

Science Department Bulletin 6– Autumn Term in Full Swing

Dear Parents and Guardians,

As the leaves begin to turn and the days grow shorter around Bridgnorth, the Science Department is well into the rhythm of the autumn term. Students are settled, focused, and making excellent progress in both their studies and extracurricular activities.

In the Classroom

Across the year groups, students are exploring a wide range of scientific topics:

- **Year 7** – Are now studying the **Energy** topic
- **Year 8** – are coming to the end of the **Bioenergetics** topic and will be preparing for assessment soon
- **Year 9** – Exploring **Energy** and have been learning about how scientists have developed ideas about the atomic model and periodic table over time
- **Year 10** – Learning about Infectious Diseases, chemical changes and radiation.
- **Year 11** – Tackling Organic Chemistry, genetics and organic chemistry. Mocks are approaching for Year 11s, who should all have a revision timetable sorted out by now- see your teacher if you need help with this!

Revision Sessions – Growing Attendance

Our Year 11 revision sessions continue to be well attended, with **many students** taking advantage of the extra support:

- **Chemistry** – Mondays after school
- **Physics** – Wednesdays at lunch
- **Biology** – Fridays P.M.

All **Year 11 students are strongly encouraged to attend**, and **Year 10 students are also welcome** — just check with your teacher to confirm the topic each week.

Science in the News

This week's big story is the announcement of the **Nobel Prize in Chemistry**, celebrating groundbreaking work that's shaping the future of science. The 2025 Nobel Prize for Chemistry has been awarded to Susumu Kitagawa (Kyoto University, Japan), Richard Robson (University of Melbourne, Australia), and Omar M Yaghi (University of California, Berkeley, USA) for their work on metal-organic frameworks (MOF).

The scientists' work on MOF is about how molecules can be built together into structures - what the Nobel committee called it "molecular architecture".

To date MOF have only been used on a small-scale, but mass-production is being worked on in industry. Potential applications of MOF include reducing dangerous pollution by breaking down harmful gases, including those used in nuclear weapons and potentially reducing climate change by capturing the gas carbon dioxide from power stations and factories.

You can read more about it here: <https://www.nobelprize.org/prizes/chemistry/2025/press-release/>

This could provide a topic for a stimulating conversation at home!

Clubs & Enrichment – Creativity and Collaboration

Our clubs continue to thrive, with new members joining and exciting projects underway:



Roll Models (Games Club) – Thursdays at lunch and after school

*Now with **35 students**, the club has welcomed new members with introductory games of **Gaslands**, and next week we'll be **painting and decorating our own Gaslands cars**. If you'd like to join in, bring a **Hot Wheels or Matchbox car** you're not too bothered about (and when I say yours, I mean **yours** and not your brothers/ sisters but they weren't looking!!!)— we'll transform it into a post-apocalyptic racer!*



STEM Club – Wednesdays at lunch

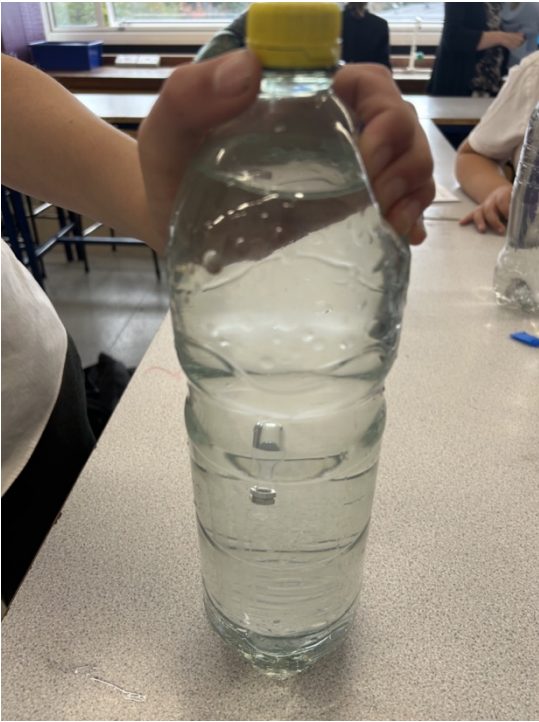
*New members have joined as we begin the **final design of our Scalextric track** and continue construction of the **baseboards**. Engineering, design, and teamwork all in action! All students are welcome to join us*

on Wednesday lunchtime!

