



PHYSICS
DEPARTMENT

A LEVEL PHYSICS

AT BEECHEN CLIFF SCHOOL





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ACTUALLY, IT IS ROCKET SCIENCE

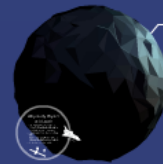
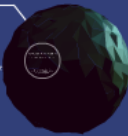


The Course

• The course is designed to be a challenging and rewarding experience for all students. It covers a wide range of topics, from classical mechanics to modern physics. The course is delivered through a combination of lectures, tutorials, and practical work. The course is assessed through a combination of written and practical examinations. The course is designed to be a challenging and rewarding experience for all students. It covers a wide range of topics, from classical mechanics to modern physics. The course is delivered through a combination of lectures, tutorials, and practical work. The course is assessed through a combination of written and practical examinations.

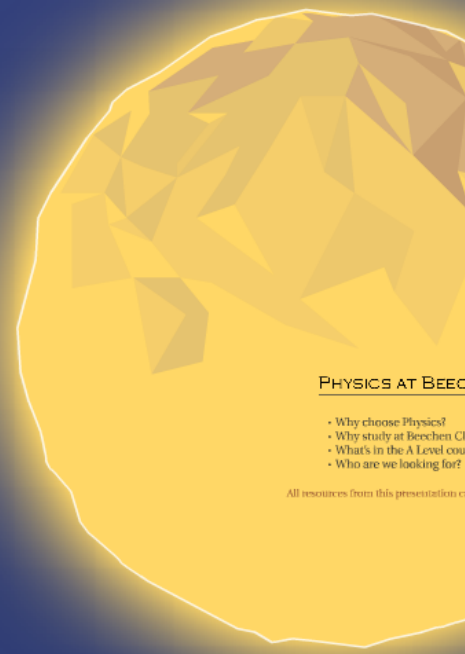
Why Beechen Cliff?

- I had wanted to succeed as well as enjoyment.
- The biggest benefit pursued by both with one.
- Will understand the nature of physics.
- The course is designed to be a challenging and rewarding experience for all students. It covers a wide range of topics, from classical mechanics to modern physics. The course is delivered through a combination of lectures, tutorials, and practical work. The course is assessed through a combination of written and practical examinations.



What is Physics?

Physics has no limits, from the smallest of atoms to the vastness of the universe. The world around us can be explained using the laws of physics.



PHYSICS AT BEECHEN CLIFF

- Why choose Physics?
- Why study at Beechen Cliff?
- What's in the A Level course?
- Who are we looking for?

All resources from this presentation can be found at www.beechencliff.ac.uk



PHYSICS AT BEECHEN CLIFF

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What is Physics?

Physics has no limits, from the smallest dimension to the entire Universe.

The world around us can be explained using the ideas developed with A Level Physics.

Why study Physics at A Level?

- It is interesting and inspiring
- It helps you to understand how the world around you works
- Develops your problem solving skills
- Apply theoretical knowledge to practical and relevant scenarios
- Full of transferrable skills



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What's the point?

"I reckon that physicists can do pretty much anything. Our training can be applied to almost any activity, and it allows us to see things in ways that might not be obvious to others"

Simon Singh, science writer and broadcaster

Most of you will end up in working in jobs that do not currently exist - 10 years ago there was no industry associated with smartphones, Apps, social media...



