

# **Hedong International Academy**

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## **YEAR 10 AND YEAR 11 IGCSE CURRICULUM BOOKLET**

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**Cambridge Assessment  
International Education**

# PRINCIPAL'S MESSAGE



Thank you for your interest in our school. I would like to introduce our school and share some of the rationale that has resulted in its creation and also its ethos and objectives. Hedong International School's foundation has been inspired by the success of Tianjin Yinghua Cambridge International School (TYCIS) based in Wujing district of Tianjin. This school is part of the larger Yinghua International school which was established over 15 years ago. TYCIS has now graduated 3 cohorts of students all of whom have gone on to secure places at the top universities in the UK, USA, Canada and Hong Kong. Quite simply the success of TYCIS is astounding and remarkable.

With this success we now wish to create a sister school and mirror the achievements of TYCIS here in Hedong International Academy. Yuncheng is an obvious location with its long cultural heritage especially in education. The quality of the students in Shanxi province is well known and we hope to provide the best students with a platform from which they too will be able to study across the world at globally regarded universities.

Our curriculum is based around the IGCSE and AS and A level examination set by Cambridge International. These qualifications are considered by many to be "the Gold Standard" in terms of pre university certification. We will be giving a number of information meetings and presentations to interested parents and students so you can find out more about these high quality courses.

All students will be assessed using online testing systems and interviews. We will select our students based upon their English competence and academic potential. For the highest ability students, we will be offering some generous scholarships.

This information in this booklet is intended to provide you with details of the subjects we will offer and some of the contents and more importantly the skills students will learn. Please remember by choosing an international curriculum you will be exposing your children to a very different way of learning and development. The focus of all of this will be to allow our student to move on to study at universities of their choice all over the world and also to be able to succeed and excel once they are there.

This booklet will help you decide which subjects to choose. The subjects that you choose will be dependent on many factors such as:

- Where do you want to go to university?
- What subject would you like to study at university?
- What career are you thinking of? What subjects would be useful to you in your chosen career?
- What subjects are you good at?
- What subjects do you enjoy?

Do not choose a subject because you like the teacher or because your friends have chosen it. Above all, talk with the subject teachers, your tutor, or the university guidance counsellor.

Remember that ALL STUDENTS must study the following subjects:-

English, Mathematics, at least 2 Science subjects. In addition you will have Chinese Language and Culture class and PE (which is not examined).

John P Evans  
Principal

# IGCSE INFORMATION

will normally take 9 subjects which are examined, plus three non examined core subjects namely PE, Chinese Culture and Tutorial. Some of the IGCSE subjects form part of the Core Compulsory Curriculum and others are available for students to choose, (electives / options) that complete the students overall study programme. Students receive the following core compulsory subject lessons:

English, Mathematics, 2 Science subjects, (PE, Chinese Culture and Tutorial)

In addition to the mandatory core subjects, students choose other subjects from the list of optional subjects from a subject choice selection sheet (an example of this is shown on page 5). Each student is expected to tick one subject in each "Subject Block" and cannot tick the same subject twice. Careful attention must be given to any restrictions which are designed to allow students to pursue a broad and balanced curriculum. The students will be provided with a subject choice selection form upon enrolment.

## HOMework

Homework is seen as an important aspect of the curriculum and students are expected to complete their tasks by the specified date and to the best of their ability. The time frame for homework given here is only a guide. Many assignments given at IGCSE (especially coursework which contributes to final exam marks) are long term and require students to develop good time-management skills.

Students studying IGCSE should expect to spend 2 – 2.5 hours each night on homework and study consolidation. Experience has shown that students respond well to parental interest in their work and we encourage parents to monitor their child's homework habits and take an interest in what is being studied at school.

## SUBJECT CHOICE PROCESS

Once a student has been accepted into our programme they complete a subject choice form. This form should be submitted to the school as soon as possible. This form indicates the subjects that they are likely to want to take for IGCSE.