- **KS3 Science Club – Tuesdays in E63**

Our young scientists launched the club by exploring Cartesian Divers with Ms Hubbard, Mr Lee, Mr Luke and Mrs Davenport. The club continues weekly with exciting hands-on science challenges — open to all KS3 students!





STEM Careers – Parent Contributions Welcome

A big thank you to the parents who've already shared their experiences working in STEM-related fields — your insights are inspiring our students and helping them see the possibilities ahead.

Below, we're delighted to share an article written by Ollie Hubbard, a brilliant MSc Physics student who credits his success to his mother, our very own Ms Hubbard! We hope this will be a thought provoking and inspiring read for all our students! **It's not too late to get involved!** If you work in science, technology, engineering, or maths and would be happy to talk to students or support our careers programme, please contact Mr Cox.

Ollie Hubbard – My story so far

Physics Graduate – Space Masters Student

Grades Aren't the End — They're Just the Beginning

When I was in secondary school, I didn't know exactly what I wanted to do. I enjoyed physics and maths, but I wasn't sure where they could take me. I got mostly 6s in my GCSEs — solid, but not standout — with an 8 in geography and a 9 in maths. At A-level, I earned a B in physics, a B in maths, and a C in geography. Not the grades that scream “future space scientist,” right?



But here's the thing: grades don't tell the whole story.

I went on to study Physics with Astronomy at the University of Leicester. First year was welcoming and light. But my second year was tough — juggling university and work was a struggle, and I only just scraped a low 2:2. It felt like a setback. I worried I'd missed my chance. But I didn't give up. I worked hard in my final year, pulled my average up to 63%, and although my overall degree came out just under 60% (2:1), something unexpected happened.

An opportunity opened for a master's in Space Exploration Systems — right at Leicester, right in my favourite subject: space. Now, I frequently get to work and learn at Space Park Leicester, surrounded by cutting-edge research and real-world missions. And hopefully next summer, I'll be heading to France and Italy, each for two months, to collaborate with students from across Europe, planning a space mission to propose to ESA — the European Space Agency.

Here's what I've learned: physics isn't intimidating. It's tough, yes — but it's not impossible. If you listen, ask questions, and try to understand, you will. It's not about being a genius. It's about being curious, persistent, and willing to learn.

And physics doesn't take over your life. You can still do everything you want to do at uni. I picked up a new sport (Lacrosse), became the best at my university, and even played nationally for the Midlands team. I was honoured as the University of Leicester's Sport Personality of the Year. I also took part in a charity boxing event called Student Fight Night — trained at least three times a week for months, fundraised for a great cause, and won my fight. Uni was full of challenges, but also full of life.

I didn't know this was where I'd end up when I was 16. I didn't even know this is where I'd end up after choosing physics as a degree. But physics is broad. It opens doors in engineering, computing, space science, finance and beyond. And most importantly, it teaches you how to think — how to solve problems, how to adapt, how to keep going when things get hard.



So, if you're reading this and worrying about your grades or feeling unsure about your future — don't. You don't have to have it all figured out. You just have to keep moving forward. Because sometimes, the best opportunities come when you least expect

Meet the Science Department!

You've met her son this week, so now you can meet Ms Hubbard! Ms Hubbard moved from rural Cambridgeshire to join our learning community 2 years ago. She has made a tremendous impact ever since- if you're interested in KS3 Science club, she is the person you should speak to!

Ms S. Hubbard



Education and experience

Transport administrator, Business Hub Manager, Science LSA



Favourite book

The Jack Reacher Series by Lee Child



Ask me about

Anything I can help with or interests you

Role

Science Teacher

Specialism

Chemistry



Hobbies/interests

Family, walking my dogs, travelling, riding pillion on motorbikes, being creative, watching films

Thank you for your continued support. The Science Department is thriving this autumn, and we're excited to keep the momentum going!

Please contact us if you have any queries, concerns or if there is anything we can do to support your young scientist- our aim is to help them achieve their very best!

Warm regards,

The Science Department