

## British Science Week 2025



High School Science Week kicked off with an assembly delivered by Lower 5 triple science pupils who had researched experiments that they believe have changed the world we live in. Experiments included Mendel's peas, Rutherford's scattering and the Cavendish experiment. Pupils presented groundbreaking discoveries which have transformed our understanding of the world.

Below are some of the activities that took place throughout High School this week...

### Upper 3 - Egg Drop Challenge



During Science Week this year, Upper 3 rose to the 'Egg Drop Challenge'. Using only specified amounts of a limited range of materials, each small group designed a safe landing or parachute to protect an egg, which they then dropped down the stair well. There was a great deal of scientific thinking, ingenious engineering and effective teamwork on show as they worked together to turn their designs into reality. The sense of anticipation mounted as each egg was poised, ready to fall and there was much excitement as parcels, wrappings and improvised baskets were removed to reveal which eggs had survived their ordeal!

## 3D Printing



Pupils delved into the exciting world of 3D printing, witnessing first-hand how digital designs transform into physical objects.

They began by exploring the basics of 3D printing and its real-world applications, from prosthetics to sustainable housing. Using online digital model marketplaces, each pupil received a small helicopter toy, which was then printed layer by layer right before their eyes.

The process sparked curiosity and excitement, as pupils marvelled at the precision and possibilities of this technology. Many were inspired to think about how 3D printing could shape the future, from medical breakthroughs to space exploration. This hands-on experience not only deepened their understanding of STEM but also encouraged creativity and problem-solving in a practical setting.

## Upper 4 – engineering paper towers (to support a creme egg!)



# High School & Sixth Form



Upper 4 pupils took on an exciting engineering challenge to building the tallest paper tower! The task was simple yet tricky—using only 20 sheets of paper, 5 sheets of card, and 2 meters of sellotape, each team had to create the tallest tower possible that could support a creme egg at the top for at least 5 seconds. The challenge sparked creativity as pupils designed their towers, considering stability, height, and how best to support the weighty chocolate egg. Teams tested different methods, from folding and rolling the paper to using the cardboard for extra support. The clock was ticking, and they had 35 minutes to design their structure. Some impressive towers were built, some focused more on balance and strength. But in the end, the true winner wasn't just the tallest tower—it was the one that could hold the creme egg steady for the full 5 seconds.

This challenge wasn't just about winning; it was an opportunity for pupils to learn about engineering principles, teamwork, and the importance of trial and error in problem-solving. Whether their towers toppled or stood tall, everyone walked away with valuable lessons in creativity, resilience, and innovation! The tallest tower, which could also support the weight of a creme egg, was designed by Grace, Balraj and Isobel which stood at an impressive 161cm tall.

## Lower 4 - building spaghetti bridges





Lower 4 pupils took on their Science Week challenge with a great deal of enthusiasm, and it turned out to be a very close competition! They were challenged to build the longest bridge possible to support a glue stick using a pack of spaghetti and a limited amount of plasticene. After ten minutes of planning, they set about constructing their design, making the maximum use of their resources. At the end of the challenge there were only a couple of centimetres between the two longest bridges.

Well done everyone on all these fantastic Science Week challenges!

The Science Department