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to hear the sound and activate the  
animations

Why Physics?  
Is it for you?



## AS and first year of A-level

Measurements and their errors

Particles and radiation

Waves

Mechanics and energy

Electricity

## Second year of A-level

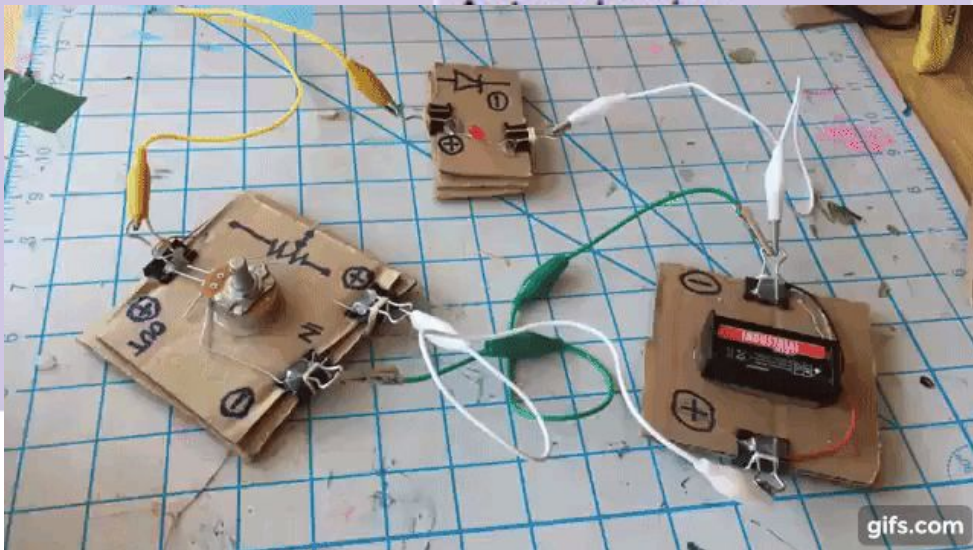
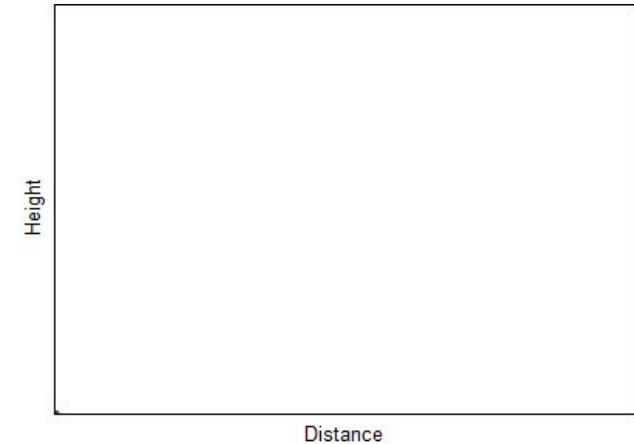
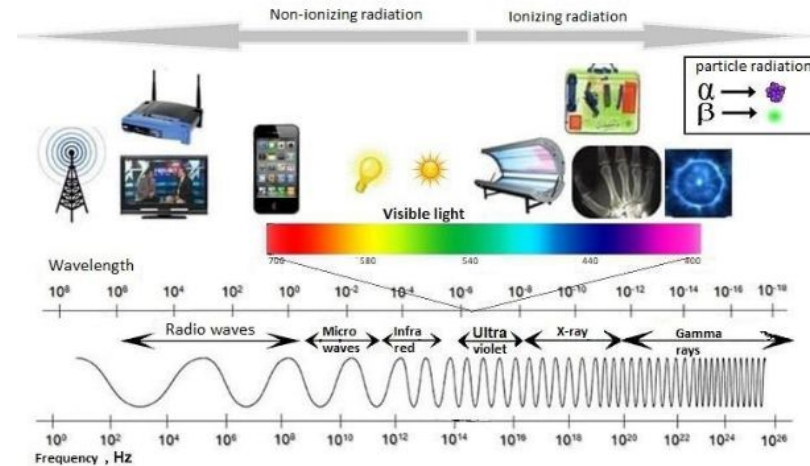
Further mechanics and thermal physics

