



Pure mathematics is, in its way, the poetry of logical ideas. ~Albert Einstein

Getting Students Engaged in Advanced Math Problem-Solving

In the article the *Math Revolution* Peg Tyre reports on the growing number of U.S. students who are enthusiastically taking part in after-school and summer programs for advanced math problem-solving – and the fact that America’s teenage team won the gold medal at the 56th International Mathematical Olympiad in Thailand last summer. Here’s an example of the type of problem that students in these programs are asked to solve (more at <http://Expil.com>):

Imagine a rope that runs completely around the Earth’s equator, flat against the ground (assume the Earth is a perfect sphere, without any mountains or valleys). You cut the rope and tie in another piece of rope that is 710 inches long, or just under 60 feet. That increases the total length of the rope by a bit more than the length of a bus, or the height of a 5-story building. Now imagine that the rope is lifted at all points simultaneously, so that it floats about the Earth at the same height all along its length. What is the largest thing that could fit underneath the rope? (a) bacteria, (b) a ladybug, (c) a dog, (d) Einstein, (e) a giraffe, or (f) a space shuttle.

Problem-solving summer and after-school classes demand that the pupils execute the cognitive bench press: investigating, conjecturing, predicting, analyzing, and finally verifying their own mathematical strategy. The point is not to accurately execute algorithms, although there is, of course, a right answer (Einstein, in the problem above). Truly thinking the problem through – creatively applying what you know about math and puzzling out possible solutions – is more important.

“The Math Revolution” by Peg Tyre in *The Atlantic*, March 2016 (Vol. 317, #2, p. 50-57), <http://theatlantic.com/1ZkPr8a>



Hawk Flight Plans



Monday, May 21, 2018: A Day

- ▼ PTSA meeting 5:30pm in the media center
- ▼ **Hornsby Helper, Bee Crew and Peer Helpers**, application window open: see announcements

Tuesday, May 22, 2018: B Day

- ▼ **8th grade Algebra I and Geometry SOL**
- ▼ **Hornsby Helper, Bee Crew and Peer Helpers**, application window open: see announcements
- ▼ Orchestra King's Dominion Performance REHEARSAL after school until 4:45
- ▼ Hawkapella

Wednesday, May 23, 2018: A Day

- ▼ **6th grade Math SOL**
- ▼ **Hornsby Helper, Bee Crew and Peer Helpers**, application window open: see announcements
- ▼ Crochet Club meeting
- ▼ Sports physicals done by Dr. Lara Quinlan after school. VHSL physical form (pages 1, 2, and 4) must be filled out. See Coach Oweis to get a form or download it from the VHSL website. The cost is \$20. Make checks payable to Dr. Lara Quinlan.

Thursday, May 24, 2018: B Day

- ▼ **7th grade Math and Algebra I SOL**
- ▼ **Hornsby Helper, Bee Crew and Peer Helpers**, application window open: see announcements
- ▼ Ally Club meeting: last one this year

Friday, May 25, 2018: A Day

- ▼ **Hornsby Helper, Bee Crew and Peer Helpers**, application window open: see announcements
- ▼ Have a great weekend!

May 28 Schools and Offices Closed





Announcements/Looking Ahead

Ms. Kuthy, alpha A-K, will be transferring to James Blair next year. We will greatly miss her but she will always be a part of the Hornsby family. We will welcome Joshua Denny to the Hornsby school counseling team next year. Mr. Denny will be at HMS shadowing Ms. Kuthy Tuesday (5/22) and Wednesday (5/23). Please say hello if you see him! *Forever a Hawk*

8th grade Dance

The 8th grade dance is here at Hornsby Middle School on Friday, June 8, 2018 from 7:00pm-10:00pm! This event will be a semi-formal dance with fun activities, food, and prizes and the cost will be \$10 per 8th grade student. Tickets may be purchased from homeroom teachers beginning Tuesday, May 29. *Beginning Monday, May 21, any disciplinary infraction resulting in either an in-school suspension (ISS) or an out-of-school (OSS) suspension will exclude a student from the 8th grade dance.* If a student has already purchased a ticket, the money will be refunded.

Please consider volunteering your time or donating food and gift cards or prize for the raffle. Big or small! We will need lots of items for the students to win. Gift certificates to restaurants or ice cream shops, iPod's, iTunes gift cards, toys, games etc.... Any prize will be greatly appreciated! Please volunteer before, during, and after the event. We will need people to set up the afternoon of the event, chaperone during the event, and help cleaning up after the event. Just visit the link to sign up:

<https://www.signupgenius.com/go/409054aafae23a20-lhms1/1150455>

To purchase the **8th Grade 2018 group picture** go to the Candid Color website <http://www.candidcolor.net> and click on Underclass Portraits. Enter the code **HRM8G18**.

