel Ninyo winning his discus.

While the senior athletes showed how the long distance events should be done, it was the younger of the High generations that showed how the sprints were done. Lachlan Street claimed silver in the 400m and the 200m. He also put in a strong performance in the 100m and the hurdles to be the top High student at the carnival. With Josh Hui unable to compete, Danny Fu stepped up to the plate along with Joel Livingston, Nelson Ridges and Lachlan Street once again to compete in the U14 4 x 100m relay. All boys ran brilliant legs with changes being made perfectly to lead them to a heat win. Unfortunately their time was just beaten in the following heat, however the boys claimed 2nd overall and will go on to represent the school and the CHS State Carnival in September.

Joel Ninyo Athletics Vice Captain

### **Volleyball Report #8**

Last Saturday saw High playing Newington.

### **Second Grade Report**

The High second grade team entered the match against Newington College determined to win in straight sets, despite losing a set against Scots last week. Upon stepping onto the court, High immediately took a streak of quick points with exceptional passing and hitting from (David) Dizon and Stephen Dong.

This momentum was interrupted by several mistakes on the High side, but it continued when Sam penetrated Newington's defence with his strong, consistent spikes. This win streak not only won critical points but also shattered the Newington side's confidence.

The end of the first set saw the High team comfortably taking it 25 - 13. The team talk once again addressed the mistakes that the High team were encountering in an attempt to minimize the points conceded.



Newington quickly recovered after the first set and threatened High by hitting the ball to places where it was least expected. High responded aggressively with

strong passing and hitting by both Gary and George. High's centre blockers, Henry Dang and Balraj also defended well at the net, shutting down numerous spikes from the opponents. We won the set 25 - 15.

High was fired up to take the game in three sets. Ed was no doubt the man of the match. He single-handedly dominated Newington with his powerful top spin serves, winning 23 points. It was too bad High couldn't get a clean sweep in the third set, but we still managed to humiliate Newington, taking the final set 25 - 1.

### **Gary Chan**

### **First Grade Report**

The High First Grade team entered the match against Newington College determined to pull off a convincing win just like Second Grade minutes before. From the warm up, it was clear that the individual skills of Newington had really improved.



Upon stepping onto the court, High immediately dominated the early stages with some exceptional hitting by both Yaegan Doran and Michael Zhao.

Passing mistakes again became costly errors, but some 'tactical' substitutions by Mr Kay saw the early momentum regather. High took the set 25-13, with some good cover in the middle by both Karl Kruszelnicki and Dominic Grimm.

Second set started rather slowly with some mistakes and good play from Newington to keep the scores close, but a good combination of accurate setting by Fahmy Balgahom and hard hitting by Robert Lu once again saw high taking the lead. Once again, poor passing resulted in a close set. High brought the set home with some great hits by Terry Ly and Victor Nguyen.

Strong passing by Alex Le and Jamie Tao saw High taking an early lead in the third. Accurate setting and strong hitting saw High dominate the set. High won the match 3 sets to none, 25-13, 25-20, 25-14. Newington is shaping up to be in good contention with fast improvements in all areas of their game.

### Bill Zhang

### **High vs Scots**

Saturday last fortnight saw a transformed Scots team. Their reception, serving and spiking skills have come along in huge bounds.

They weren't strong enough to defeat High's First grade, but they were strong enough to take **ONE** set off a weakened and complacent Second Grade side.

### **Upcoming events**

1. Sunday 7<sup>th</sup> August: Fundraising for Australian Schools Cup. All students wishing to be considered for the Australian Schools Cup (5<sup>th</sup> -10<sup>th</sup> December) should be in attendance with an adult helper.

Funds raised will be allocated to teams based on the number of boys from each team assisting at this parking day. <u>Each team</u> must have at least one parent in attendance for the duration of parking.

Parking will run from 12 noon to 4 pm.

2. Saturday 27<sup>th</sup> August: 2005 Volleyball Awards Luncheon will be held at Abbotsford on Saturday 27<sup>th</sup> August from 1 pm to 4 pm. Parents are encouraged to attend. \$5 per head payable to Mr Kay or Mr Parker.

The following presentations will be made:

Report from Captain of Balls
Most improved in each team (medal presentation)
Best and fairest in each team (medal presentation
GPS results in 1<sup>st</sup> and 2<sup>nd</sup> Grade
Captain of Balls for 2005/2006
M Kay

**NB** The weekend following the volleyball luncheon will see High pitting their skills against other schools in the next Metro Schools Tournament.

