

## **Girls Learn About Work of Harry Kroto**

As part of Materials Matter week Six One Maths students were treated to an excellent lecture by Dr Jonathon Hare, a physicist, television presenter and a science communicator.

Dr Hare's lecture was about the work of Harry Kroto and the discovery of fullerenes (allotropes of carbon) for which Kroto shared the Nobel Prize for Chemistry in 1996. It was a very insightful lecture as Jonathan Hare was fortunate to have been part of Harry's Kroto team.

The maths behind the chemistry took off when Dr Hare showed the girls the shape of a fullerene molecule called C<sub>60</sub>. The spherical structure consists of 60 atoms of carbon connected by single and double bonds represented as a truncated icosahedron.

This is a three-dimensional solid made up of 12 pentagons and 20 hexagons – the easiest way to think about it is to visualise it as a football.

In the lecture the girls were all given a C<sub>60</sub> kit to build and keep and they spent 20 minutes engrossed in building their C<sub>60</sub> models in the Weston Lecture Theatre.

The lecture introduced the girls to Euler's Theorem and left us with the tantalising but yet unproven benefits of C<sub>60</sub> as a food supplement!

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