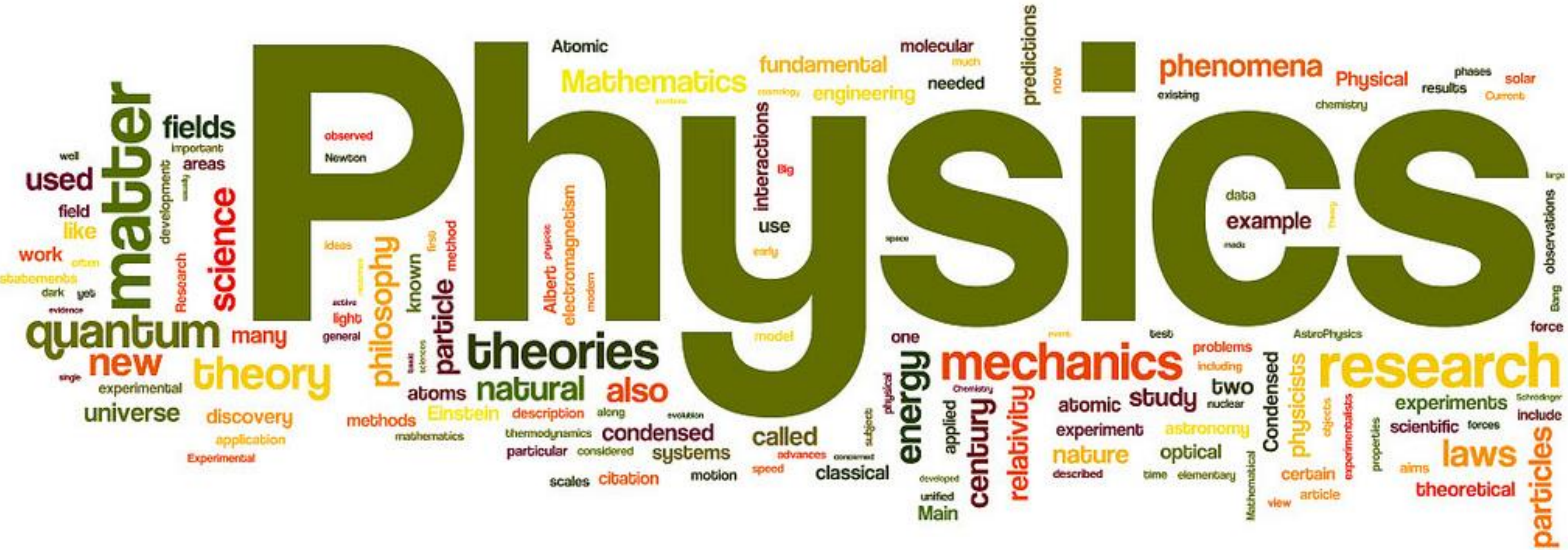
Welcome to



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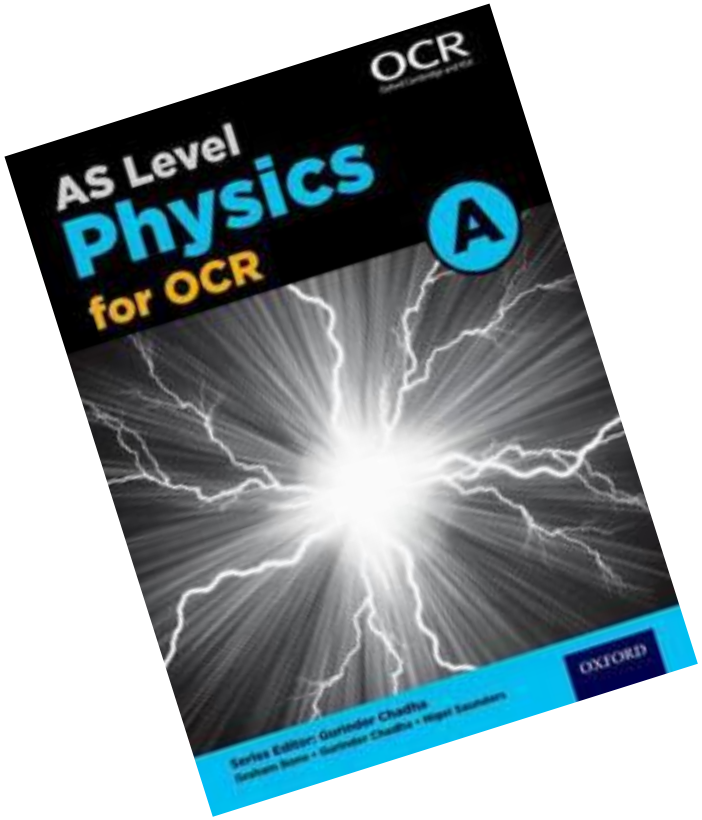
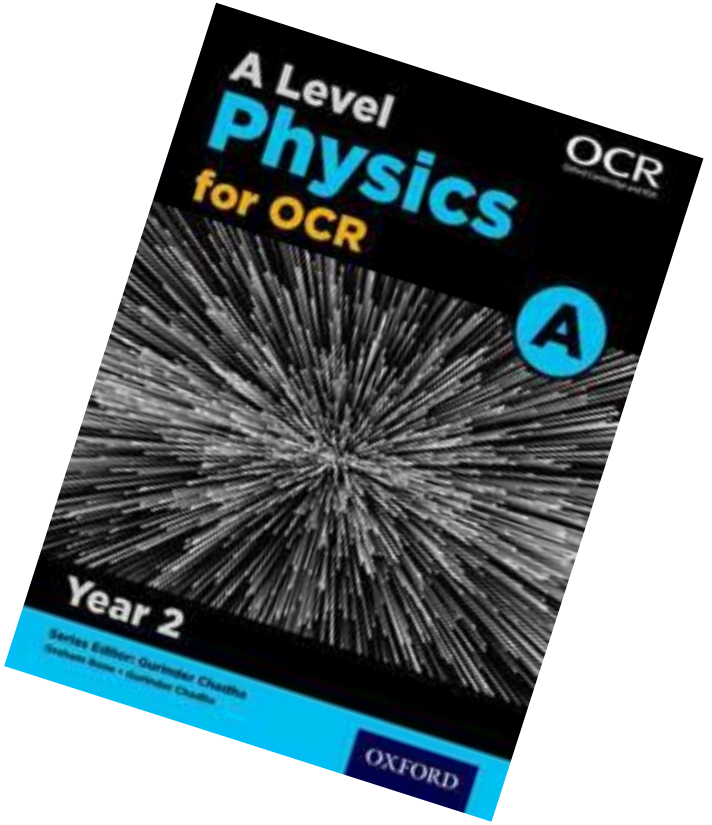
A level Physics Specification A H556