### FROM LOTE CLASSICAL GREEK



In case you've never heard of it (this should not be, with an SBHS tradition going back to 1883, of studying the classical languages!) an annual Reading Competition is held for Years 10 and 11 students

of Latin and/or Greek. This year Russell Rahman (11) and Eugene Stadnik (10) took part in the Greek section and made it to the Finals, which were held on July 28<sup>th</sup> at Sydney Grammar School. They read very well indeed, but the other two finalists (from Meriden and Trinity) had the edge and won the two prizes for their excellent effort.

Seventeen schools competed in this event. The task was to read out aloud two passages from significant works of 5<sup>th</sup> century BC authors, one prepared, the other "unseen", with 15 minutes of preparation time, from the stage before an audience of academics, teachers, parents & visitors and the other competitors. Perfect pronunciation, intonation and expression were the criteria.

In September the Year 9 reading competition will be held (different competition, different place), and we'll soon be wishing our Year 9 Latin **BONA FORTUNA.** 

So come on, Classical Students in Years 7 and 8, do your best work and be ready to represent the school when the time comes.

C Werner LOTE

### **GERMAN - YEAR 8 TO 11**



Theatre Performance by the Group "Der Schock"

"Struwelpeters Welt"
Monday 25th of July
Period 1 in the Hall

Student feedback by Frederick Lee

On Monday period 1 German students from Years 8-11 attended a performance called 'Der Schock: Struwwelpeters Welt' (The Shock: Shock-headed Peter) by 'Theatre LOTE.' The performance was about German folk tales and what children were once threatened with in Germany, if they once misbehaved, eg; having your thumbs cut off for sucking them! There were also other little stories such as the tale of the girl 'Paulinchen' a pyromaniac who accidentally set herself alight

with while with fire. pet cats, and were using mobiles to not to call



matches,
playing
Her two
Minz
Maunz
their
chat, but
the fire

brigade or an ambulance, when Paulinchen was on fire. They just watched her burn. The performance was really funny and everyone enjoyed it and it felt a little weird listening to almost an hour of non-stop German. Overall it was light-hearted and funny and I enjoyed it a lot!

### Note by Mr Scheibel:

In this modern version of Struwelpeter shown to us, cats have mobiles and the boy Struwelpeter was played by a young lady. The original is an 1896 comic book intended to warn children about the dire consequences of misbehaviour in those days.

# FROM THE LIBRARY FUNDRAISING BARBEQUE at Bunnings Mascot



Huge thanks to prefects – Gabriel McManus and Peter Gordon for their assistance and special thanks to Valda Roser for the big organisational job. Thanks also to the parents and staff

who gave up their free time to fundraise for our new library. \$824.45 was raised for the Library and \$300 went to Skiing. Two thousand of those efforts and we might get a \$2,000,000 library sometime!

We really need to succeed with the <u>letter writing</u> <u>campaign</u> to our member of parliament if we don't want to do 2000 barbeques.

Thanks to everyone involved **Mrs Crothers** 

### SCIENCE NEWS

### Results of Science Quiz no. 7

This was about the recent skateboarder who leapt over the Great Wall of China. His final speed at the bottom of the ramp was correctly calculated using energy considerations by Aditya Hatle (8S) and Nikita Slinko {7R}.

Quiz number 8 will be posted next week. I Cox

## GPS DEBATING RESULTS- ROUND TWO

### SHS vs TKS

All three of our senior teams were undefeated this week against Kings on the topic "that the Australian government should limit Medicarefunded access to In-Vitro fertilisation".

The firsts and thirds negated the topic, with the seconds affirming and winning on a split decision (the firsts and seconds are adjudicated by a panel of three people).



We had a Fourths team debate against Sydney Girls team who came over to gain more practical experience. Thanks to the team and to Julia Bowes for adjudicating them.

The 10B, 9A, 8A and 8B teams won their debates "that women's sport should be given equal recognition".

Unfortunately the 10As' eight debate winning streak came to an end this week and the 9As had only a narrow win.

Interestingly, the 7Bs won the negative- "that single sex school are better for boys".

The results table is below and can be found at <a href="http://www.sydneyhigh.org.au/debating/results.sht">http://www.sydneyhigh.org.au/debating/results.sht</a> ml.

