Cumberland High School

Excellence in Education

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Celebrating Excellence!

Over the past few weeks, we have been able to recognise and celebrate student and staff excellence at Cumberland High School. Congratulations to *(from top left)* Mrs King, Mr Tang and Mrs Rigg and to our 2019 School Captains *(pictured below with Education Minister Rob Stokes)* Aleksandra and John on their Minister's Award for Excellence. For more details, see over the page.

Events for Term 3 and 4, 2018

11 Sep	MAD Concert – 2 Nights
17 Sep	Year 12 Hospitality Work Placement Week 2
18 Sep	Prefect Induction Assembly
25 Sep	Sports Presentation Assembly
26 Sep	Year 12 Formal
27 Sep	Community Mentoring Breakfast
27 Sep	Prefects Car Wash
28 Sep	Year 12 Graduation Assembly
28 Sep	Last Day of Term 3
15 Oct	Term 4 Commences – Staff and Students Return
16 Oct	P&C Meeting – 7pm
18 Oct	HSC Written Exams Commence
25 Oct	Community Mentoring Celebration Breakfast
25 Oct	Year 7 Vaccinations
26 Oct	Year 9 Peer Support Training
29 Oct	Year 7 Exam Week
05 Nov	Year 8 Exam Week
09 Nov	HSC Written Exams Conclude

Principal's Voice

Celebrating Excellence Cont.

Congratulations to Aleksandra Najdovska and John Bekiaris, the successful recipients of the prestigious Minister's Award for Excellence. Aleksandra and John have demonstrated excellence as school leaders and served our school community with exceptional diligence and unswerving commitment. These awards were presented at Sydney Town Hall and highlighted the outstanding achievements across our Public Schools. A fabulous video clip was shared at this event that celebrates our achievements as a system. The link for ***Building Great Australian Lives*** can be found at https://vimeo.com/281212027.

Mr Tang, Mrs Rigg and Ms King were also celebrated last week at the Western Sydney SPC Excellence in Public Education Awards ceremony. Both Mrs Kim Rigg and Mr Ronald Tang received ***Excellence in Teaching Awards*** and were acknowledged for their outstanding service to our students and school community and outstanding teaching for 35 years and 27 years respectively. Ms Sarah King was also acknowledged for ***Excellence in Promoting Student Wellbeing.*** Ms King's warmth, genuine care and investment in all students have enabled our students to thrive. Ms King's outstanding wellbeing initiatives have also fostered a positive and inclusive learning culture at Cumberland High School.

Congratulations to our outstanding student leaders and staff!

The excellence in student leadership continues to flourish as a new wave of student leaders has been elected to lead the school in 2018/2019. After a very rigorous process with high participation and interest from our Year 11 cohort, our Prefects, Vice Captains and Captains for 2018/2019 have been elected.

Congratulations:

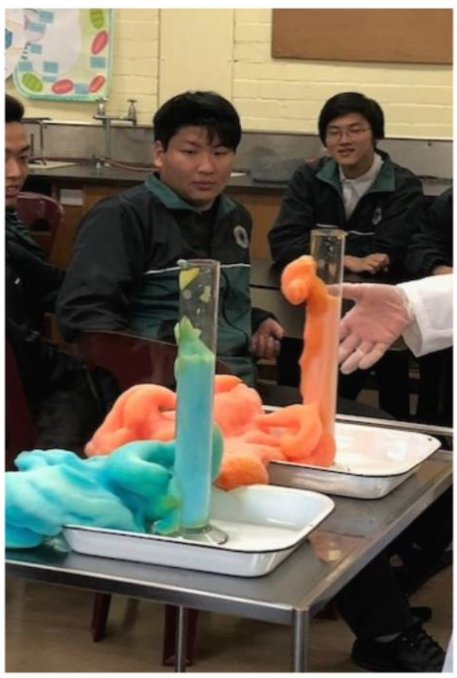
Captains: Jack Roser and Elinor Bickerstaff- Westbrook

Vice Captains: Rose McPherson and Feng Ye

Prefects: Jessie Campkin, Gabriella Forlani, Amy Hong, Hannah Jang, Mackenzie Verey, Joshua Kim, Cyrus Lam, Tim Marks and Edison Ruan.

International Student Science Show

Our inspiring Science Leaders hosted another rich and exciting Science Show for our International students. Interactive experiments and fun scientific investigations had our students enthused! Congratulations Ms Stead, Ms Kitson, Ms Kwong and all Science leaders for a fantastic show! *(See Images Below)*



Excellence in Competitions

At our school assembly today, we presented 98 credit, merit and distinction certificates for the Big Science Competition, the ICAS Science competition and ICAS Digital Technologies and National Computer Science Schools' competition. What a fantastic response and result for our students!

