

SCIENCE NEWS – Years 7 and 8 get the lowdown on magnets and magnetism

On Thursday morning (16th November) BAE Systems arrived at St Benedict's, courtesy of the Royal Air Force and the Royal Navy. BAE Systems and their partners in education, the RAF and the RN, currently employ more than 50,000 engineers across the UK and are committed to engaging with all young people on STEM (science, technology, engineering and maths) activities to encourage and support a highly skilled engineering and scientific workforce of the future.

The Schools STEM Roadshow, which began in 2005, currently visits over 420 schools across the UK each year. It provides a highly interactive experience for students aged 10 to 13 years old in primary and secondary schools and is designed to inspire excitement in STEM subjects. This year's show focused on magnets and the important role they play in everything from healthcare, to transport, and to electricity generation. A series of experiences and demonstrations showcased practical applications of science concepts and brought them to life for the students, all of which is perfectly aligned to the current curriculum taught in school.



One part of the show focused on why magnets are crucial in the operation of motors and generators. These are not new concepts – Michael Faraday figured it out as long ago as the early 19th century when he invented the first electric motor in 1821 and then the generator in 1831. With today's more powerful magnets and improved engineering and technology, we can help achieve one of the most important goals essential for our future: the elimination of the need to burn fossil fuels for energy. Magnets will therefore play an important role for the world to get to 'net carbon zero'.

Thanks to the expertise and enthusiasm of the show's three presenters, all highly trained BAE Systems STEM ambassadors, the show certainly inspired all our year 7 and 8 students and perhaps some will seriously think about STEM subjects and careers, especially with the need for new skills and talent to help develop the next-generation of ideas.

Much thanks must go to our Careers Officer, Mr Steward, who arranged this event and to the teachers of years 7 and 8 who allowed us into their daily routine. Most of all, though, a huge thank you to all the students who attended and played such a splendid part in this truly interactive event. We look forward to welcoming the Roadshow back next year when the topic will be "Space Travel".



(Fact can be stranger than fiction: did you know that modern magnets can be made so powerful that they can levitate a frog? You'd better believe it – it's true!)