Attention all rising 9th grade families and students—It is not too late to sign up for the **Warhill Innovation Courses, Lafayette's Linc5, or Jamestown's Concourse 9** program! There will be representatives coming this week to the school to speak to interested students. Information about the programs and program coursework examples can be found on each high school's websites. Please contact amber.spicer@wjccschools.org if you are interested in having your student attend the session.

The **Hornsby Helper, Bee Crew and Peer Helpers**, application window will be May 21-25. The application packet for current 7th graders/rising 8th graders will be available in the school counseling office.

Mr. Pfeiffer's Grant Project Escape Room: Creating the Constitution, will be held in the auditorium on Monday and Tuesday, June 4 and June 5. His core classes will be



experiencing this escape room challenge, which focuses on the founding documents of the U.S. Constitution. *Ms. Gwaltney and Mr. Winthrop's civics students are welcome to stay after school on those days to experience the escape room!* Mr. Pfeiffer will be staying after if any faculty or other students would like to try as well.

Laptop collection schedule:

Monday, June 4: **Grade 7** (students turn in laptop and charger, keep laptop bag)

Tuesday, June 5: **Grade 6** and exceptional classes: (students turn in laptop and charger, keep laptop bag)

Wednesday, June 6: **Grade 8** (students turn in laptop, charger, and laptop bag)

Students who do not turn in their equipment by **June 14** will be billed. Estimates of replacement costs below:

Laptop: \$325

Charger: \$25

Laptop bag: \$20 (8th grade only)

Mrs. Thomas is looking for licensed barbers and stylists to volunteer a few hours on the afternoon of Thursday, June 7 to help students get ready for Stepping Up and the 8th Grade Dance. If you are interested and available to help, please call 757-565-9400 ext. 22083 or email Anna.Thomas@wjccschools.org.

Nurse Vona's Closet:

Nurse Vona is starting to prep her semi-formal closet for the 8th grade dance and Stepping Up. We want every Hornsby student to shine and feel that they are looking their best for these events. We could use donations of male and female semi-formal clothing items and accessories. Shoes, belts, pants, shirts, bow-ties, jewelry, dresses. (Hangers are also desperately needed!) Most of my donations have come from staff members, so I could really use more current fashions in smaller sizes. Thank you so much for any donations you can provide.

Did you forget to order your yearbook? No worries! See a yearbook staff member during your lunch or Ms. Anderson in Room 1323 to have your name put on the reserve list to guarantee a yearbook. Do NOT bring money to reserve your spot. You will bring money on field day when you pick up your yearbook!

PTSA General Membership Meeting

Join us on Monday May 21st at 5:30 pm in the media center for the last PTSA meeting. We will be electing the PTSA Officers for next year. The Slate is President - Jill Dalton; Vice President - Adrienne Tropilo; Secretary - Alisa Smith and Treasurer - Stephanie Trogon. Please come out and vote!

Parents/Guardians – If you have moved and HMS does not have your new address (or, you've forgotten to give us a change in address), please contact Marcia, Registrar, #(757)565-9438. Needed items: 2 proofs of residency, and the Residency Affidavit



completed. Please remember, we have some students going to high school in the Fall and the redistricting. Both events may impact which school your student will attend. Have a great weekend and I'm looking forward to hearing from these families.

Box Tops Due June 1st - final collection for this school year. Please send in all box tops by June 1st.

Important Dates:

May 28 Schools and Offices Closed

May 30 8th grade Science SOL

May 31 NJHS Induction Ceremony 5:30pm

June 1 Band Festivals here. Some students will be guides.

June 1st - Box Tops collection deadline

June 1 all of 7th grade goes on a field trip to the Virginia Science Museum in Richmond.

June 2 Chorus spring trip to Kings Dominion

June 4 and June 5 Mr. Pfeiffer's Escape Room: see announcements

June 5 Betsy Costner presentation by Sheila Arnold for 6th grade in the choir room periods 1, 2, 3, 4. *Generously funded by the PTSA.*

June 8 Last day for Activity Buses

June 8 Eighth Grade Dance 7pm-10pm

June 8 The 8th grade Advanced Theatre performance of *Bad Auditions by Bad Actors* will be during 8th, 7th, and 6th grade related arts classes

June 8 SOLabration: All day, all grades: more information to follow

June 13 Early Release 12:25pm

June 13 8th grade Stepping Up at WHS 2pm

June 14 Early Release 12:25pm: Last Day

June 20 Report Cards Mailed Home



Thank you!!!

All **our students** are showing their academic prowess on the SOL's. You are doing an outstanding job! We are proud of you.

Thank you to all the **parents** for supporting our students!



Teachers have been working hard proctoring, monitoring, and doing hall duty. Thank you! Also, thank you for contacting parents for expedited retakes.

Thank you to **all students who were not testing** this week who remained respectfully quiet and were flexible about their schedules.

A big thank you to **Mrs. Schweitzer and the team** for organizing all of this!

Our students are wonderful! Students have been following the Hawk expectations. Our Hawks SOAR!

Hornsby Hawks SOAR

Safe

Organized

Accountable

Respectful