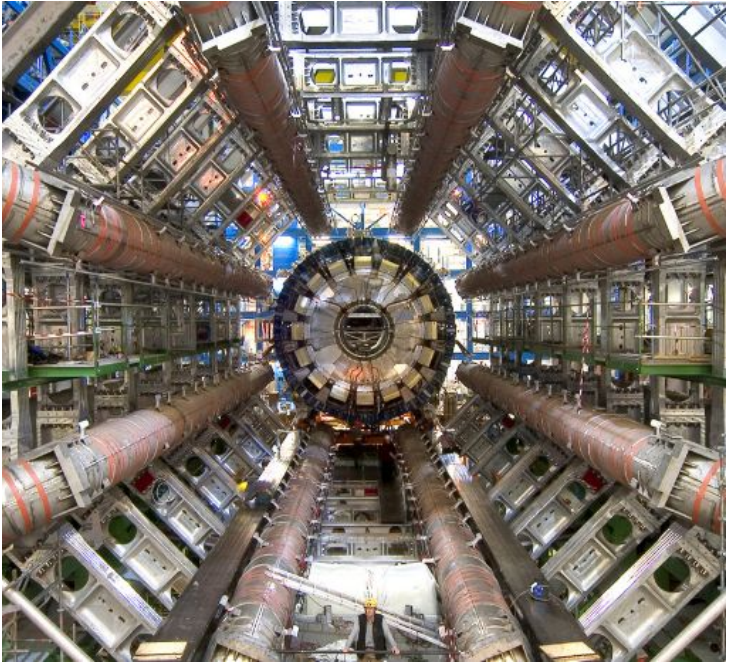
Fields

Nuclear physics

Plus **one** option from the following – ask your teacher which is offered at your school or college