R U OK DAY – The Helmsman Girls Fundraising and MAD

Today we also paused as a school community to reflect upon the meaning of R U OK Day. *(See images right)*

Look out for our next newsletter edition that will capture the highlights of our SRC's R U OK initiatives and our Helmsman Project Girls fundraising and sporting initiative to raise funds for Westmead Children's Hospital.

In our next newsletter, we will also capture the highlights of our MAD festival. MAD will showcase our students' talents tonight and tomorrow night, commencing 7:00pm. We have tickets available for purchase at the door -$5 for students, $10 for adults and $25 for families! Don't miss it!

Just another week at Cumberland High School with our committed teachers and students serving their school with excellence, getting involved and making a difference!

Ms M. Pikoulas
Principal

Math News

Mathematics Subject Selection

At Cumberland High School, all students must study Mathematics in Years 11 and 12. Our year 10 students have nominated their preferences for Mathematics in 2019 from the following options:

- Mathematics Standard 1
- Mathematics Standard 2
- Mathematics Advanced
- Mathematics Extension 1 (off timetable)

Most students will be choosing between Mathematics Standard and Mathematics Advanced.

Mathematics Advanced is generally suggested for students looking to study Health Sciences or Engineering at university. However, it is not often a prerequisite, so interested students should do their own research.

Mathematics Advanced is heavily weighted towards the study of Calculus (the mathematical study of change), which requires a very strong foundation in algebra and equations. The Standard courses are more concerned with real-world examples and case studies when compared to Advanced.

In Term 4, students in Year 10 interested in completing Mathematics Advanced will have the opportunity to sit an entrance exam to determine their readiness for the challenges of the course. Students who can't yet demonstrate the required skills to succeed in the course will need to attend Maths Consolidation sessions before or after school on Thursdays. They will have a second opportunity at the entrance exam in Term 4.

Students unable to meet the requirements of the entrance exam will need to complete a booklet over the summer holidays to ensure that they are fully prepared for the challenges of the advanced course.

Students with any questions on their Mathematics subject selection should speak to their teacher.

ICAS Mathematics Competition

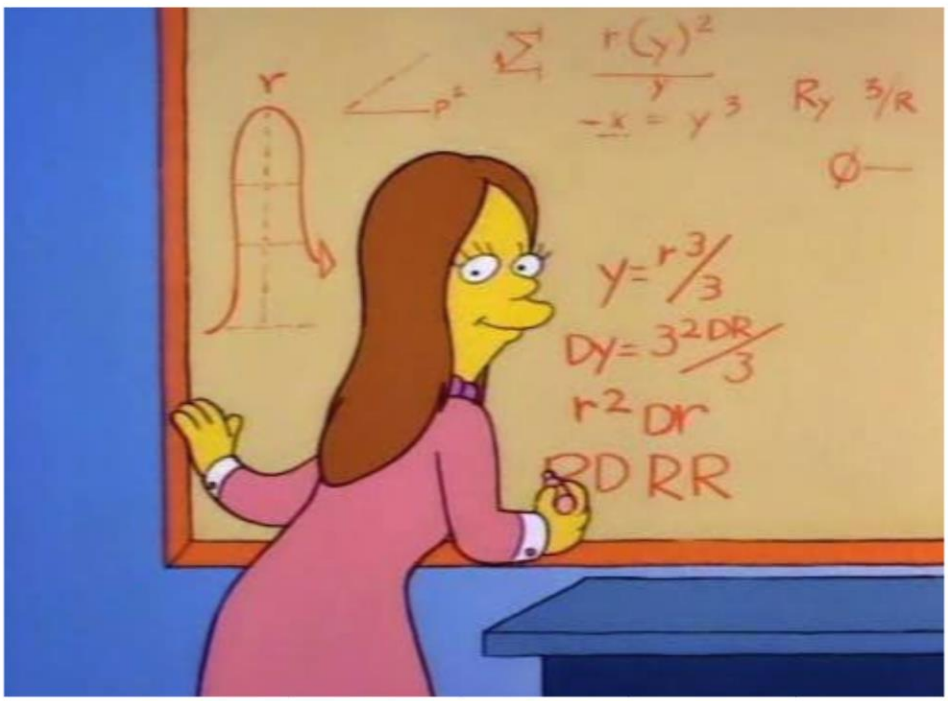
In August over 50 students in Years 7 to 11 participated in ICAS Mathematics. This is an annual event run by the University of NSW where students challenge themselves against other students, not only across Australia but also in over 20 countries in Asia, Africa, Europe and America.