From this information the Year 10 curriculum timetable is created to achieve the highest possible subject choice satisfaction rate for the students. It is not always possible to satisfy every student's individual choices. Those students who are not able to get all of their subject choices are counselled onto alternative suitable IGCSE subjects.

# ASSESSMENT AND REPORTING

Students are assessed regularly in a variety of different ways, depending on what is appropriate to the subject and the type of work being undertaken. For example, they will regularly sit end-of-topic tests, complete extended written assignments or be observed preparing creative work. The way in which students' work is marked varies from subject to subject. This means that we are continually assessing the students in our classes and using the results of those assessments to identify routes for the individual student to improve.

At the end of Year 10, all students sit exams in the subjects that they have been studying. The exams assess what they have learnt throughout the year, so it is important that students revise all the work they have covered. During January/February in Year 11 all students will sit "mock" IGCSE exams. Some subjects require students to prepare a portfolio or coursework over the duration of the course that is assessed and forms part of the final IGCSE grade. Details of the IGCSE assessment structure for the individual subjects are provided in this booklet. Students are also informed at the beginning of every year so that they understand the various procedures that apply.

A report is produced at least twice a year which contains an attainment grade and an effort/engagement grade for every subject studied. The grades are an aggregate of the students' performance over the year to that date and are calculated using the marks or grades gained throughout the preceding months from their tests, homework and other assessments.

Students will be graded from A-U for attainment and "Colour Coded" for effort/engagement. The attainment grades are based on assessment criteria produced by the external examination boards and the criteria printed on the reports.

## TEXT BOOKS

Text books are available for most courses and offer a useful aid to learning. The text books generally cover the complete IGCSE course and therefore, in most cases, one text book will cover Year 10 and Year 11 work. Each year the teachers inspect the available text books and adopt a text book for their course. The school will order a text book for each student and for course they choose to take.

## TUTORS

Students are placed in a group which is overseen by a tutor. Students meet their tutors every day at morning registration. Tutors are the first point of contact for students experiencing difficulties. They also monitor use of the Student Planner which is used for recording homework and provides a means for staff and parents to communicate with one another.

Students will also have a Chinese speaking tutor or Housemaster to help with communication with parents

# CHOOSE

All students will take Physical Education, PSHE, Chinese, English, Maths, Coordinated Science and Global Perspectives in addition to their chosen subjects.

In Year 10, you then can choose two subjects from Computer Science, Economics or Business Studies.

In Year 11, you can pick one subject from Computer Science, Economics or Business Studies  
You will a minimum of 8 subjects in total

Here is a sample of subject choice option blocks

Year 10
Physical Education
PHSE
Chinese
English
Maths
Coordinated Science
Global Perspectives
<b>Pick any two from:</b>
Computer Science
Economics
Business Studies

Year 11
Physical Education (during Activity time)
PHSE
Chinese (during Evening slots)
English
Maths
Coordinated Science
Global Perspectives
<b>Pick any one from:</b>
Computer Science
Economics
Business Studies

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## UNIVERSITY AND CAREER

The aim of the University and Careers Department is to prepare TYCIS students from Year 10 through to Year 13 to identify their opportunities and responsibilities, through the development of career management skills with a clear focus on the best fit between subject choices at school, interests, strengths culminating in each student's individual personal university choices towards their chosen career.

- The university guidance counsellor is available for appointments throughout the school day for one-on-one appointments to discuss future educational career options.
- Parents are welcome to have appointments with the university guidance counsellor.
- During each year there will be one-on-one interviews organised with the university guidance counsellor.
- Throughout each year students will be encouraged to attend the university information sessions within the school from United Kingdom, United State of America and Canada.
- Students will be encouraged to foster their interests in their university/degree choices via their chosen activities.
- Student sessions will work towards identifying what they want to study to ascertain what subjects/skills are required to study his/her chosen course.
- Students will have sessions to identify their passions, interests, subject likes and dislikes and skills, working towards identifying what they may wish to study and career choices.