## The electromagnetic spectrum





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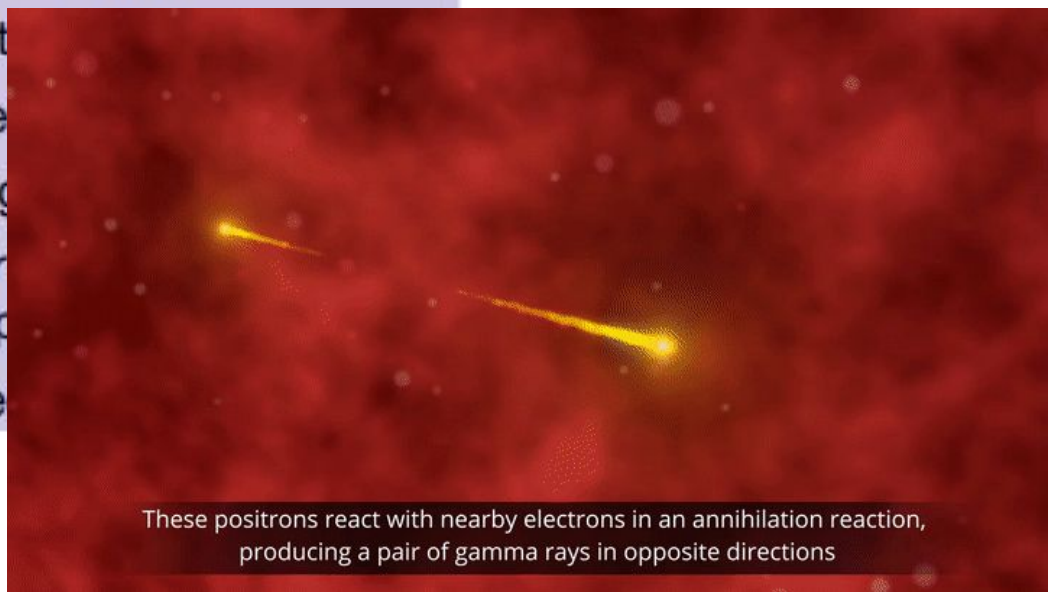
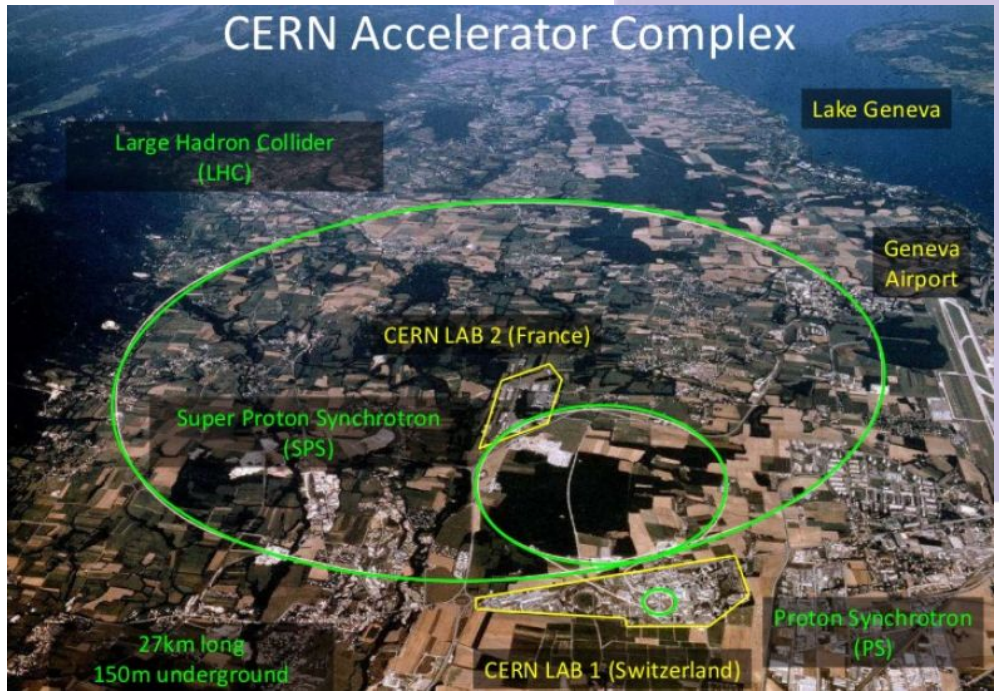
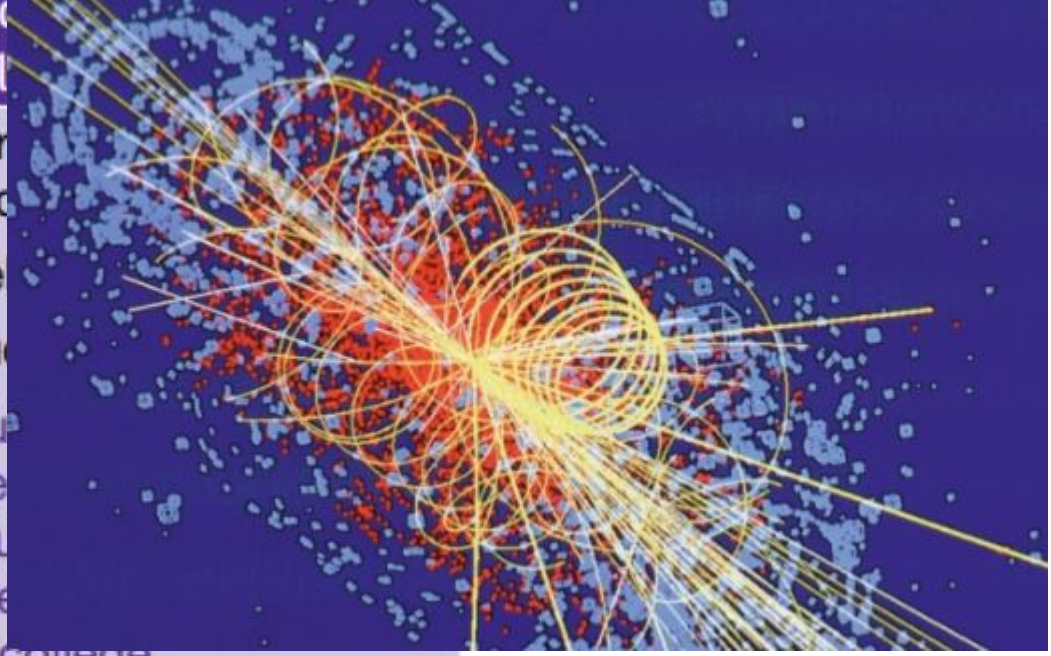
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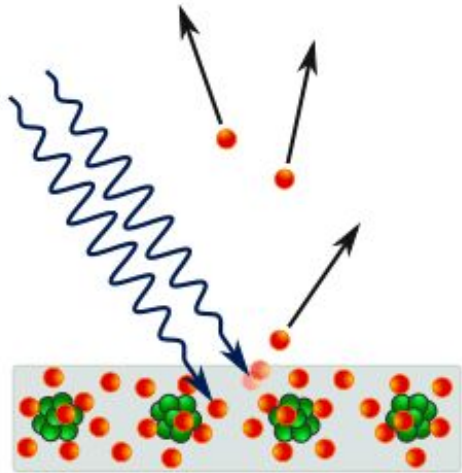
you