ICAS Mathematics aims to promote the importance of Mathematics as a subject and gives students an opportunity to discover their talents in Mathematics.

Students were asked to tackle up to 35 questions in 1 hour. Questions got increasingly challenging as the paper progressed. Students were able to test their skills and knowledge across five key strands; Algebra and Patterns, Chance and Data, Measurement and Units, Number and Arithmetic, and Space and Geometry.

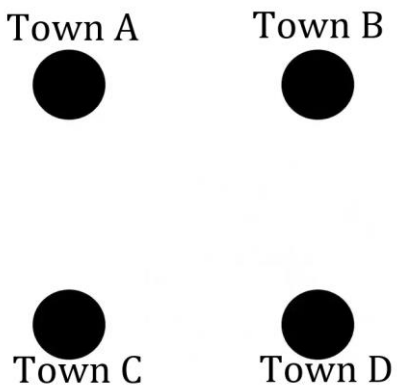
Congratulations to all students who participated, and thank you to Miss Frew who organised the day. Results will be released to the school in Term 4.

ICAS
International Competitions and Assessments for Schools



MATH CHALLENGE

1. What is the French word for "pie chart"?
2. Potatoes are on sale, so Mr Bell buys 100kg. He finds that the potatoes he bought are 99% water, so he leaves them outside until they are 98% water. How much do they now weigh?
3. Four towns together form a square. Town A is 1km from Town B. What is the minimum distance of road to be built that connects all four towns together?



The first student to see Mr Bell with correct answers for all three questions will receive a prize.

Serving Pi in Maths

Year 7 Red were investigating the relationship between the circumference of a circle (the distance around the outside) and the diameter of a circle (the distance from one side of a circle to another traveling through the centre*). See images on right.*

We measured a number of different sized circles and recorded their circumference and diameter. We then divided the circumference by the diameter.

When we wrote all our answers on the board we discovered that all our answers to circumference divided by diameter were around 3! It didn't matter how big or small our circle was. We had discovered Pi!!!

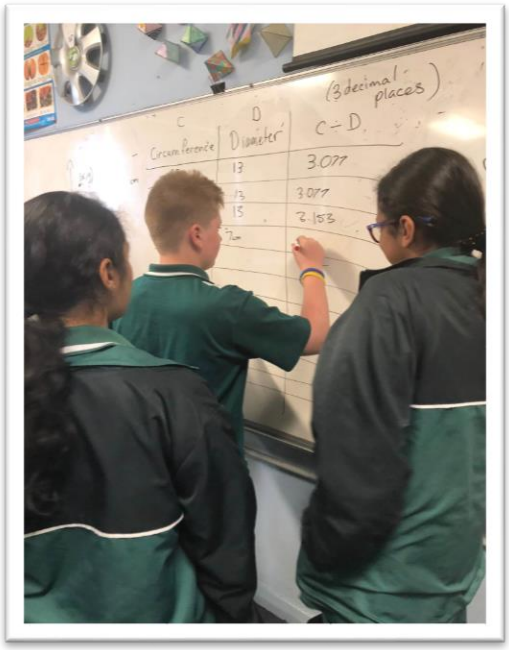
Fun Pi Fact 1!

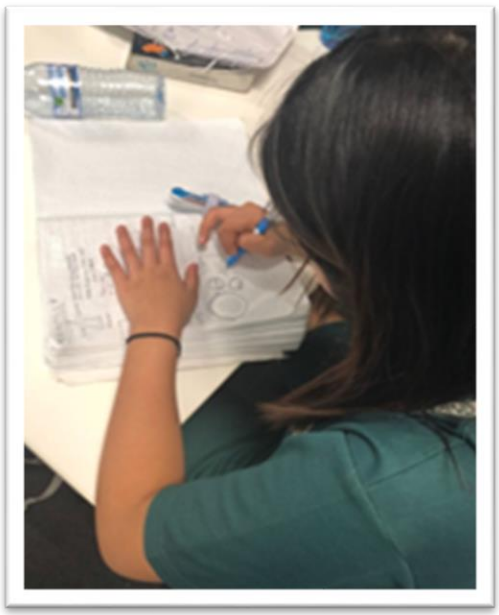
Pi or π is a special number which links the circumference to the diameter. Pi = 3.14159 to 5 decimal places, however, we still have not discovered the end of Pi. The decimal places just keep going!

