

Ripon Grammar School

Dear Student,

We look forward to welcoming you into the Physics department in September. To help with the transition from Year 11 into sixth form and ensure you are well prepared for the A Level Physics course, we have set some <u>preparation tasks</u>.

Please email Mr. Shovlin (Head of Physics & Science) at <u>shovlinm@ripongrammar.com</u> to introduce yourself. Tell us which school you are joining us from, which part of the A Level Physics course you are most looking forward to, and whether you have any areas of particular interest — such as space, energy, medical physics, or robotics.

Physics is a unique and powerful subject. No other discipline allows you to explore the world around you, from the smallest particles to the vastness of space, through ideas that are profound, imaginative and often beautifully simple. You'll learn to solve problems, think logically, and apply mathematical reasoning to real-world situations.

<u>Physicists</u> are shaping the future from cancer treatment to tackling climate change, from robotics and artificial intelligence to renewable energy. Physics not only opens doors to scientific and engineering careers, but is also highly valued in law, finance, data science, computer programming and many other industries where analytical thinking and quantitative skills are in high demand.

Reading around our fascinating subject is one of the best things you can do in preparation for studying at A level. AT RGS we subscribe to the <u>Physics Review</u> magazine, which is aimed at A Level students and explores current topics and developments in the field. You'll have access to this wonderful resource when you join, but in the meantime if you can get hold of one of the following books, reading it over the summer will give you insight into that area of physics and perhaps generate some interesting questions that you can bring with you in September!

- A Brief History of Time Stephen Hawking
- A Short History of Nearly Everything Bill Bryson
- Cosmos Carl Sagan
- Astrophysics for People in a Hurry Neil deGrasse Tyson
- The God Equation: The Quest for a Theory of Everything Michio Kaku
- "Seven Brief Lessons on Physics" Carlo Rovelli
- Why Does E=mc²? Prof Brian Cox and Jeff Forshaw

Our team are really looking forward to meeting you in September, but please don't hesitate to get in touch if there is anything you would like to discuss before then.

Best wishes,

Mr M Shovlin Head of Physics and Science

Founded in Saxon Times, re-founded in 1555

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