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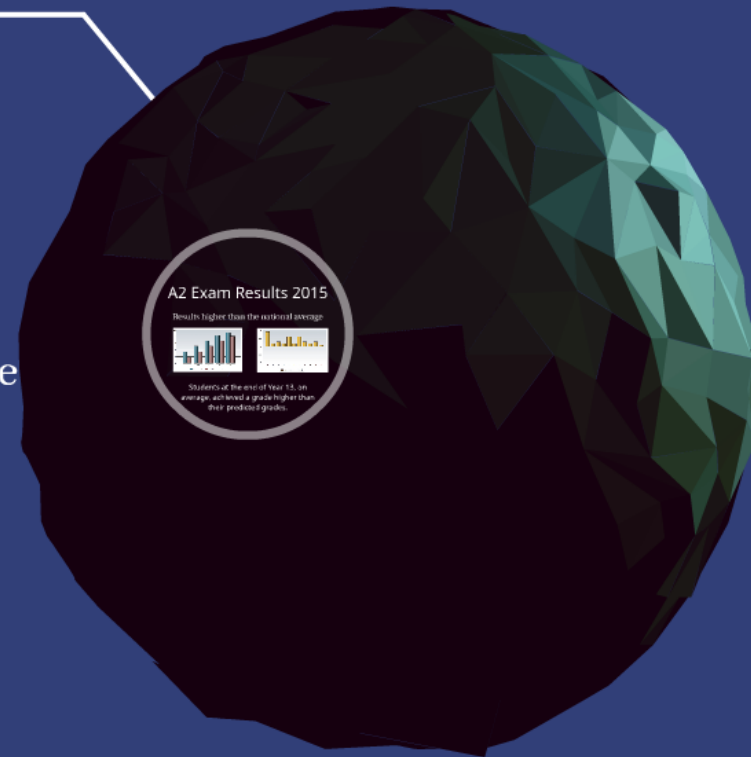
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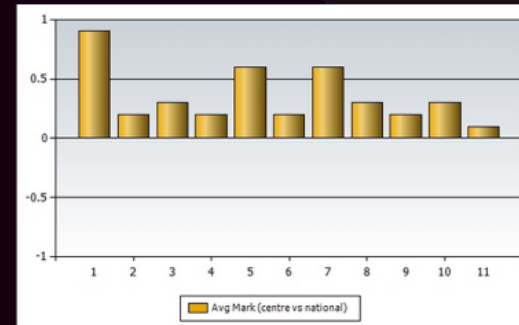
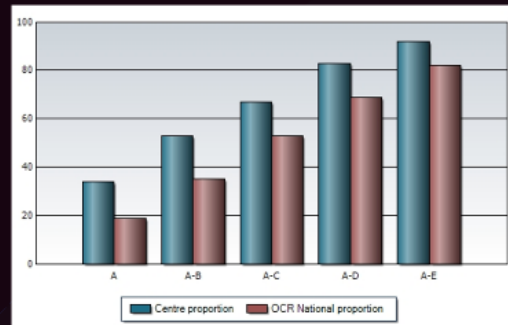
Why Beechen Cliff?

- Dedicated to success as well as enjoyment
- The largest Physics department in Bath with over 100 students studying A Level physics
- Excellent exam results with many students studying STEM subjects at university
- We run the regional Stimulating Physics Network that runs professional training for the other physics teachers in Bath
- We are the hub school for the Ogden Science Partnership organising events for students in this area