Year	Round 1 VS Joeys	Round 2 VS Kings
Firsts	Won	Won
Seconds	Won	Won (split)
Thirds	Lost	Won
10A	Won	Lost
10B	Won	Won
9A	Lost	Won
9B	Lost	Lost
8A	Lost	Won
8B	Won	Won
7A	Lost	Lost
7B	Lost	Won

This week we face Newington on their home turf.

Senior Debates commence at 8.00 pm, and I warmly invite and encourage boys to attend these debates.

Jocelyn Brewer MIC - Debating

### Model United Nations Assembly Randwick Girls High School June 30, 2005.

On the last Thursday of Term 2, ten students from Year 10 participated in a Model United Nations Assembly (MUNA) at Randwick Girls High School.

MUNA is about developing appropriate minds for a peaceful and purposeful global future.

MUNA events are mini versions of events negotiated in the same style and using the same protocol as in the UN. MUNA is a unique and important opportunity for students to research issues from different perspectives and gain a greater understanding of issues facing and shaping our world. It is a very challenging day for the students who have to synthesise their research with what is presented by other nations on the day and re-evaluate their stance with regard to what has been presented.

Each team of boys were allocated a nation which has membership in the UN and spent 6 weeks researching three key resolutions which were negotiated on the day. With the help of their coach, Sydney Girls High School Old Girl and World Champion Debater, Julia Featherston, the boys were able to gain a solid understanding and level of analysis of their nation's stance on each issue.

The boys who participated were

### **FRANCE**

Blaise Prentice- Davidson Kelvin Yu Raymond Roca



### **CHINA**

Kelvin Wong Wilson Wong Yu Lin



### **NORTH KOREA**

Anthony Morris Max Keldoulis Thomas Hurrell Efrem Blackshield.



At all times the delegates are bound to represent the views of the country they were representing on the day; they had to conduct quite a high level of research into the politics, history, geography, government, trade agreements, alliances and culture of each nation.

The day consisted of preparing and delivering an introductory policy speech that outlined the current issues which impacted each nation, three planned resolutions which explained each nations stance on the matter and devising and negotiating an unplanned resolution which was a product of the issues that arose out of the discussions.

The resolutions debated are as follows-

- 1. In keeping with UN philosophy, that the UN endorse a program of global citizenship: that such a program would enable free-flowing (im/e)migration and economic free trade arrangements.
- 2. That the UN endorses sanctions imposed upon recalcitrant nations ignoring key environmental edicts.
- 3. Recognising the UN position on women's issues and international women's rights which seeks to redress the unjust practices and the denying or limiting of fundamental rights and human dignity for women, that the UN endorse a program of sanctions against nations whose policy development perpetuates discrimination and inequity for its female residents.

Unfortunately High were not victorious on the day with the North Korean Delegation coming second by a mere one point to a girls teams representing Zimbabwe. North Korea scored 40 points, China was close behind on 39, and beaten by a whisker were the French team on 38.5 points (and who started their policy speech in very fluent French!). Next year with more attention paid to preparing their table decorations and the more homely touches to their desks, I'm sure we have every chance to win the event!

All the boys had a fantastic experience at MUNA and we would sincerely like to thank Ms Kerry Bannon from Randwick Girls High for all her incredible enthusiasm, energy and great organisation of the day.

**Jocelyn Brewer MIC - Debating** 

# Mathematics Faculty To Infinity and Beyond!

Definition of infinity expands for scientists By Sharon Begley, The Wall Street Journal

At the Hotel Infinity, managers never have a problem with over booking. If you arrive with a reservation and find that the hotel's infinite number of rooms (named 1, 2, 3 and so on, forever) are all occupied, the manager simply moves the guest in Room 1 to Room 2, the guest in Room 2 to Room 3, and on and on until every guest has a room and you get Room 1. In an "infinite set" such as the rooms at the Hotel, whatever you thought was the highest-numbered member of that set isn't.



The next time you're in town, you have an infinite number of friends in tow, and you try the Hotel Infinity again. The manager is happy to accommodate a party of

infinity even though his infinite rooms are, again, full. Knowing that your friends have an odd aversion to even numbers, he moves the guest in Room 1 to Room 2, the guest in Room 2 to Room 4, the guest in Room 3 to Room 6, etc. You and your friends get the odd-numbered rooms, of which there are, conveniently, an infinite number.

