

THE BENEFITS OF STUDYING CAMBRIDGE IGCSE PHYSICS

How does gravity work? In our Cambridge IGCSE Physics homeschooling course your child will learn the answer to this and many other questions. They will explore the basic building blocks of the universe – energy and matter. They'll be introduced to a range of interesting phenomena and discover surprising explanations for everyday things we see and take for granted. Our carefully designed based experiments will help to reinforce your child's understanding of theoretical ideas as they are guided through the main areas of Physics.

KEY TOPICS COVERED IN THE COURSE

Cambridge IGCSE Physics will enable your child to develop a concern for accuracy and precision, objectivity, integrity, enquiry, initiative and inventiveness.

Key topics in the course include:

- General physics;
- Thermal physics;
- Properties of waves, including light and sound;
- Electricity and magnetism;
- Atomic physics.

PRIOR REQUIREMENTS/HOURS OF STUDY

- Our Cambridge IGCSE Physics course assumes no prior knowledge. It begins from first principles.
- Your child should allow for up to 150 hours' study time to complete their Cambridge IGCSE Physics plus additional time for completing assignments within entire biennial course. This is an approximate figure which depends on their learning abilities and the pace at which they work.

THE SYLLABUS AND THE EXAM

- The course will prepare your child for the following three papers of the Cambridge (CIE) Physics syllabus 0625.

- The exam comprises:

Paper 2: Multiple choice paper: 45 minutes, (30% of total mark).

Paper 4: Extended theory paper: 1 hour and 15 minutes, (50%).

Paper 6: Alternative to Practical paper which will test your child's familiarity with practical procedures which they will learn during the course: 1 hour, (20%).

Books: Quantum, SEI - Physics IGCSE, Cambridge University Press

II anno			
	<i>Italian Teacher</i> 2h/week		<i>Mother Tongue Teacher</i> 1h/week
Sett Ott		Sound and Light Concave and convex lenses	Electricity
Ott Nov		Rays and waves Electromagnetic waves and spectrum	Magnets and currents
Nov Dic	Moto rettilineo uniforme	Motion	Electronics
Genn	Moto uniformemente accelerato e caduta libera		
Febb	Moti nel piano - il moto lungo un piano inclinato, il moto dei proiettili.	Circular motion	Atoms and radioactivity:
Mar	I principi della dinamica	Newton's laws	
Apr Mag	Lavoro e forme di energia	Momentum Collision problems	
Practical Investigations and experiments in Laboratory			

THE BENEFITS OF STUDYING CAMBRIDGE IGCSE MATHS

A good grounding in Maths is vital if your child wishes to enter university or embark on a career. Grade C is part of an accepted entrance qualification for most universities. Grade A or A* or better provides evidence that they have the numeracy skills to do further study in the subject and in the Sciences.

Our Cambridge IGCSE Maths course will teach your child how to think logically. If your child knows how to think logically then they will know how to make more rational decisions and how to present an argument. They will be better able to operate in most work environments. It will also help your child decide how to spend money more wisely and manage time more effectively.

KEY TOPICS COVERED IN THE COURSE

- Number;
- Algebra and graphs;
- Geometry & co-ordinate geometry;
- Mensuration;
- Trigonometry;
- Matrices and transformations;
- Probability & Statistics.

PRIOR REQUIREMENTS/HOURS OF STUDY

- Our Cambridge IGCSE Maths course assumes a sound basic knowledge of the subject.
- Your child should allow for up to 150 hours' study time to complete the course plus additional time for completing assignments within entire biennial course. This is an approximate figure which depends on their learning abilities and the pace at which they work.

THE SYLLABUS AND THE EXAM

- The course is designed to meet the requirements of Cambridge IGCSE Maths syllabus 0580.
- Your child may prepare for either the “Extended” exam (papers 2 and 4) or the “Core” exam (papers 1 and 3). As its name implies the Extended syllabus is broader and covers more topics than the Core.
- The highest grade your child can achieve in the Core exam is C, whereas in the Extended exam they can achieve up to A*. Our application form allows you to choose the exam for which you wish your child to study. If you’re in any doubt about which exam to take, we recommend that your child commence their course by studying for the Extended exam. Should they wish to change to the Core syllabus during the course, it can be easily arranged with their teachers.
- Assessment comprises two written papers:

For the Core exam:

Paper 1: 1 hour (35% of the total marks)

Paper 3: 2 hours (65%)

For the Extended exam:

Paper 2: 1 hour and 30 minutes (35% of the total marks)

Paper 4: 2 hours and 30 minutes(65%)

II anno		
	Italian Teacher	5h/week
	Algebra	Geometry
Sett Ott	Number extended Review about fractions, percentages, standard form. Percentages: percentage increase and decrease. Simple interest. Compound interest. Use of calculator. Exponential growth and decay. Upper and lower bounds for calculations. Number sequences.	Trigonometry
Ott	Straight lines Linear programming	
Nov	Sistemi di primo grado Simultaneous linear equations	Circonferenza e cerchio Tangents and diametres Corde Angle in a circle
Nov Dic	Radicali	Triangoli e punti notevoli con Geogebra Cyclic quadrilaterals
Genn	Equazioni di secondo grado- Quadratic equation	Congruent shapes Equivalenza ed equicomposizione Euclide e Pitagora
Febb	Curved graphs Parabola. Disequazioni irrazionali e con modulo	Talete Criteri di Similitudine Similar shapes
Mar	Introduction to probability	Sezione Aurea
Apr	Transformation and matrices	
	Geometrical Constructions	Sviluppato dal Docente di Disegno
Mag	Exam	-