# **Physics**



Subject Lead: Mr A. Harvey-Parsons Email: aharveypar9zru@nsix.org.uk

# **Key topics covered**

### Core Topics (we study all of these)

- Measurements and their errors
- 2. Particles and radiation
- Waves
- 4. Mechanics and materials
- Electricity
- 6. Further mechanics and thermal physics
- 7. Fields and their consequences
- 8. Nuclear physics

#### Choice of Option Topic (we choose 1)

- 9. Astrophysics (default)
- 10. Turning points in physics
- 11. Medical physics
- 12. Electronics
- 13. Engineering physics

# Recommended Textbook and/or resources

AQA Physics 2<sup>nd</sup> Edition, ISBN 978-0198351870 Amazon, Waterstones, Scopay - £41.40

A-Level Physics: Essential Maths Skills, ISBN 9781782944713. Amazon - £7.50 (for those not taking A-Level Maths)

Physicsandmathstutor.com
Past paper and mark schemes provision

Resources - Scientific Calculator

Super-curricular reading. <a href="https://www.my-mooc.com/en/categorie/Physics">https://www.my-mooc.com/en/categorie/Physics</a>

https://isaacphysics.org/

# Why Study the Subject/what students Like about it

Physics is exciting, it is fun, it is challenging, it is rewarding, and it is crucial to understanding the world around us, the world inside us, and the world beyond us.

'I really like applying maths to real world applications, I find myself thinking about SUVAT equations in everyday life!".

'We went to Sizewell Nuclear Power station to see Physics in real life'

'We participated in interactive live-streams of University Taster Lectures to help our future choices'

# Opportunities outside the classroom

There are many resources available to you outside of the classroom, such as full online lessons, past papers from AQA, a range of materials on the Google Classroom, and on websites such as Isaac Physics. In addition, students are also able to access online text books via Kerboodle.

University Taster Lectures interactive live-streams, university trips, guest STEM teachers.

# **Future progression/career routes**

Engineering, astronomy, robotics, renewable energies, computer science, communications, space exploration, science writing, sports and games technology, research and nanotechnology.