If thinking of infinities makes your head spin, you're in good company. Georg Cantor, the early-20th-century mathematician who did more than anyone to explore infinities, suffered a nervous breakdown and repeated bouts of depression. In the 1930s, some fed-up mathematicians even argued that infinities should be banned from mathematics. Today, however, infinities aren't just a central part of mathematics. More surprising, says cosmologist John Barrow of the University of Cambridge, England, in his charming new tome, "The Infinite Book," scientists who study the real world are having to take infinities seriously, too.

Not long ago, if the solution to an equation included an infinity, alarms went off. In particle physics, for instance, "the appearance of an infinite answer was always taken as a warning that you had made a wrong turn," Prof. Barrow says. So physicists performed a sleight-of-hand, subtracting the infinite part of the answer and leaving the finite part. The finite part produced by

this "renormalization" was always "spectacularly good agreement with experiments," he says, but "there was always a deep uneasiness" over erasing infinities so blithely. Might physicists, blinded by their abhorrence of infinities, have been erasing a deep truth of nature? Suspecting just that, some scientists now see infinities "as an essential part of the physical description of the universe," says Prof. Barrow. For instance, Einstein's equations say the universe began in, and will end with, an infinity of density and temperature, something long regarded as a sign that his theory breaks down at the beginning and end of time. But in a 2004 paper, Prof. Barrow calculated that Einstein's equations allow a point of infinite pressure to arise throughout the expanding universe at some time in the future.

In addition to coming around to the view that infinities might be real, rather than signs of a problem with Einstein's and other theories, some cosmologists suspect that infinities at the beginning and end of time "have quite different structures," Prof. Barrow writes. Just as at the hotel, not all infinities are equal. And that is making the weird math of different-size infinities suddenly relevant in the physical world, too.



To mathematicians, "equal" means you can match the elements in one set to the elements in another, one to one, with nothing left over. For instance, there is an infinite

number of integers: 1, 2, 3, 4 ... . There is also an infinite number of squares: 1, 4, 9, 16 ... . You can match every integer with a square (1 with 1, 2 with 4, and so on), so the two sets are equal, as long as you never stop matching. But wait: Every square also belongs to the set of integers. That suggests that the set of integers is larger, since it contains all the squares and then some. Surely there are more integers than squares, right?

Actually, no. Before his breakdown, Cantor asserted that if the elements in one infinite set match up one to one with the counting numbers, then those infinities are of equal size. The infinity of squares and the infinity of integers (and the infinity of even numbers) are therefore equal, even though the infinity of integers is denser. Decimals, however, are different, mathematicians say. There is an infinite number of them, too, but this infinity is larger than the infinity of integers or squares. Even in the tiny space between zero

and 1, there's an infinite number of decimals with no certainty as to what comes next. What comes after .1, for example? Is it .11 or .2? Just as mathematicians found a distinction among infinities, so scientists trying to fathom the physical world may need to distinguish among infinities.

In his study of infinities, Prof. Barrow noticed that a universe like ours that seems infinite in size, extending without bound, presents curious ethical dilemmas. An infinite universe must have infinite amounts of good and evil, he writes. Nothing we do, or fail to do, can change that, for adding a bit of good to an infinite amount of good still leaves infinite good, and subtracting a bit of evil from an infinite amount of evil still leaves infinite evil. "What is the status of good and evil," he wonders, "when all possible outcomes actually arise somewhere" ... or sometime? Small wonder infinity drove Cantor mad.

If at first you succeed, try to hide your astonishment.

If a man could have half his wishes, he would double his troubles.

(Benjamin Franklin 1706-1790)

### **Subject Choices 2006**

A meeting will be held in the Great Hall at 7:00pm on Tuesday 9 August to provide information about **English Extension 1 and Extension 2 for Year 12 2006**.

The number of boys attempting Extension 1 and Extension 2 English will be restricted.

Ms Trompetter (Head Teacher English) will explain the requirements of the courses and indicate the criteria to be used in determining which boys will be able to attempt these courses.

### WORDS OF WISDOM



When in doubt, think!

When faced with no challenge, create one.

Living on Earth is expensive, but it does include a free trip around the sun every year.

Someone who thinks logically provides a nice contrast to the real world.

In success, failure is merely a detour.

Nor sitting at his hearth at home doth man escape his appointed doom. (*Aeschylus c. 525-456BC*)

Those who know the least, know it the loudest.