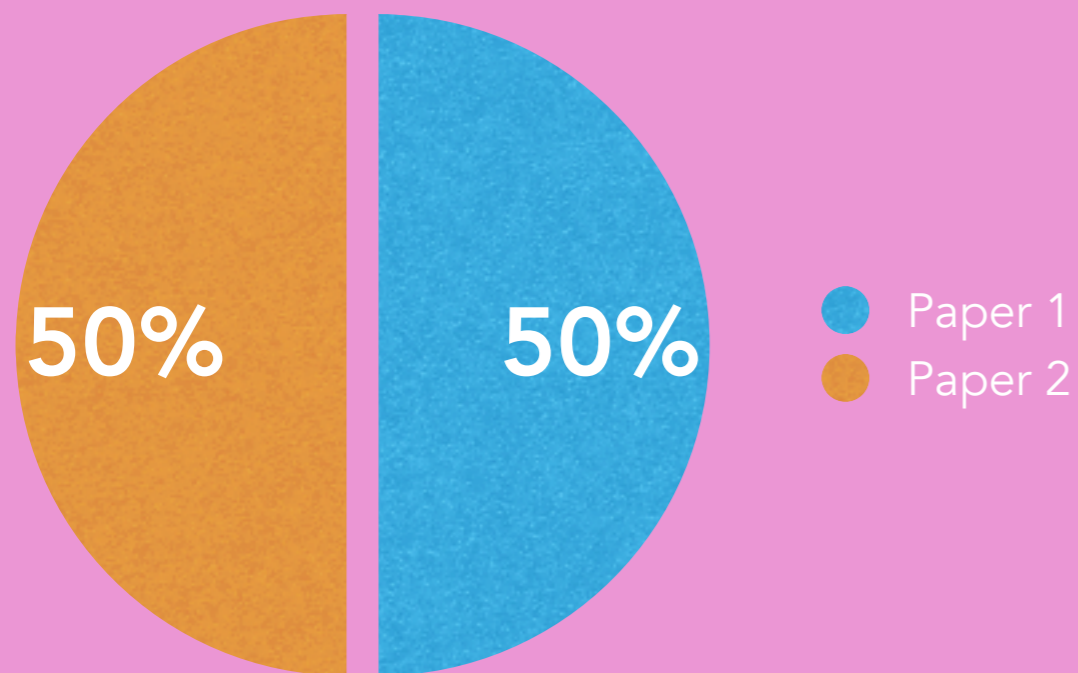
# **BUSINESS STUDIES 0450**



## ABOUT

The course considers the types of business organisation present in the global community and how these organisations meet their objectives through internal development and processes. External influences on businesses are analysed and students consider real world case-studies to apply theory.

## ASSESSMENT



## TOPICS

The course is split over 6 main areas that are studied for several weeks at a time:

1. Business aims and types of organisations,
2. Human resources,
3. Marketing
4. Finance
5. Operations management
6. External influences on businesses.

## SKILLS AND AIMS

Students will have an understanding of how commercial entities operate internally and the purpose and activities of different functions across business organisations. They will develop business English where they are able to use the right grammar and vocabulary to explain and analyse business operations. Students will be able to develop skills in numeracy, literacy, develop approaches to finding sources of information and present data effectively.

## WHY

The course will provide students with a good foundation in understanding business theory and processes in a workplace. Students can build on this knowledge for success with future studies at A Level and degree level. Students also learn transferrable academic skills such as researching and organising data, critical thinking and summarising information.