offer

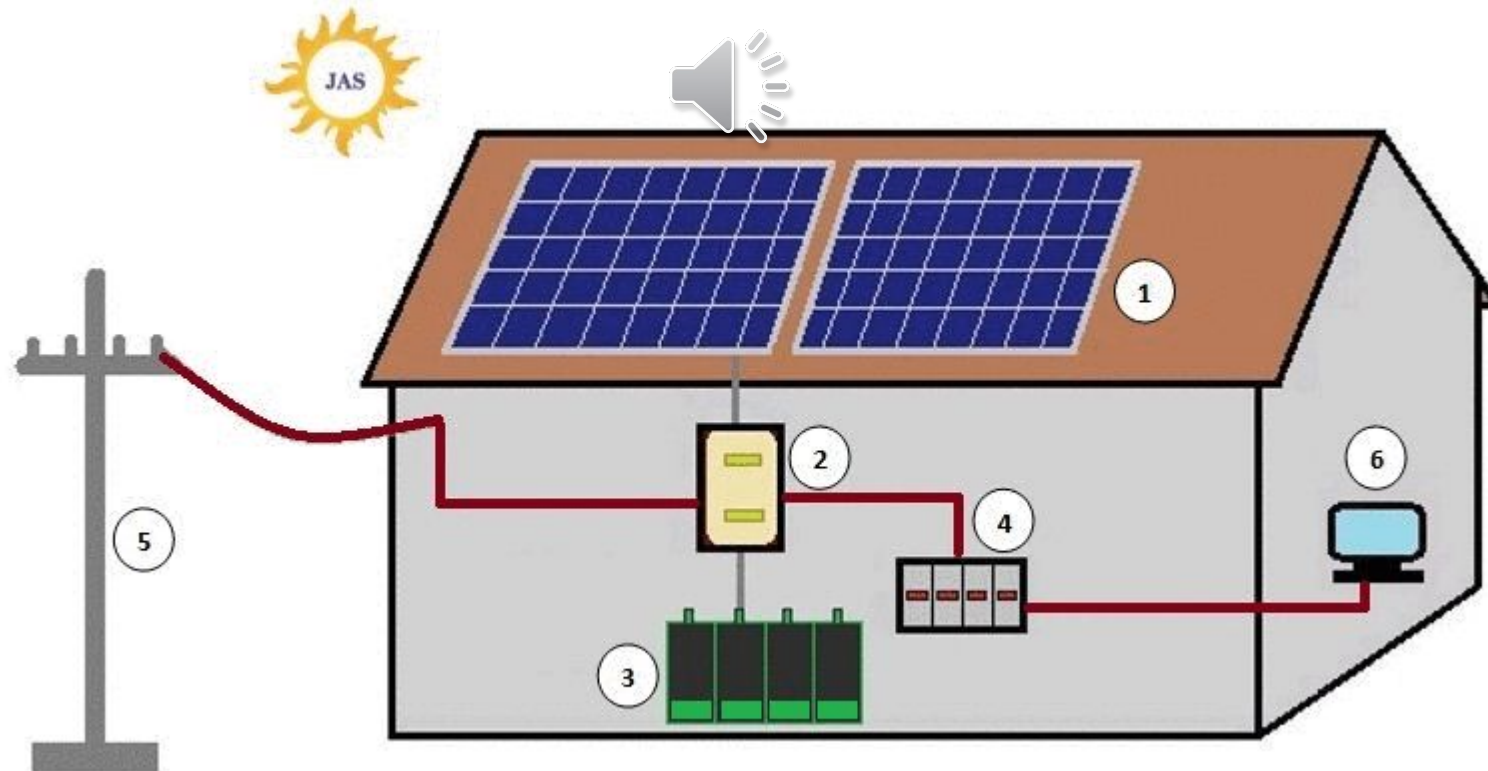
or college

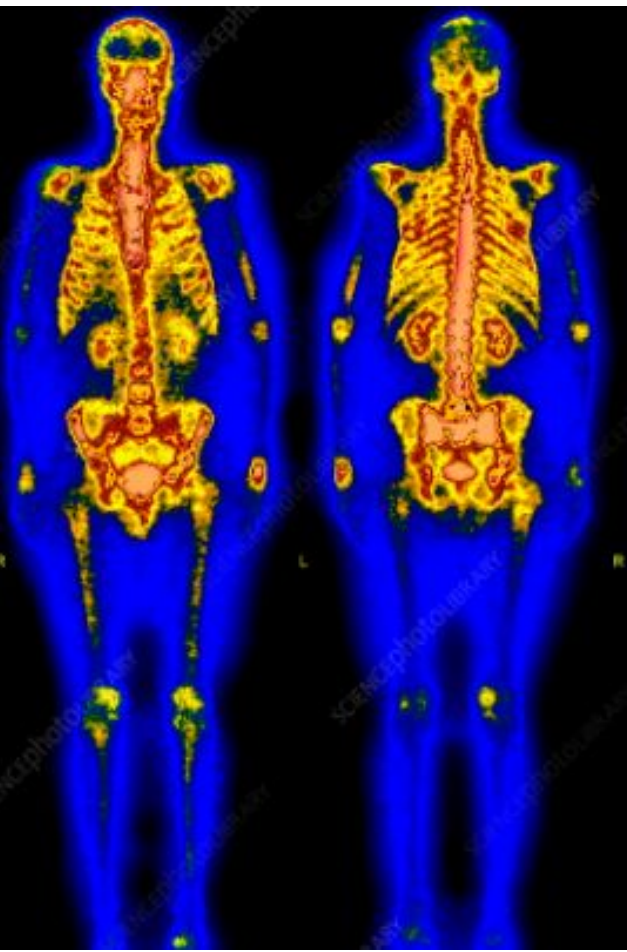


These positrons react with nearby electrons in an annihilation reaction, producing a pair of gamma rays in opposite directions