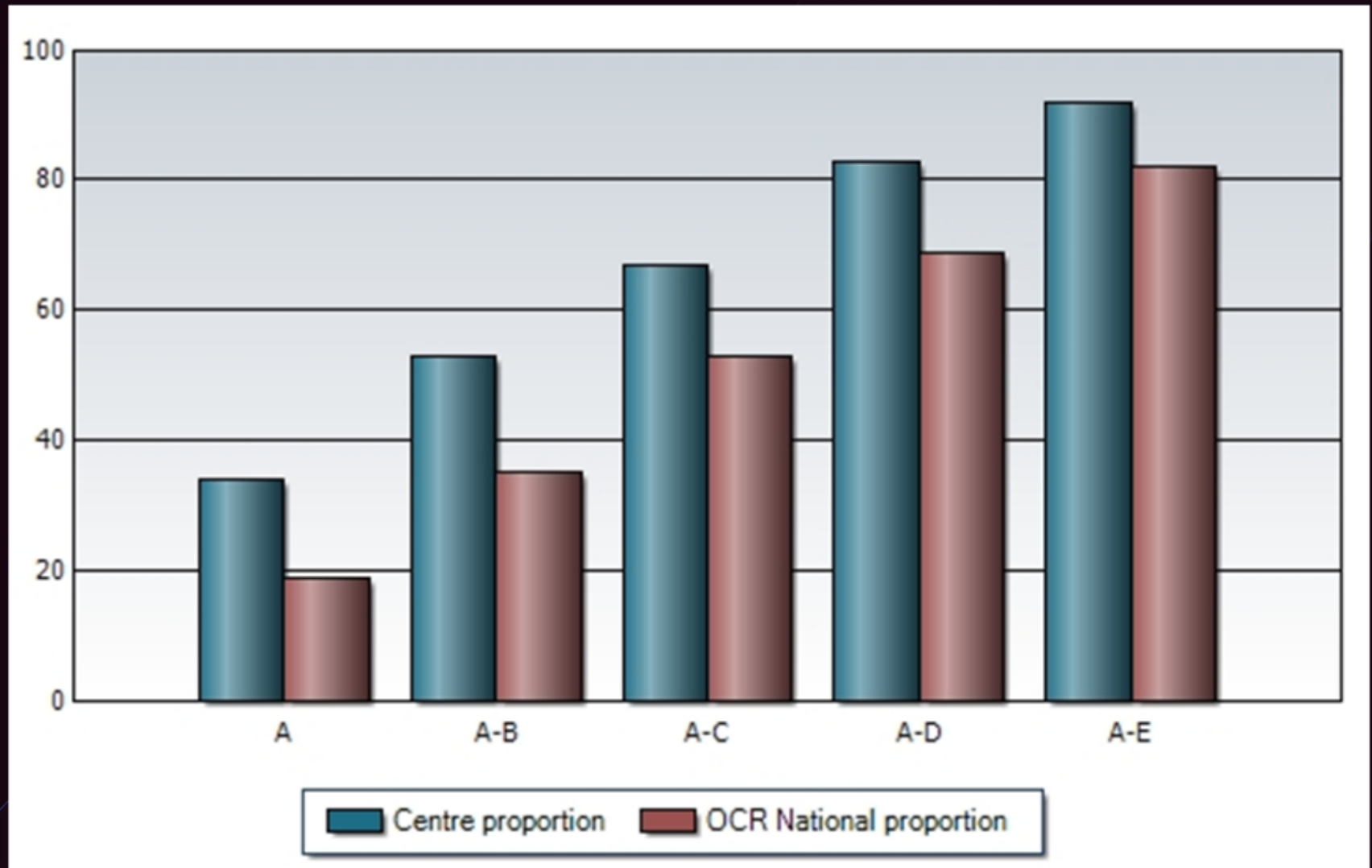
A2 Exam Results 2015

Results higher than the national average

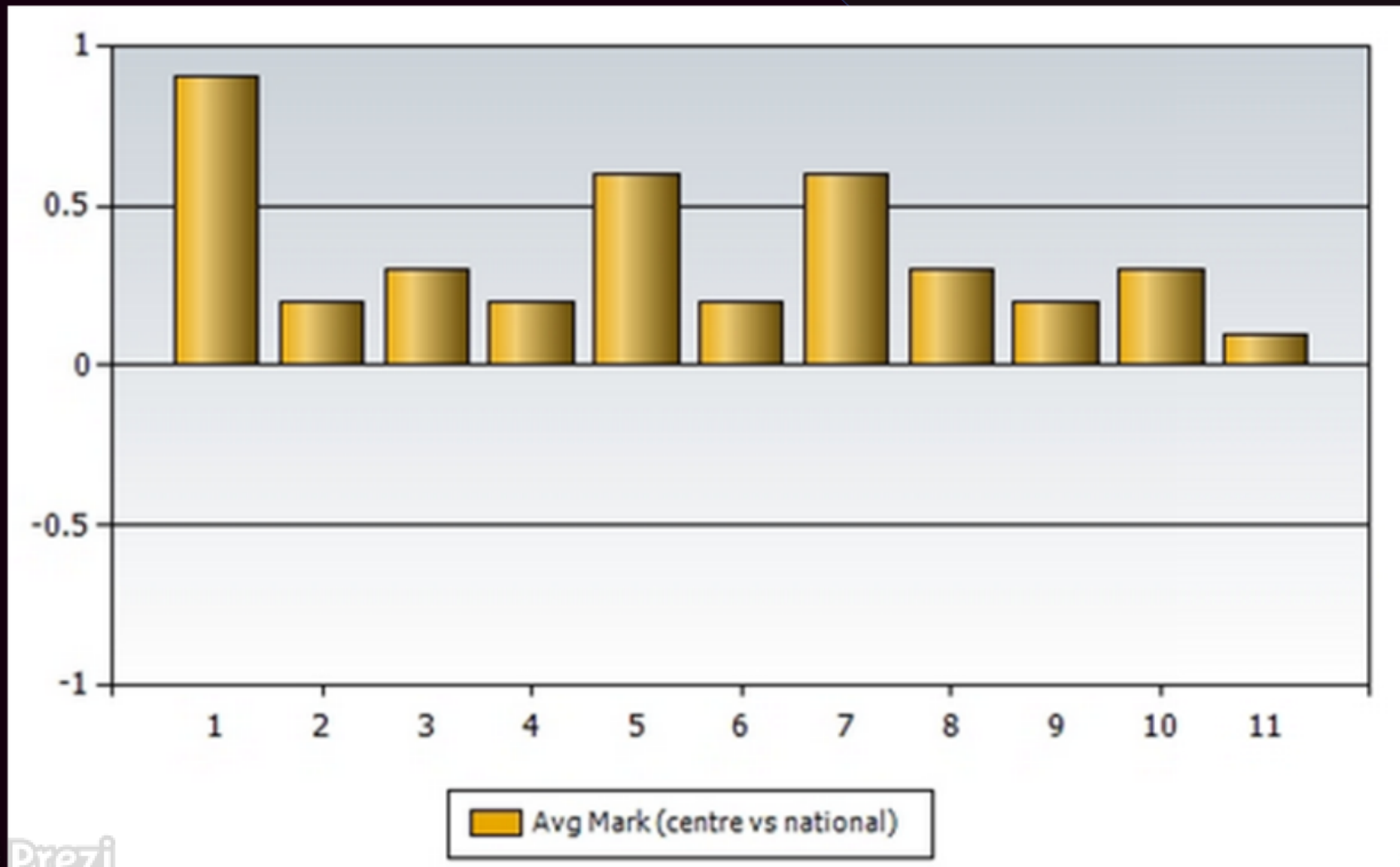


Students at the end of Year 13, on average, achieved a grade higher than their predicted grades.

Results higher than t



the national average



The Course

OCR New Specification A Physics - H156/H556

Who are we looking for?

- Someone who enjoys Physics
- Somebody who is fascinated by how things work and likes the question 'why?'
- Minimum B at GCSE Additional Science or GCSE Physics
- Competent at Maths (B or GCSE)
- Looking to improve their analytical/problem solving skills

A Level Maths highly recommended!

Module 1: Development of practical skills

Module 2: Foundations of physics

Module 3: Forces and motion

Module 4: Electrons, waves, and photons

Students studying A2 also study:

Module 5: Newtonian world and astrophysics

Module 6: Particles and medical physics

- Physical quantities
- Scalars and vectors
- Measurements

- Motion
- Forces in action
- Work, energy and power
- Materials
- Newton's laws of motion

- Charge and current
- Energy, power and efficiency