# CHINESE FIRST LANGUAGE 0509

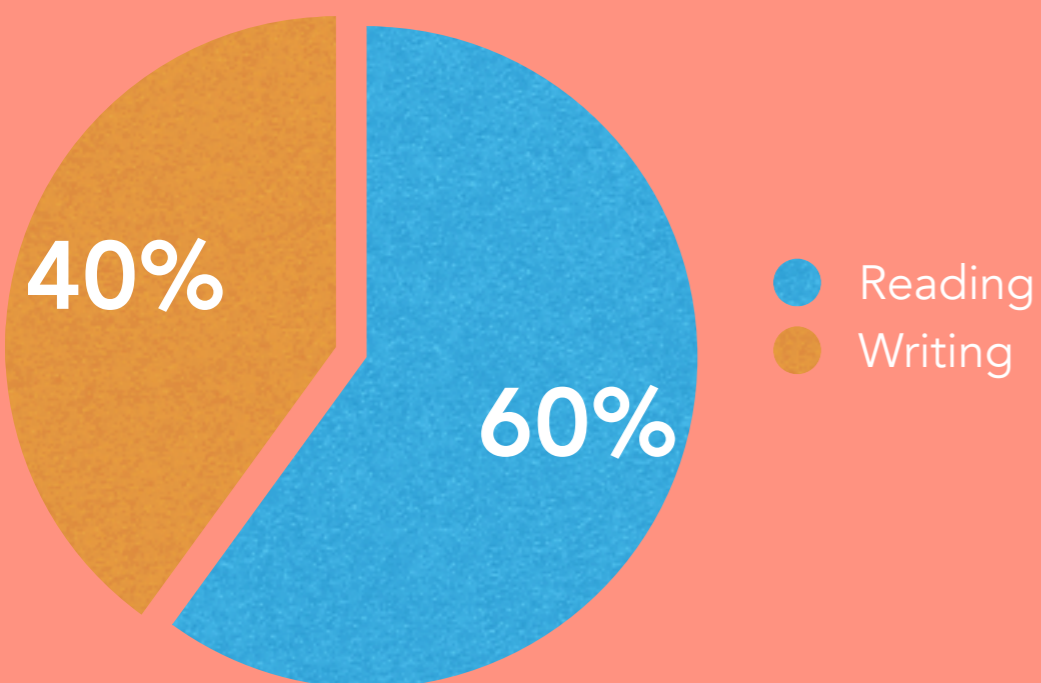


# ABOUT

The Cambridge IGCSE First Language Chinese syllabus is designed for learners whose first language is Chinese. The syllabus develops learners' ability to communicate clearly, accurately and effectively. They learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed.

Learners are also encouraged to read widely, both for their own enjoyment and in order to develop an appreciation of how writers achieve their effects. The syllabus also complements other areas of study by encouraging skills of more general application.

## ASSESSMENT



## TOPICS

### Reading

- R1: Understand and collate explicit meanings
- R2: Understand, explain and collate implicit meanings and attitudes
- R3: Select, analyse and evaluate what is relevant to specific purposes
- R4: Understand how writers achieve effects.

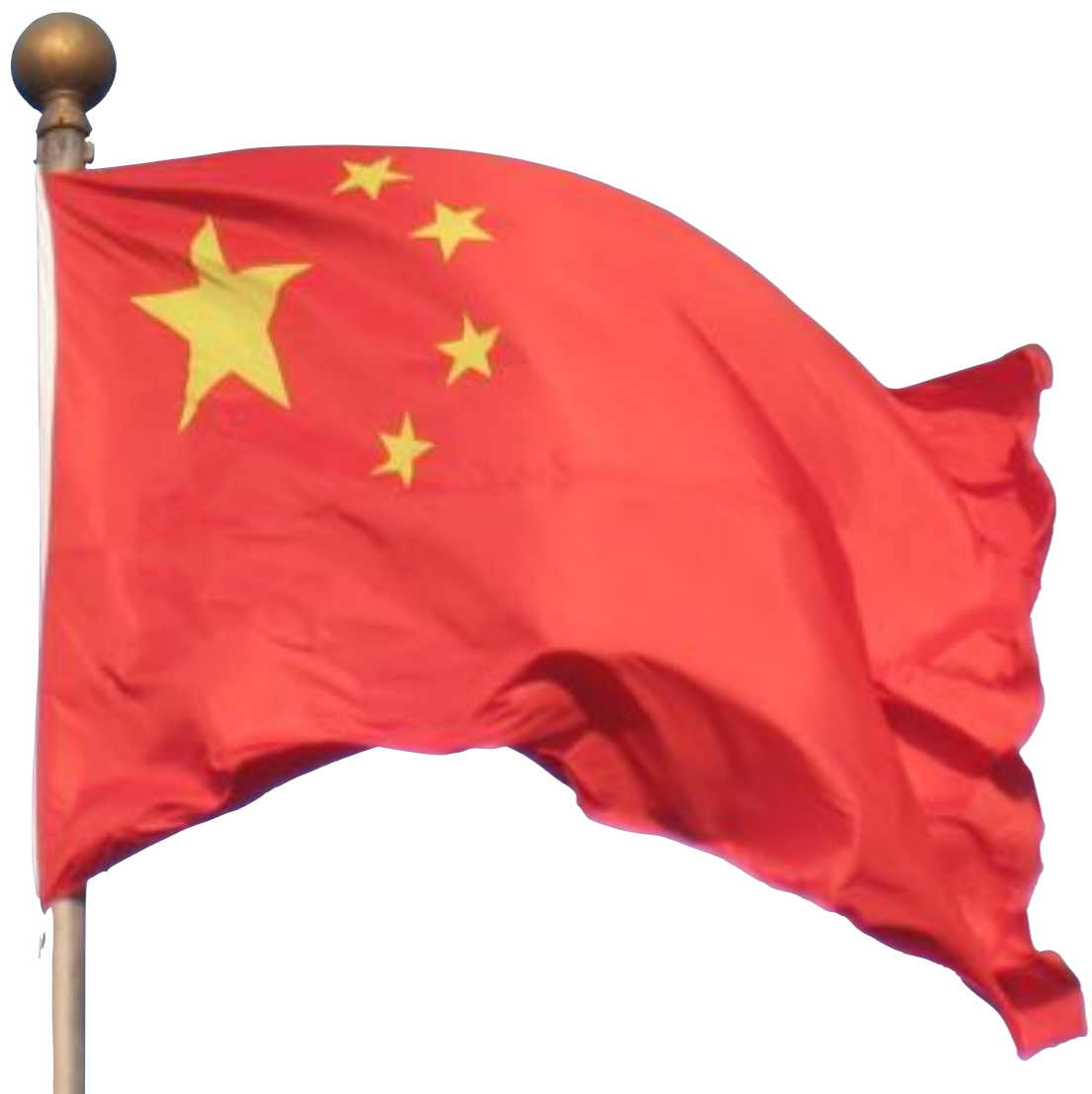
### Writing

- W1: Articulate experience and express what is thought, felt and imagined
- W2: Order and present facts, ideas and opinions
- W3: Understand and use a range of appropriate vocabulary
- W4: Use language and register appropriate to audience and context
- W5: Make accurate and effective use of paragraphs, grammatical structures, sentences, punctuation and spelling.

# SKILLS AND AIMS

The aims are to:

- Enable students to communicate accurately, appropriately and effectively in writing
- Enable students to understand and respond appropriately to what they read
- Encourage students to enjoy and appreciate the variety of language
- Complement the students' other areas of study by developing skills of a more general application (e.g. analysis, synthesis, drawing of inferences)
- Promote the students' personal development and an understanding of themselves and others.



## WHY

Cambridge IGCSE Certificates are general qualifications that enable candidates to progress either directly to employment, or to proceed to further qualifications.

Candidates who are awarded grades C to A\* in Cambridge IGCSE First Language Chinese are well prepared to follow courses leading to Cambridge International AS and A Level Chinese, or the equivalent.