- http://www.ocr.org.uk/qualifications/type/gce/science/physics_a/documents/index.html





A Level Physics – linear assessment

The A Level is fully linear, so assessment of a student's knowledge and understanding of the whole course takes place at the end of two years of study.

At Broxbourne, along with induction tests and mock exam periods, there will be end of Year 12 exam to check progress.

Physics A content is split into six teaching modules:

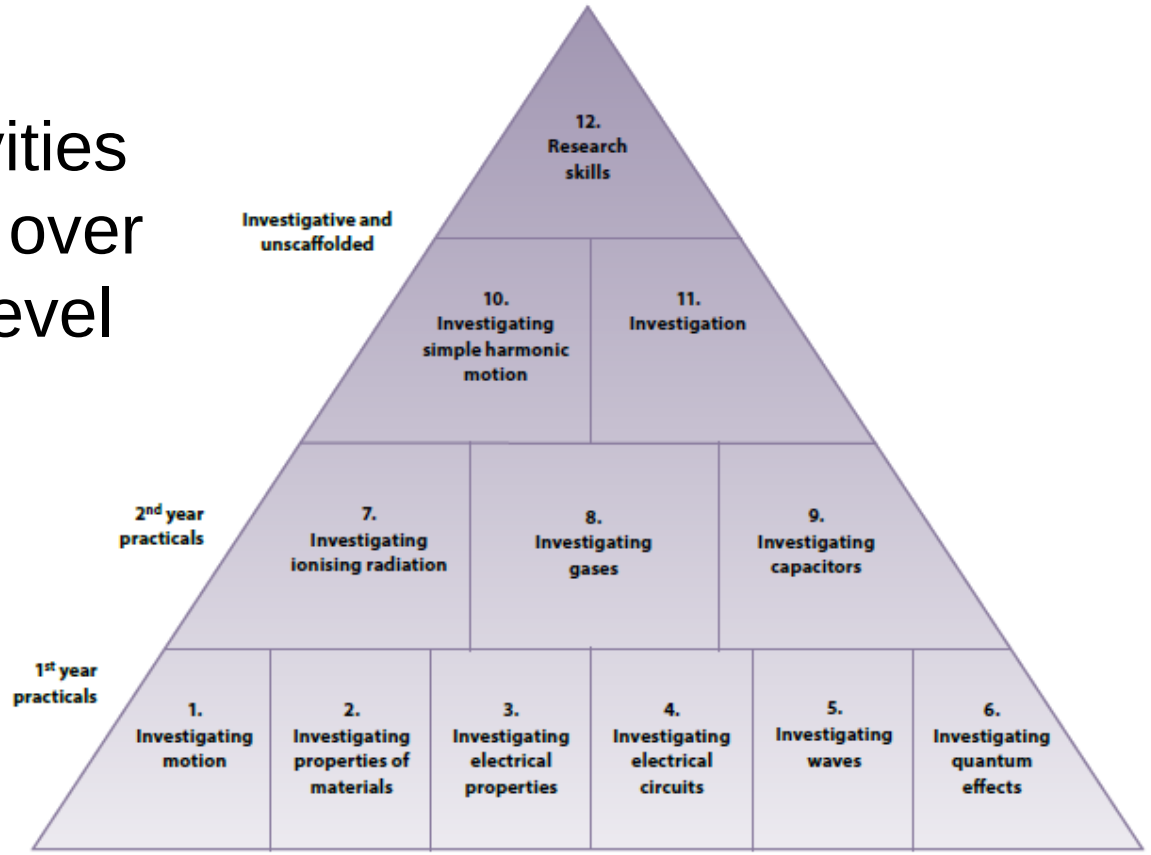
Module 1: Development of practical skills.
Module 2: Foundations of physics.
Module 3: Forces and motion.
Module 4: Electrons, waves, and photons.