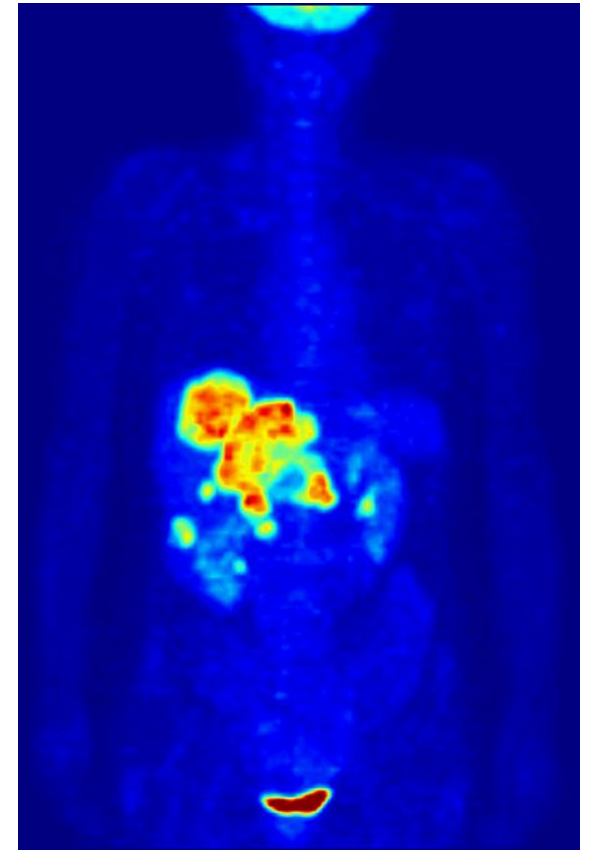
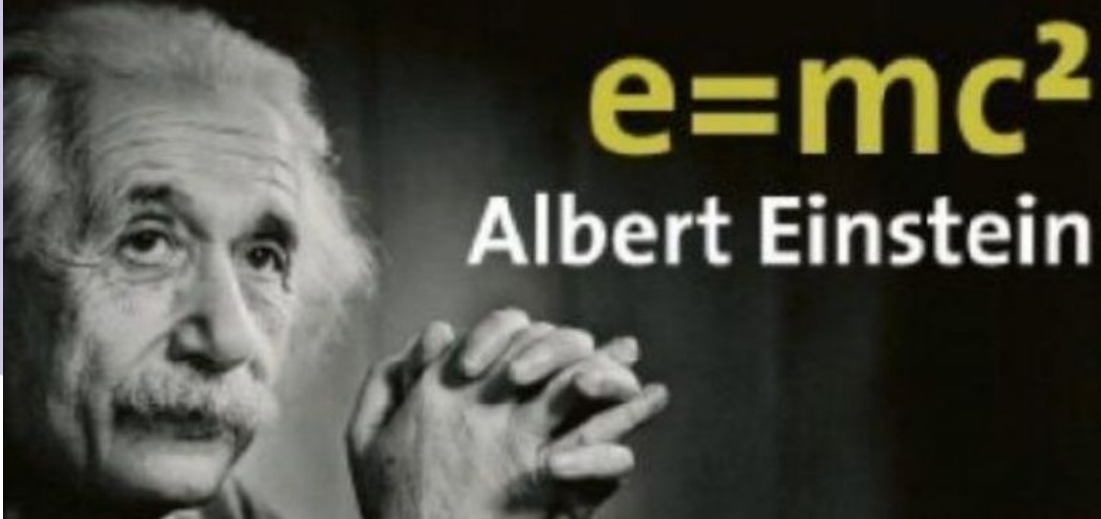
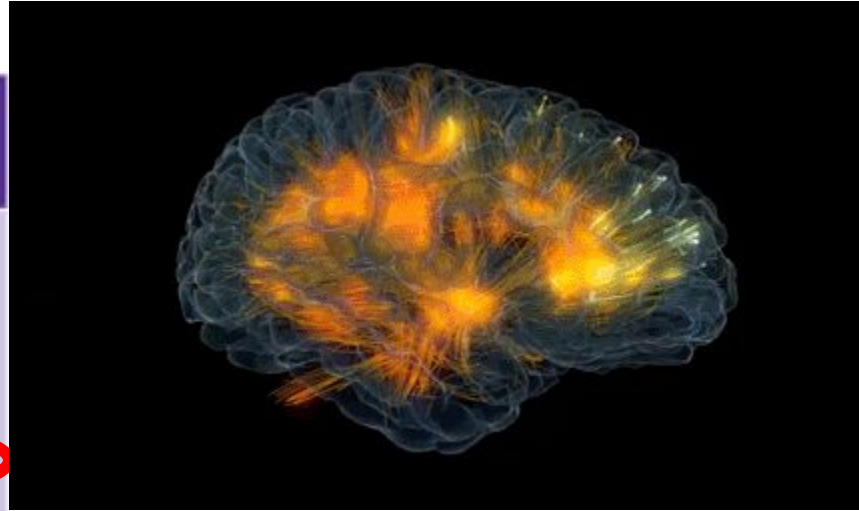