Modern computers have calculated the 2,000,000,000,000,000th value of Pi.

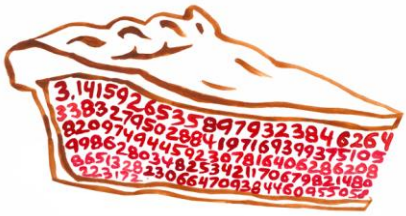
Fun Pi Fact 2!

Archimedes of Syracuse (287-212 BC) is largely considered to be the first to calculate an accurate estimation of the value of Pi.





More Pi in Maths!



Year 8 Orange also spent a lesson exploring the relationship between the diameters and circumferences of circles, and discovering the existence of Pi.

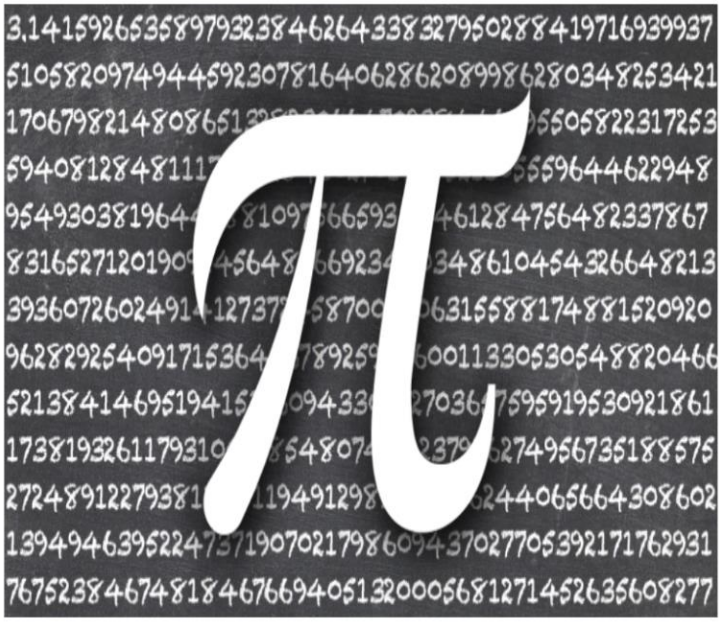
They described the session as "interesting, informative, fun, entertaining, engaging and exciting" and mentioned that it was "helpful to visually see what I'm learning". *See images below and right.*

Fun Pi Fact 3!

The record for the most digits of pi memorized belongs to Chao Lu, of China, who recited pi from memory to 67,890 places in 2005, according to The Guinness World Records.

Mr G. Bell
Rel. Head Teacher Mathematics

Mr C. Diamond
Mathematics Teacher



STEM at UTS

On the 15th June, Naman Ganjekar, Dev Chopra, Adwithiya Puri, Alex Warnecke and Danial Amin-Rahmanlou accompanied by Mrs Bastock attended a Stem Day at UTS.

It involved getting up earlier than usual and travelling into the city.

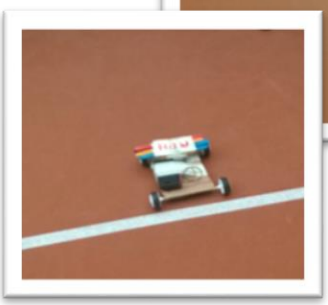
The day started with a forum made up of some students currently studying at UTS and a computer analysist who gave us an overview of the options available at UTS.

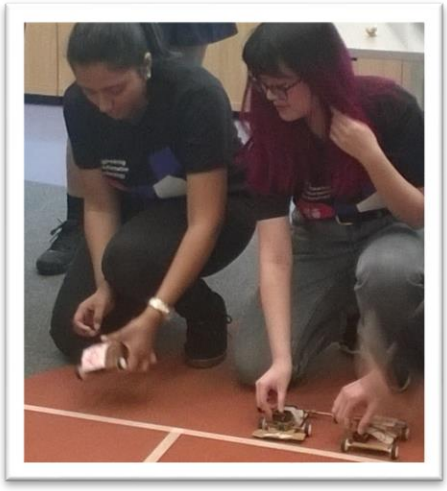
Throughout the day we attended various workshops where we were involved in thinking creatively to build solutions for various problems, such as building a wind turbine out of cardboard; designing a fast model car and the thought processes required to solve everyday problems.

Dev, Addy and Alex made a friend. They also won the model car race with their design. *See images on right.*

We thought it a fun and engaging day, and my favourite part of the day was meeting University students who shared their experiences with us.