Module 5: Newtonian world and astrophysics.
Module 6: Particles and medical physics.

Practical Endorsement - PAGs

- NOT coursework
- is reported separately from the A Level as Pass/Fail
- is teacher-assessed
- the centre may be moderated

- 12 practical activities to be carried out over the two-year A Level course



A LEVEL PHYSICS A (H556) -

Paper		Marks	Duration	Weighting
Paper 1	**Modelling physics** Content – Modules 1, 2, 3, 5	**100**	2 hr 15 mins	37%
	Section A – Multiple choice	15		
	Section B – Structured questions, covering theory and practical skills	85		
Paper 2	**Exploring physics** Content – Modules 1, 2, 4, 6	**100**	2 hr 15 mins	37%
	Section A – Multiple choice	15		
	Section B – Structured questions, covering theory and practical skills	85		
Paper 3	**Unified physics** Content – all modules	**70**	1 hr 30 mins	26%
	Structured questions and extended response questions covering theory and practical skills	70		
Non-exam assessment	**Practical endorsement for physics**	Pass/Fail	Non-exam assessment	Reported separately
	See pages 28-29. Teacher-assessed component common to Physics A and Physics B (Advancing Physics). Candidates complete a minimum of 12 practical activities to demonstrate practical competence. Performance reported separately to the A Level grade. Moderation details still to be confirmed by Ofqual at the time of going to press	Reported separately		

Key Learning Year 12…

Mrs Pilbeam

- Mechanics Topic
- Quantum Topic
- Practical skills - embedded
- Foundations skills - embedded
- Key Practical Tasks – PAGS
- Summer Exam preparation

Mr Deadman

- Electricity Topic
- Waves Topic
- Practical skills - embedded
- Foundation skills - embedded
- Key Practical Tasks – PAGS
- Summer Exam preparation

Key Personal Skills

→Thinking

→Reflecting

→Solving

We expect students to ask questions…

– but they can help themselves too:

→read up on topic / read ahead / read around

→talk together about your work

→find a study buddy

→set up a group chat and actively use it

→Google it

What helps students to succeed?

- Students who study Physics do well if motivated and genuinely interested in the subject.
- Mathematics is central to success in Physics. If not taking Mathematics, students will need even more practice with calculations.
- Physics is about understanding concepts and principles. It helps to discuss Physics with friends and family.
- Students need to be prepared to have a go but seek help when needed

Expectations – how to succeed

- Enthusiasm – for the work to be done
- Attendance to **all lessons** – email absence in advance
- Focus – on work in lessons
- Deadlines – submit work complete and on time
- Willingness – get involved in discussions
- Working in groups – collaborate with others.
- Help – seek help when needed / attend after school sessions
- Bringing equipment calculators to lessons – pen, pencil, eraser, sharpener, 30cm ruler, protractor etc.

How Can students help themselves ?

- Be positive.
- Be organised.
- Use ‘free’ lessons wisely.
- Come and discuss work - we are always available to help.
- Read around the subject – read books & research internet/magazine articles.
- Use the school Library

Work in Class

- Throughout the course students will be expected to work in a variety of ways.
  - Experiments and investigations
  - Questions and discussions
  - Tests & examinations.
  - Solve physical problems.
  - Research tasks using texts and internet.
  - Perform computer based simulations.
  - Present ideas & work including power point presentations.

How much work should they be doing ?

We suggest that students should be doing around 7/9 hours private study per week.

This should include.

- Checking & reading through notes.
- Retrieval practise.
- Making your own notes.
- Homework questions.
- Longer assignments.
- Past exam questions.
- Revision.
- Extra Reading.

What do students go on to do?

- A level Physics leads to a variety of careers, not just Physics and Engineering
- These are possible careers that A level Physics can lead to: Food scientist, Ergonomics expert, Chemist, Oceanographer, Climatologist, Medical Physicist, Naval architect, Orthopedist, Radiographer, Geophysicist, Audio technician

Engineering in areas such as:

- Flight
- Design
- Mining
- Medical
- Electrical/electronic
- Mechanical
- Aeronautical
- Agricultural
- Automobile