AS and first year of A-level	Second year of A-level
Measurements and their errors	Further mechanics and thermal physics
Particles and <b>radiation</b>	Fields
Waves	Nuclear physics
Mechanics and energy	Plus <b>one</b> option from the following – ask






AS and first year of A-level	Second year of A-level
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Particles and radiation	Fields
Waves	<b>Nuclear physics</b>
Mechanics and energy	Plus <b>one</b> option from the following – ask your teacher which is offered at your school or college
Electricity	Astrophysics

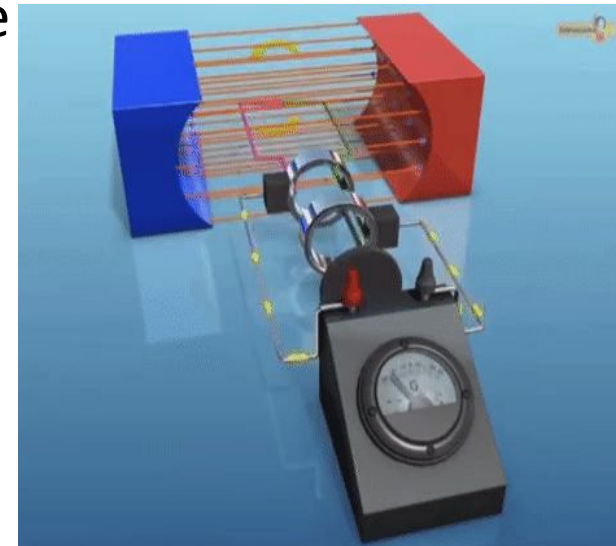
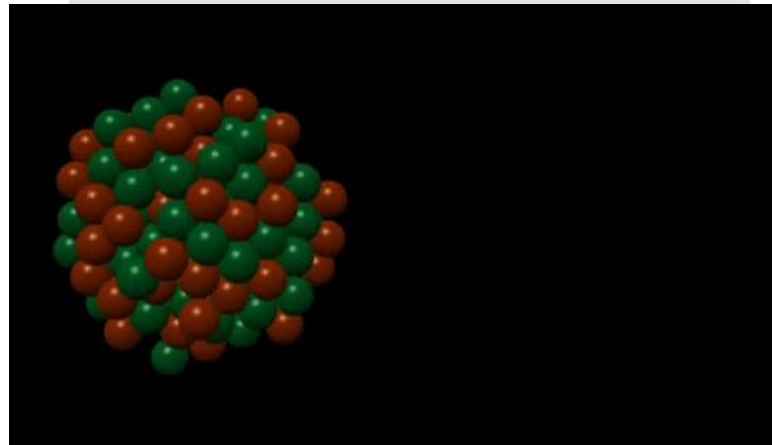
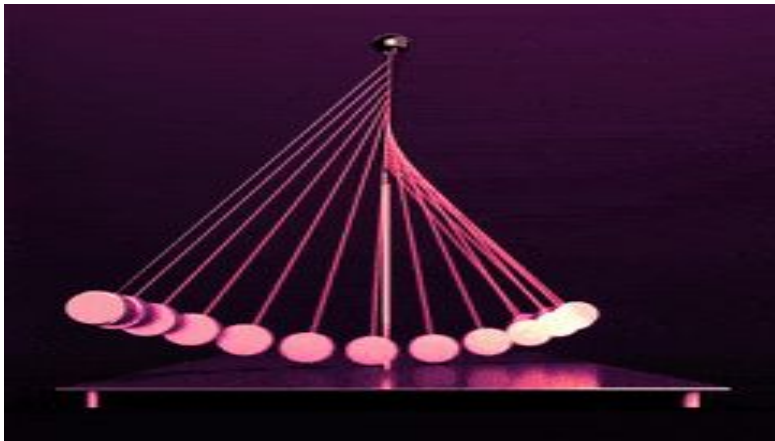


# Exams

There is no coursework on this course. However, your performance during practicals will be assessed.

