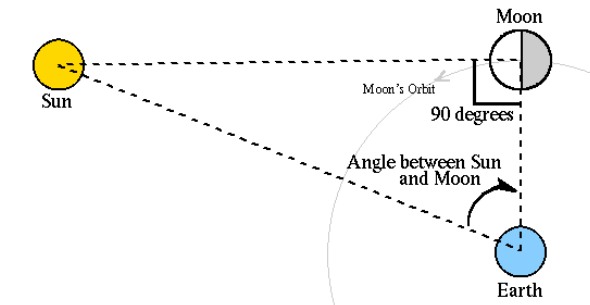


Upper 4 set 1 – The sky's the limit – or is it?



Geometry of Earth–Sun–Moon system during 1st quarter lunar phase



For the Upper 4 set 1 girls, the topic of writing big numbers in standard form has taken us on a journey through the universe where we explored the distances between Earth and the other planets in the Milky Way, and then on to other star systems in our galaxy and beyond. All these distances were mind blowing and gave us pause to reflect on our very existence on the planet Earth.

They then carried out a piece of independent research on how astronomers such as Aristarchus of Samos, from as far back as the year 250 B.C., have been able to determine the distance between Earth and the Sun to be around 93 million miles (150 million kilometres – or in standard form, 1.5×10^8 km).

It was interesting to find that many of the pupils' investigations pointed to the particularly important topic of trigonometry as one of the ways of working out this distance, which is an integral part of the GCSE course. When they study this topic later this term, they will now have something exciting in real life to relate it to.

High School & Sixth Form



Yes, isn't it a mind-boggling thought that, as of 2012, that tiny circle that we see in the sky was exactly 149,597,870,700 metres away? (Bonus fact: It will also fit 1.3 million planet Earths inside it, but that is something to leave until we learn about working out volumes of spheres!)

Mr Charles Adegboro