Danial Amin-Rahmanlou
Year 10 Student





Images at bottom from left to right: Alex's car, opposition's car and the start of the race.

Mathematics Consolidation

Does your child need help in Mathematics?

For the past year or so, Mathematics teachers of Cumberland High School have given up their Thursday mornings and afternoons to help students with their mathematical work.

Students come for all sorts of reasons. We provide help with their homework and/or Mathematics assignments; their overall comprehension of new concepts; study tips; how to write a summary sheet and much more.

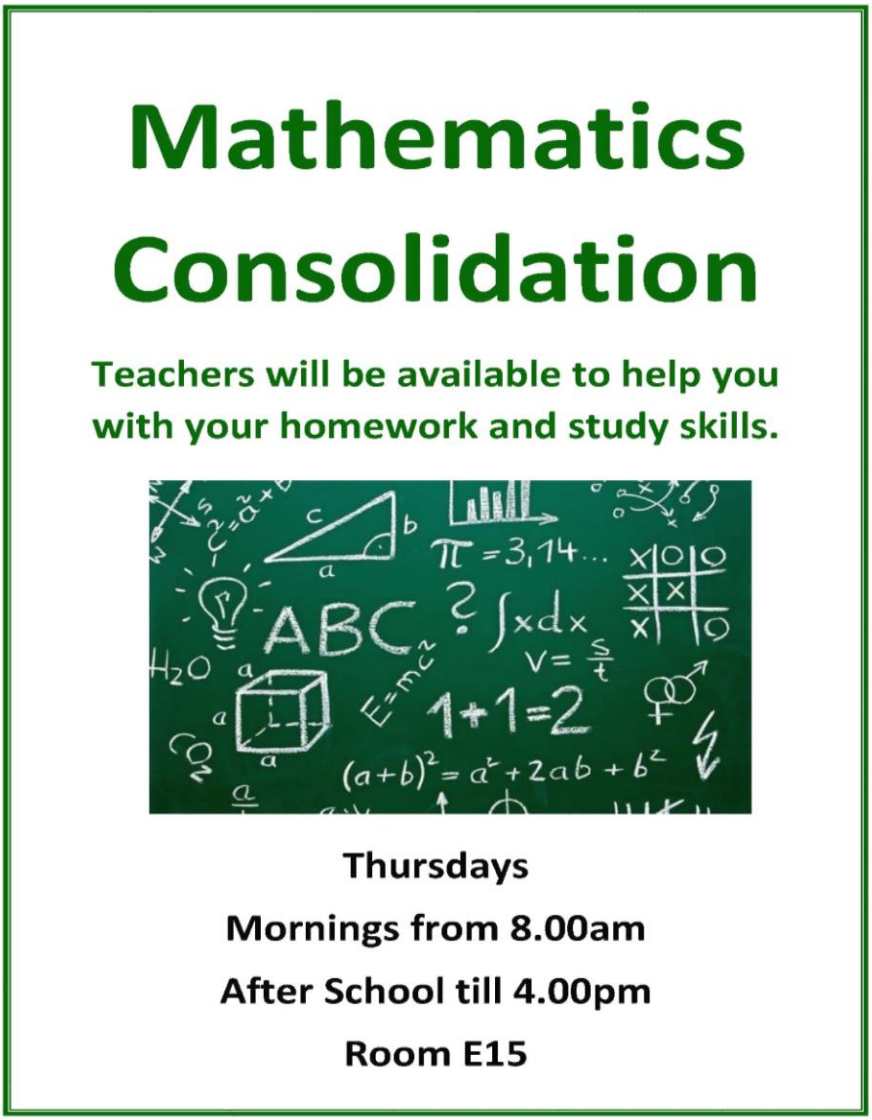
Last week I asked Maison, Izabella, Jeffrey and Andrew why they came to Maths Consolidation and these were their responses:

- Parents made me
- I want to improve my ranking by three
- I have a test coming up and I want to do really well
- I want to improve my results, so I can pass

See details of the Mathematics Consolidation on the right of this page.

Ms H. Bastock
Mathematics Teacher

Image Below Right: Mr Aoki assisting Andrew with his homework.



Winning at Maths!

Time to celebrate! For only the second time ever, an Australian has won the most famous prize in mathematics – the Fields Medal. Let's take a moment to celebrate the achievements of the winner, Akshay Venkatesh.

Akshay is a number theorist, which means that he's particularly interested in questions about whole numbers. Whole numbers seem pretty simple – they're the first numbers that you learn and they're easy to add and multiply. But questions about whole numbers can be notoriously tricky.

Akshay is known for using completely different areas of maths to solve problems. When looking at a question about factorisation – using division to break a number into smaller whole numbers – Akshay turned to a part of geometry known as topology.

Topology looks at what makes shapes the same or different when you bend and stretch them.

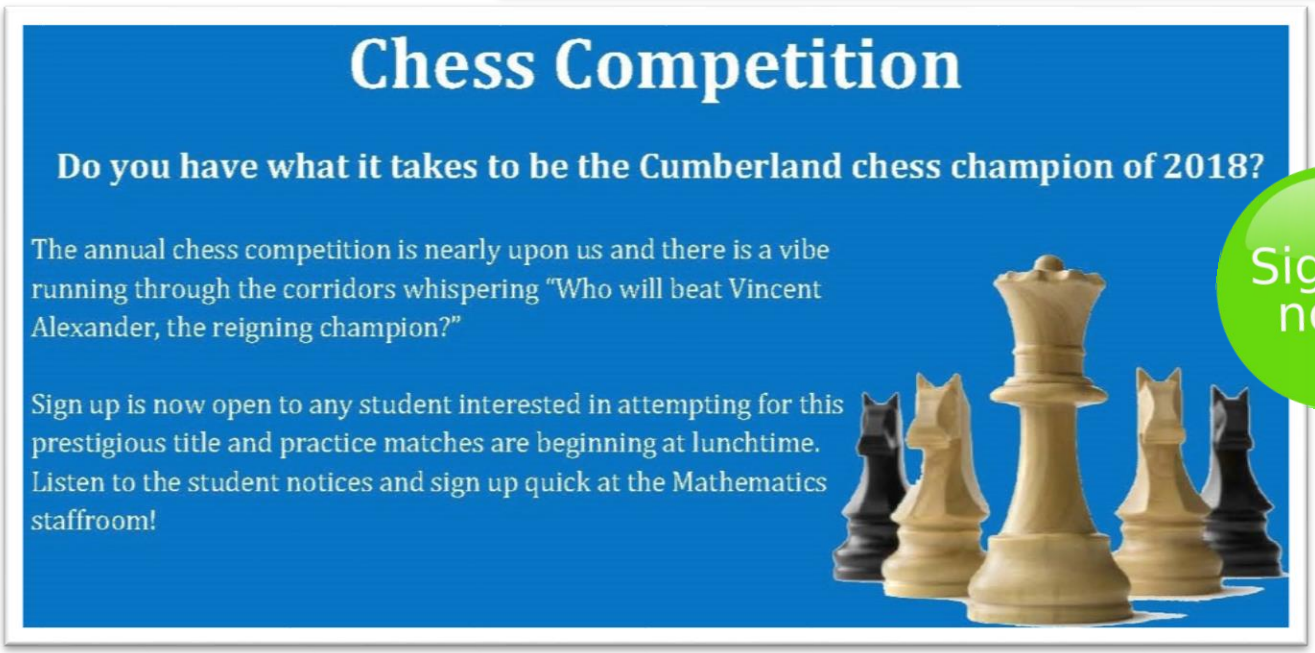
Akshay made a connection between the factorisations he was doing and certain shapes. In the process, he not only found the factorisation answers he was seeking, but also found some new results in topology!

The Fields Medal is a great opportunity to celebrate Akshay's achievements, but it's also a good time to look to the future.

Like all Fields Medallists, Akshay is under the age of 40, so with any luck, his best work is still to come!

Ms J. Ashton
Mathematics Teacher (Excerpt from Double Helix Magazine)

The Fields Medal contains about $5700 worth of gold.



Library News

Premier's Reading Challenge

Congratulations to the students who have successfully completed the Premier's Reading Challenge which involved reading 20 books this year. It was encouraging to see the number of students completing the challenge which is double from last year.

Wide Reading lessons

To keep on encouraging our students to read, many classes have booked into the library for wide reading lessons. For some students the simple pleasure of reading a book has been eroded by the compulsive nature of online games and social media.

Year 7 and 9 Information Skills Lessons

Both Year 7 and Year 9 have had two information skills lessons as part of their Science Research Assessment Task preparation. These valuable information skills will not only assist our students in the successful completion of their assessment task but also enable our students to avoid being scammed or deceived by false information. Some of the skills taught include:

- Effectively internet searching techniques, including some Google keyboard shortcuts
- The understanding that they should critically evaluate all online information
- How to check if information is valid and reliable
- Creating a bibliography using "Cite this for me" (an online bibliography generator)
- Using the amazing online resources available freely through Parramatta Library

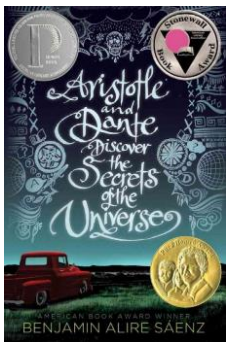
Sphero Robotics

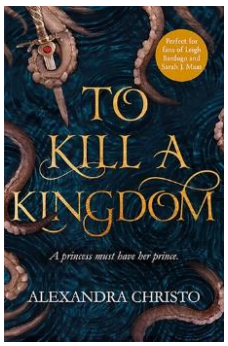
In addition to our Edison robots, the school has purchased a class set of Sphero robots for use in the robotics group and in classroom activities. These fun robust robots are easily programmed on iPads or via a phone App. They have many practical applications in Science, Technology, Mathematics and ICT.

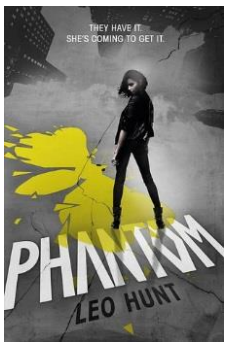
Upgrade of our Senior Study Area

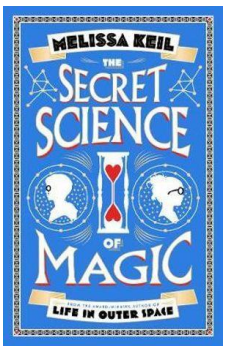
The downstairs senior study area has received a facelift with three new large whiteboards that have lightened the atmosphere but also allowed students to work together in brainstorming their ideas. These whiteboards have been continually utilised since they were installed. The furniture in the room will also be upgraded with new movable tables and some extra computers to facilitate an effective study environment for our senior students.

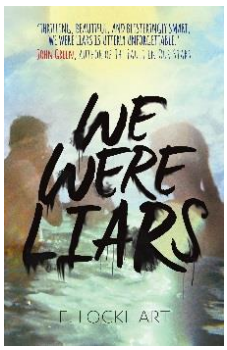
Ms K. Alexander
Teacher Librarian

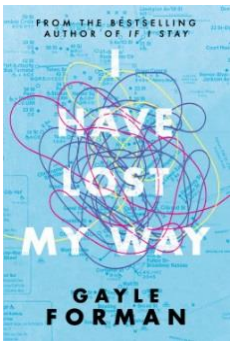












Study Skills

Tips For September – Best Way To Study?

Students sometimes ask 'what is the best way to study?' The answer is: there is no best way. An important lesson for students to learn is that everyone learns in different ways, everyone has different approaches and preferences, and what works well for one person may not work well for another. This truth applies to all aspects of effective learning – time management, research skills, writing skills and so on.

There are certainly good techniques and strategies available in all of these areas, and also approaches that work well for the majority of students. However it is essential that all students try different techniques to see what works best for them. Preferences could also change over time, so it makes sense to at least once a year stop and reflect on approaches to learning. What did you do, what worked, what didn't, what should you change, what should you keep, and what new things could you try.

This is what 'metacognition' is all about. It means taking the time to try and understand more about the process of learning and your role as a learner. Students who take a metacognitive approach to their learning are much more likely to improve their results. How can you find out different study techniques to try?

Talk to the people around you – friends, siblings, parents – ask them what techniques they have used. Also ask your teachers what they would recommend for their subject. You can also visit the unit on the Study Skills Handbook that covers how to study for tests and exams. You will find lots of active studying strategies and grids to help you plan for exams. Just remember – there is a worst way to study – just reading your notes over and over and hoping the information stays in your head!

Our school's subscription details to this online study skills website for secondary school students are:

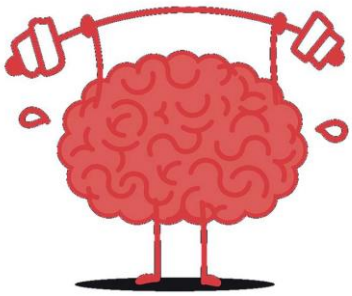
www.studyskillshandbook.com.au

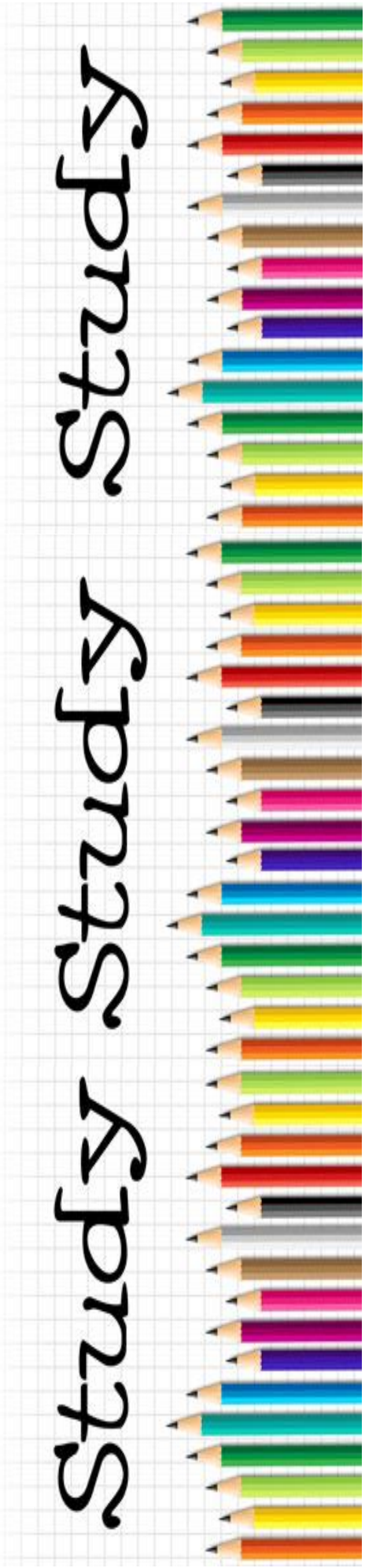
username: cumberlandhs
password: 183success

It would be great if parents / care-givers could allocate 30 minutes at home to go through this site with their child/ren.

This could be particularly useful for our Year 12 HSC students and our juniors who will have quite a few exams coming up in Term 4. Study hard!

Mr K. Thomas
Head Teacher Portfolio: Academic Attainment





The Faculty of Arts

MAD 2018

Cumberland High School

Come and see Year 7 + 8 form a large choir!

Our ensembles will be performing:
Concert Band, String Ensemble,
Rock Bands & Vocal Ensemble.

Soloists will be highlighting the individual talents of our students.

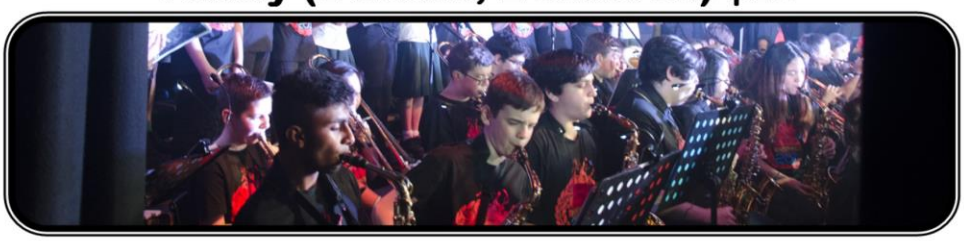
Art and Photography works will be on display.

Tuesday 11 September 2018 7PM

Wednesday 12 September 2018 7PM

Tickets Available from the Front Office & at The Door
Children/Students/Concession $5 Adults $10

Family (2 adults, 2 children) $25



MUSIC

INSTRUMENTAL LESSONS

Students are able to have private instrumental lessons for $35 per week at school.

We have spaces for students to be involved in PIANO, GUITAR or BRASS lessons!

CUMBERLAND

FINIS CORONAT OPUS

Collect an information note from Mr Andrews in the Faculty of Arts staff room.

TELOPEA CONNECTIONS PRESENTS

TELOPEA COMMUNITY FAIR

BE ACTIVE. JOIN IN. TAKE PART.

Year 6 Student – Telopea Public School

TELOPEA PUBLIC SCHOOL

CHESTNUT AVE TELOPEA

SATURDAY 15TH SEPTEMBER 2018

10AM - 2PM

For any enquiries please contact Keith Reynolds 9684 4250 or Pip Martins 9898 3448

Telopea Connections is a Collaboration between various services, groups and government agencies that serve Telopea/Dundas/Ermington/Rydalmere area.

Dundas Area Neighbourhood Centre · TELOPEA Schools as Community Centres' Project · PAYCE · NSW Family & Community Services · HCA Hume Community Housing Association · rrt RAPID RELIEF TEAM