Paper 1	+	Paper 2	+	Paper 3
<b>Content</b> <ul style="list-style-type: none"><li>• Topics 1 – 5</li><li>• and periodic motion</li></ul>		<b>Content</b> <ul style="list-style-type: none"><li>• Topics 6 – 8</li></ul>		<b>Content</b> <ul style="list-style-type: none"><li>• Practical skills</li><li>• Data analysis</li><li>• Optional topic</li></ul>
<b>Assessment</b> <ul style="list-style-type: none"><li>• Written exam: 2 hours</li><li>• 85 marks</li><li>• 34% of A-level</li></ul>		 <b>Assessment</b> <ul style="list-style-type: none"><li>• Written exam: 2 hours</li><li>• 85 marks</li><li>• 34% of A-level</li></ul>		<b>Assessment</b> <ul style="list-style-type: none"><li>• Written exam: 2 hours</li><li>• 80 marks</li><li>• 32% of A-level</li></ul>
<b>Questions</b> <ul style="list-style-type: none"><li>• 60 marks: a mixture of short and long answer questions</li><li>• 25 marks: multiple choice questions</li></ul>		<b>Questions</b> <ul style="list-style-type: none"><li>• 60 marks: a mixture of short and long answer questions</li><li>• 25 marks: multiple choice questions</li></ul>		<b>Questions</b> <ul style="list-style-type: none"><li>• 45 marks: questions on practical experiments and data analysis</li><li>• 35 marks: questions on optional topic</li></ul>

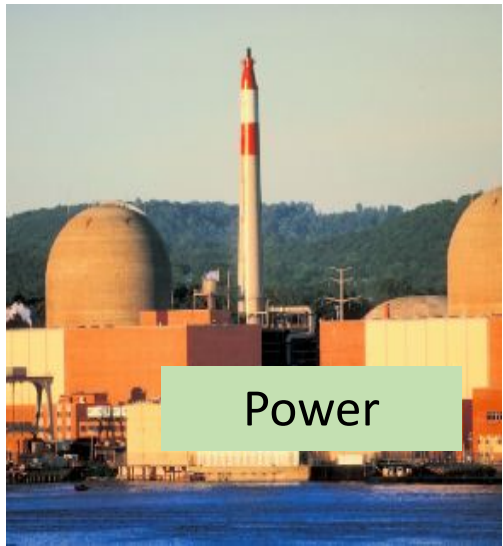
- 1 Investigation into stationary waves
- 2 Investigation of interference effects to include the Young's slit experiment.
- 3 Determination of  $g$  by a free-fall method
- 4 Determination of the Young modulus by a simple method.
- 5 Determination of resistivity of a wire
- 6 Investigation of the emf and internal resistance of electric
- 7 Investigation into simple harmonic motion
- 8 Investigation of Boyle's law and Charles's law for a gas.
- 9 Investigation of the charge and discharge of capacitors.
- 10 Investigate how the force on a wire varies with flux density, current and length of
- 11 Investigate, the effect on magnetic flux linkage of varying the angle
- 12 Investigation of the inverse-square law for gamma radiation.







Teacher



Power

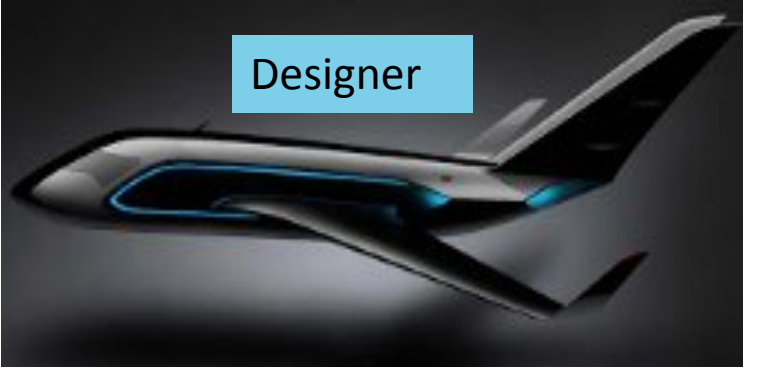


Engineer



Medicine

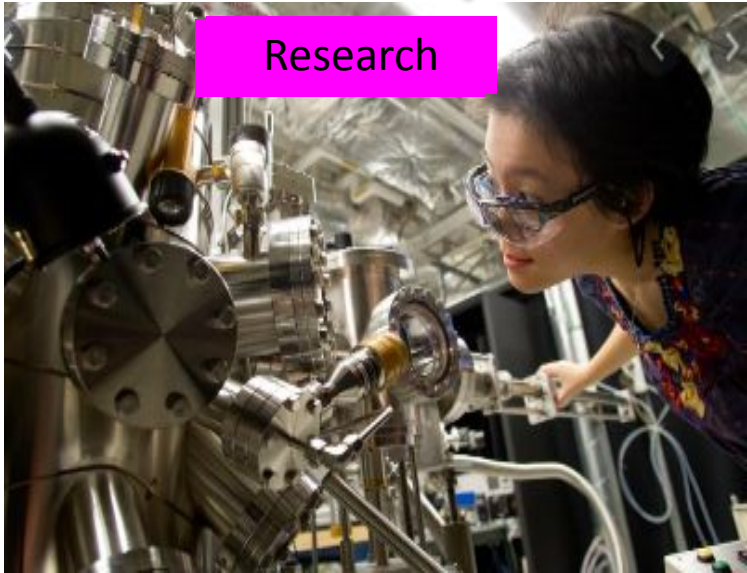
# Careers



Designer



Apprenticeships



Research



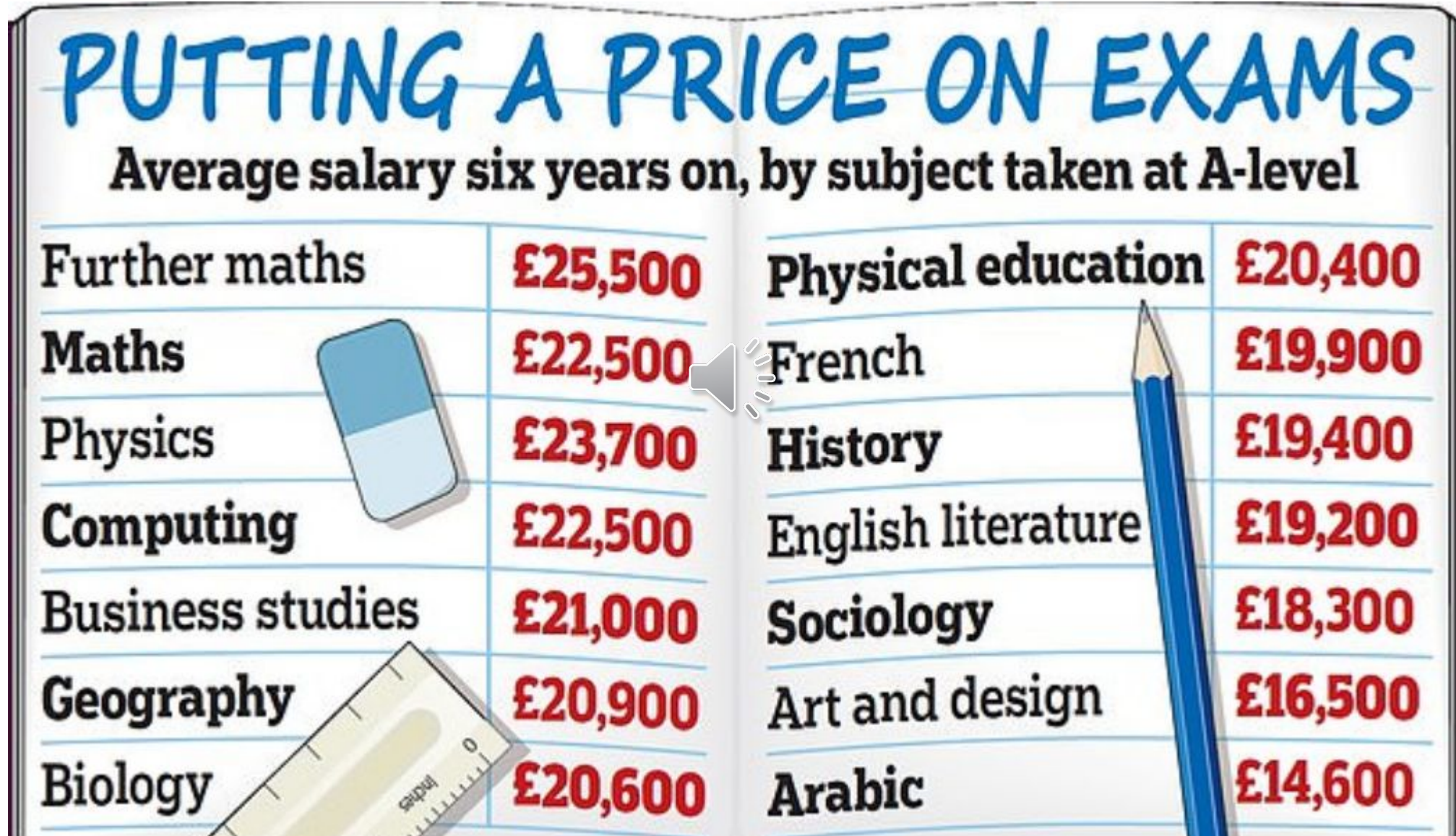
Scientist

# Good value education 😊

## PUTTING A PRICE ON EXAMS

Average salary six years on, by subject taken at A-level

Further maths	£25,500	Physical education	£20,400
Maths	£22,500	French	£19,900
Physics	£23,700	History	£19,400
Computing	£22,500	English literature	£19,200
Business studies	£21,000	Sociology	£18,300
Geography	£20,900	Art and design	£16,500
Biology	£20,600	Arabic	£14,600



<https://www.youtube.com/watch?v=iedbUUX8iJ8&t=7s>

If you need further information – call into A215 and see Mr. McDuff  
Thank-you for listening

