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The Scholar Ship

"All literature is consolation" - Alan Bennett

Physics of Sailing

Georgie Stammers (Y9) reports on the recent Studd Society session, a joint venture between Sailing and Physics...



Well, after a long wait in the school calendar we finally (and just before the school closed) made it to the Physics of Sailing talk. This had a good turn out of sailing, sport and physics students.

We started off by downloading the app 'WindTunnel free'. Mr Sibson then told everyone to use this app to try and make the best boat shape. My group decided to make a thin boat shape for speed; several others had the same idea, but during feedback to the group Mr Sibson suggested that this might be too tippy. As a group we discussed having two thin hulls based on a catamaran and we made hulls shaped with a thin bow and square stern.

Then Dr Gibbs spoke about how olden day ships had very square sails so could only go downwind. This meant a lot of time was wasted as they needed to wait for the wind direction to change. The modern sails we use nowadays can be used to sail in almost any direction. Mr Sibson demonstrated this using model boats and fans. This really helped show the effect of the shape of the sail.

Next in pairs we were given a piece of paper. The object of this task was to hold the paper by two corners in front of your mouth with the paper hanging down. We then had to blow over the top of the piece of paper we were holding to see what effect it had. As we blew over the paper the tail of the paper which was hanging down lifted up. This happens because your breath is faster moving over the top of the paper, which has less pressure than the air under the paper which causes it to lift. This is how a modern sail works.

Everyone then went back to experiment with the 'WindTunnel' app again. Mr Sibson set a challenge to see who could create a sail shape with the most lift. After a lot of trial and error we figured out how to get the most lift and finally achieved a lift of 202.43. Mr Sibson and Dr Gibbs presented a very interesting and fun talk.

Puzzle of the Fortnight: Most Powerful Cup of Tea Most Interesting Answer Jason Sims

> *Runner-up* Zara Graham

WHAT IS THE MOST POWERFUL CUP OF TEA?



This fortnight's problem is slightly different. There is no single 'correct' answer to this question. Instead, I'm looking for *interesting* answers.

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Things Mr Johnson learnt recently: Easter Edition

Most European countries have a word for Easter which derives from the Greek verb $\pi\alpha\alpha\sigma\chi\omega$ (*pasc^ho*, 'I suffer'), such as *Paques* (French), *Pascoa* (Portugese) and *Pasti* (Romanian). Yet we have 'Easter', which *Wikipedia* will tell you derives from the Germanic goddess, Eostre (pictured). There is one problem with this, though, and it's not that I got my information from *Wikipedia*. There is only one source for Eostre's existence - a single sentence from Bede's 8th Century work *The Reckoning of Time*. No other literary references, medieval images, statues, carvings - nothing. So why do we call it 'Easter' (and the Germans say 'Ostern'), when almost every other nearby language derives from the Greek? I still don't know... Maybe one of our readers will have better luck answering this question?

"THE LAST WORD", WITH THIS EDITION'S SCHOLAR...

My experience with online learning was so different to how I could ever imagine. Although I do miss being able to ask my teachers questions face to face, interact in person, being in a classroom environment and seeing my friends at school and enjoying normal school life at RHS, there was something so uniquely elevating about these online lessons; it remided me that no matter where you are, or what situation you are put in, education and this fascination to learn doesn't have to stop. All my teachers were incredible and were the reason why I found these lessons effective and a great success. Throughout these past five days I have managed to absorb a lot of new information whilst feeling stretched, challenged and felt as if I have had an extremely productive week as a result.

This new online system of learning enabled me to be even more proactive, to be more independent and really take full ownership with my learning. If I didn't understand something, it was more important than ever to ask questions to my teachers through the chat function, making notes, doing extra research on certain topics and really getting involved in the discussion to make sure we are retaining and understanding all that we have been taught in that lesson. My highlight of the online learning experience would have to be the level of communication and discussion which I was able to have with my teachers and my class in general which you wouldn't expect from an online lesson but I felt that the level of communication and feedback was amazing! Although we are all obviously distant and remote, I still felt as if I was in a classroom setting for some reason, my teachers were so helpful and always made sure that everyone was engaging and managed to make sure everyone was on track despite not being able to see our faces and we were all contributing to the lesson like normal, as when we get really involved in each of our subjects, it really helps us as students to understand the concept of the lesson even more. It almost felt like a normal day of school, I felt so present within each lesson. If we had any prep we were set it on assignments and we were also able to get feedback on our class work at the end of the lessons to make sure we had done all the tasks of the day. Another thing I really liked about the online lessons was the amount of support we got from our teachers, our teachers as always are so helpful and supportive and the challenge of a new type of education format didn't stop that. On teams if we were behind with a particular concept, we could go at the pace with which we were happy with using the PowerPoint presentation while also keeping up with what our teacher was saying.

And although I have enjoyed these online lessons, I can't wait to come back to school! Ayoola (year 10)