## HEY KIDS! EVER THOUGHT OF LEARNING KARATE, AND BE TAUGHT BY A MULTI NATIONAL GRAND CHAMPION 2ND DAN BLACK BELT - DANIEL TRIFU?

What benefits am I going to get from learning Karate?

- You will have lots of fun, and make lots and lots of new friends.

- Learn to set your own goals and achieve them for yourselves, or with your team mates.

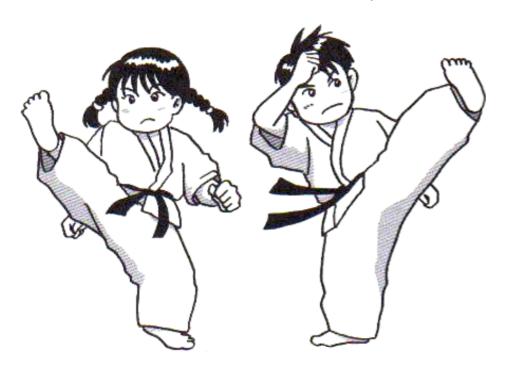
- Understand why exercise is so important for you.

 Learn to respect others, improve on your mental awareness, and feel confident to achieve whatever goal you desire in life.

Where: The Andrew (Boy) Charl ton Pool, Mrs Macquarie's Rd, The Domain

time: Tuesday- 4.30pm-5.30pm and Saturdays 12.30pm-1.30pm

contact: Daniel Trifu on 0410 799 - 816 for further enquiries











### SYDNEY HIGH JUNIOR RUGBY DINNER

Help celebrate another great year of rugby at High by attending the 2005 Junior Rugby Dinner.

WHEN? Thursday, 18<sup>th</sup> August 2005, 6.30pm. for 7.00 pm

WHERE? Great Hall, Sydney Boys' High School

WHO? Players, parents, friends, supporters and coaches of

our Junior rugby teams

WHY? Because the friendships made through High Rugby last

a lifetime

COST? \$25/person. Payable to the school office by Friday

12/8/05

\* This is a BYO function

<b>%</b>	··· ····		
SYDNEY HIGH JUN		Y DINNER	
Please find attached the amount of \$	for	x \$25/person, as pay	ment
for tickets under the name of		, roll class	,
rugby team			









## SYDNEY HIGH SENIOR RUGBY DINNER - 2005

Help celebrate another great year of rugby at High by attending the 2005 Senior Rugby Dinner.

WHEN?

Saturday, 20th August 2005, 11.30am. for 12.00 pm

WHERE?

Outterside Centre, Teviot Ave, Abbotsford

WHO?

Players, parents, friends, supporters and coaches of

our Senior rugby teams

WHY?

Because the friendships made through High Rugby last

a lifetime.

COST?

\$25/person. Payable to the school office by Friday

12/8/05. Guest maximum 100

<b>%</b>	
SYDNEY HIGH SENIOR RUG	BY DINNER - 2005
Please find attached the amount of \$	forx \$25/person, as payment
for tickets under the name of	, roll class,
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<sup>\*</sup> This is a BYO function

# SOME KIDS CAN'T LIVE AT HOME WITH THEIR MUM AND DAD



There are many children in our area who are in need of a safe & secure home environment because they are unable to experience this in their own homes. This may be due to abuse, neglect or family breakdown.

The NSW Department of Community Services (DoCS) is looking for people who can provide crisis, short term, respite or long term care for these kids.

We are especially looking for foster carers for children five years & older. We also need carers for siblings, so brothers & sisters can stay together.

Children need carers who can provide stability & can help them through the different & sometimes challenging stages of their lives.

You can be single, married, with or without children of your own, & from any cultural background. It is important that you have experience with children. DoCS staff will work closely with you & support you with ongoing training & allowances.



### Become a Foster Carer.

For more information please contact Rob, Mariam or Cheryl on 9245 1757



## What do I need to know?

Date: September 3, 2005 Time: 6:00 pm for 6:30 pm start Location: The Outterside Centre, Abbotsford Price: \$30 per person

### What do I do next?

Guaranteeing your spot at the Debating Dinner is easy. Just follow the steps below:

- 1. Pay at the office by August 26, 2005.
- 2. Fill in, tear off and return the slip below to Ms Brewer.

# BHSDEBATING/ASPIREHIGHER

PLEASE DETACH



## **Debating Dinner Registration Slip**

Name:

Roll call class:

Number of people attending: