Congratulations 2014 Captains and Prefects

Katie Broomfield
School Captain

Lewis Wheatley
School Captain

Dea Trigwell-Lindley
Vice Captain

Xavier Dean
Vice Captain

The Duval High School community wishes the Year 12 Class of 2013 all the very best of luck for the HSC exams and beyond.

DATES FOR THE DIARY

- 14 October> HSC Exams start
- 15-18 October> Yr 7 Warrumbungles Excursion
- 29 Oct - 1 Nov> Yr 9 Newcastle Excursion
- 7 November> Year 7, 2014 Orientation Day
- 11-15 November> Year 10 Exams
- 14 November> Immunisation Dose 2 Hep B all Yr 7 Dose 3 HPV all Yr 7 students + Yr 9 Boys

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In PBL we are looking at how we can, as a school, ensure that we demonstrate our core values in our assemblies.
32 enthusiastic Duval High School students participated in the Northern NSW Decathlon event hosted by The Armidale School at the end of Term 3. We entered four teams from Year 7 to Year 10 and competed against students from as far afield as Coffs Harbour as well as teams from our local high schools.

Students were required to work in their groups, completing a series of ten activities across a range of disciplines. With no teacher involvement the students needed to assign tasks amongst themselves, given each individual’s strengths. The tasks were marked and the marks combined to calculate overall placings.

Our teams all performed well, with Year 7 being placed 5th in their year group, Year 8 placed 2nd, Year 9 placed 3rd, and Year 10 placed 1st. With 37 teams competing across the year groups we were certainly very proud of our students’ achievements.
Our Year 10 team managed to gain first place in five of the disciplines, Art and Poetry, English, Mathematics, General Knowledge and Code Breaking. They also placed 2nd or 3rd in four of the other disciplines, which gives an indication of their breadth and depth of talent, as well as their impressive ability to work well in a team.

Our students gained much from the day, represented their school with pride, and are no doubt looking forward to this event becoming a regular addition to the Extension and Enrichment activities offered in the region.

Ms Morey

A VERY, VERY SHORT STORY WRITING COMPETITION based on the picture book The Mysteries of Harris Burdick by Chris Van Allsburg

As promised in our last issue of the Top of the Hill, in this issue we are publishing the Winners’ and Runners-Up’ stories for Year 9 and 10. Stories had to be 50 words only.

Year 9

Best Story: Ellen Vince-Moin (image - The Harp)

A river twisting around trees, intertwined with the land, mystical and quiet. A boy and a dog, watching and wondering. A sound begins; the plucking of a lyre wafts through the countryside. The young child and the pet run towards the bubbly river.

A splash, a ripple and vibrating strings.

Runner-Up: Eva Rummery (image - A Strange Day in July)

“Are you sure you saw it?”
“Yes I’m sure.”
“Ellie, its cold.”
“But I know I saw it.”
“Ellie, I don’t think stars can-”
“I saw it! It fell right here, I watched it from my window!”

I watch as little Ellie pulls out a shining light from the water.

Year 10

Best Story: Oliver Bruhl (image - Another Place, Another Time)

They watched as their rails were discovered. They glimpsed the minds, bubbling over. They noticed the eagerness. They noticed the creativity. They watched as the idea blossomed into reality. They saw the children on the verge of the unknown. They saw the children falter. And they gave the final push.

Runner-Up: Bethany Jedlicka (image - The Third-Floor Bedroom)

A pale, lofty breeze had lazed about the sill, waltzing around the curtains and brushing its sunny taste along the wall. Again and again waves of summer seeped over the crisp wings of the placid creatures, frozen against the papered wall. Swirling the day into senses and beckoning to wisps.

The second story that made the judge
laugh

Nyah Golding - Yr 8 (image - Just Dessert)

The Life of a Pumpkin

There’s this creepy lady, she always stares at me funny. I don’t think she realises I’m so much better than my brothers. You can eat my insides, boil, decapitate, mush, de-seed, chop; you can do anything you want, really.

I don’t think I like my future. I’m running.

FRENCH BREAKFAST

On Wednesday, 4 September 7C and 7W, accompanied by Mrs Holmes, Mr Bieler and Mr Kelly, went to ‘René on the Mews’ for a typical French breakfast. These meals included orange juice and hot chocolate, and there was a fruit platter first then bread, followed by crepes and last of all, pastries and croissants. James said “It was the best food I have ever had!” Many students would have agreed with him. This excursion would not have happened without the owners, Rene and Jill Pauvert, being willing to have us at their restaurant. Our thanks go to them and also to their staff members for looking after us so well.

Emily Barlin 7W

PDHPE HSC ENRICHMENT DAY

On 13 September, six HSC PDHPE students travelled to Peel High School in Tamworth to participate in the HSC PDHPE Enrichment Day.

Guest speakers came from Newcastle, Warialda and Tamworth to engage students in each of the Core topics and options that the Duval High students are studying. Each of the students found the day very rewarding, picking up tips from examination technique to in-depth subject knowledge and study skills prior to their HSC examination. A very big thanks must go to Mr Breen from Uralla Central School for driving the bus that the two schools shared for the excursion.

Mr Harris

THE MATHEMATICS COLUMN

Four 4s

This week’s maths puzzle is in three parts. It is not too hard, accessible (with a bit of mathematical thinking and patience) to everyone from Year 7 upwards - and that includes all you parents! - so give it a go!

It is amazing what you can do with four 4s and a handful of mathematical symbols. A well-known maths problem is to use exactly four 4s and any of the symbols

\[ + \times \div ( ) \sqrt{ } \]

to make each positive whole number from 1 upwards.

**Part 1** of your puzzle is to make each whole number from 1 to 20.

**Part 2** is to see how many totals you can create.

**Part 3** is to make the largest number possible using just four 4s.

Here are five examples, illustrating most of the tricks you will need and explaining the meaning...
of any symbols in the list which may not be familiar.

We can make 28 using
\[ 44 - 4 \times 4 = 44 - 16 = 28 \]

Don’t forget that the normal order of operations is to evaluate any brackets first, then ‘powers’, followed by multiplications and divisions, and finally additions and subtractions, going from left to right. Year 7 learn this as ‘BODMAS’.

29 can be made with
\[ 41 + 4 + \frac{4}{4} = 24 + 4 + 1 = 29 \]

The ‘exclamation mark’ here is a mathematical symbol called ‘factorial’. Four factorial means
\[ 4 \times 3 \times 2 \times 1 \] (and for example 6! would be
\[ 6 \times 5 \times 4 \times 3 \times 2 \times 1 \]).

30 is possible using
\[ (4 + 4) \times 4 - \sqrt{4} = 8 \times 4 - 2 = 30. \]

Don’t forget, the bracket tells us to get the ’8’ first. The other symbol here is ‘square root’.
\[ \sqrt{4} = 2 \]

being the reverse of
\[ 2 \times 2 = 4 \]
(as another example \( \sqrt{100} = 10 \) because
\[ 10 \times 10 = 100 \). 31 is
\[ (4! + 4) + 4 + 4! = (24 + 4) + 4 + 24 = 7 + 24 = 31. \]

Tricky to spot, but possible using brackets and factorials.

One way to get 32 is
\[ 4^4 + (4 + 4) = 256 + 8 = 32. \]

Here ‘4 to the power 4’ means
\[ 4 \times 4 \times 4 \times 4 = 256 \]

A note on Part 2: now you can make all the totals up to 20 and most numbers up to 100 or more. Following the above rules, some totals below 100 are not possible. However, allowing just a couple more bits of mathematical shorthand gets us all the way to 100. Personally, I find these somewhat less satisfying but, for interested readers, here they are: The decimal 0.4 can be written (less elegantly) as ‘.4’. If we allow this (which I don’t!), then the notation for recurring decimals also comes in handy, namely
\[ 0\overline{.4} \]

meaning 0.4444444… With these we can create numbers such as
\[ 4 + 0.\overline{4} + 4! = 4 + \frac{2}{9} + 24 = 9 + 24 = 33 \]

A note on Part 3: to make larger totals, clearly ‘powers’ and ‘factorials’ would be useful. In fact, the factorial symbol would let us go on forever if we allowed \((4444)!\)… etc. We therefore disallow this for the purposes of this puzzle. In fact, you are intended to use ‘4’s only with no other symbols. The question is, which of 4444 or 4444 or any other combination of powers is the biggest? You may be surprised at the size of the answer. Have fun!

\[ J \text{ Suddaby} \]

HSC + TRAINEESHIP = HAPPY AT SCHOOL

Choosing to combine school and a paid job is becoming a popular formula for a happy school life.

Senior students who are interested in entering a trade or industry can complete a traineeship or start an apprenticeship while still at school.

The School Based Apprenticeship and Traineeship (SBAT) programme allows students to go to work one day a week and get their HSC.

The formal training or study of the apprenticeship is done at school, or with another training organisation such as TAFE. The subject is included as part of their HSC.

On the job training is provided by an employer who agrees to take part in the SBAT. The student is paid for their work and is treated like a normal employee. Responsibilities, such as carrying out work to the best of their ability and acting safely in the work place, are taken seriously.

Young adults usually respond well to the extra responsibility placed on them at work and this translates to a happier and more successful high school student.

\[ J \text{ake McFarlane} \] is a Year 12 student who started a School Based Apprenticeship with North-West Solar.
Jake wanted to combine a qualification in Electrotechnology with his HSC.

He found a suitable employer and did some work experience with them to see how he liked the job.

Jake goes to work one day a week and also half his school holidays to gain the required amount of time on the job.

“Participating in the SBAT program has made me extremely happy as it has given me the opportunity to get a head start becoming an Electrician and allows me to finish my HSC at the same time “

Year 10 students who are choosing their subjects for next year can apply for a School Based Apprenticeship or Traineeship (SBAT) now.

If you already have a part time job you may be able to enter an SBAT with the same employer.

Contact Mrs Hardman for more information or go to www.sbatinnsw.info

SPORTS NEWS

Cycling

Sam Jenner was selected to represent NSW Cycling at the Australian Junior Road Titles which were held in Wagga Wagga, 6-8 September 2013. Sam won silver in the Australian Time Trial Championships and was overwhelmed with his result. Sam then travelled to Invercargill, New Zealand during the holidays as part of the Racing Kangaroos Development Team to compete in the Tour of Yunca and a three day Track carnival to finish.

Cricket

At the end of last term, Duval High School was lucky enough to have a visit from Australian Test Cricketer, Patrick Cummins. He was in Armidale as part of a promotional tour for the T20 Blast school competition. After opening the Armidale competition, Patrick met with our Year 12 PDHPE students to discuss things including sports psychology, injury treatment and recovery, pressures associated with sports professionalism, nutrition, training regimes, and more detailed issues such as Australia Cricket policies like the controversial bowler rotation.

After this informative session, our enthusiastic junior cricketers were invited to a training session at our newly renovated cricket nets to receive advice and tips from Patrick.

Thanks go to Kathy Barber from Cricket NSW and especially Blair Chalmers, who accompanied Patrick throughout his visit.