- Electrical circuits
- Waves
- Quantum physics

- Thermal physics
- Circular motion
- Oscillations
- Gravitational fields
- Astrophysics

- Capacitors
- Electric fields
- Electromagnetic induction
- Nuclear and particle physics
- Medical imaging

e Course

ification A Physics - H156/H556

Development of practical skills

Foundations of physics

Forces and motion

Electrons, waves, and photons

- Physical quantities and units
- Scalars and vectors
- Measurements

- Motion
- Forces in action
- Work, energy and power
- Materials
- Newton's laws of motion and momentum

- Charge and current
- Energy, power and resistance
- Electrical circuits
- Waves
- Quantum physics

2: Foundations of physics

3: Forces and motion

4: Electrons, waves, and photons

- Motion
- Forces in action
- Work, energy and power
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- Newton's laws of motion and momentum

As studying A2 also study:

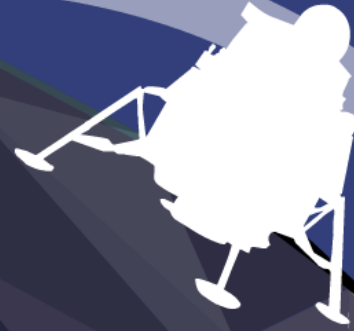
5: Newtonian world and astrophysics

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- Charge and current
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