# **COMPUTER SCIENCE 0478**

## ABOUT

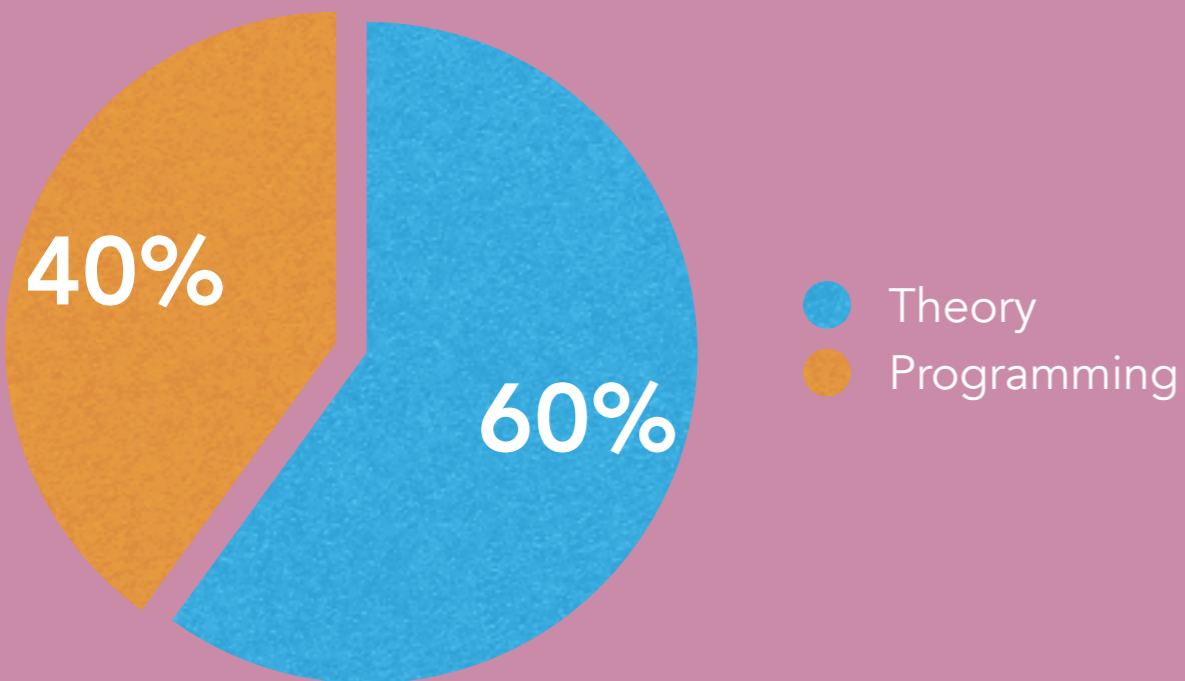
This course will give you an understanding of how computers do what they do. You probably know how to use a computer and in this course you will learn how a computer operates, what makes it function and you will write your own computer program also

## TOPICS

You will learn:

Binary, hexadecimal, how data is transmitted, logic gates, memory, storage devices, how languages are translated, programming languages, HTML, CSS, PHP, SQL and Visual Basic

## ASSESSMENT



## SKILLS AND AIMS

Cambridge IGCSE Computer Science syllabus aims are to develop:

- Computational thinking that is thinking about what can be computed and how, and includes consideration of the data required
- Understanding of the main principles of solving problems by using computers
- Understanding that every computer system is made up of sub-systems, which in turn consist of further sub-systems
- Understanding of the component parts of computer systems and how they interrelate, including software, data, hardware, communications and people
- Skills necessary to apply understanding to solve computer-based problems using a high-level programming language.

## WHY

Computer Science will give a huge advantage if you want your future to involve technology in some way. From web development, database modelling to design and game development. The topics covered may be the first time you ever encountered the topic, this means the amount of new and interesting knowledge is a lot as is the challenge of studying Computer Science.

# CO-ORDINATED SCIENCE

0654



# ABOUT

Cambridge IGCSE Co-ordinated Sciences gives learners the opportunity to study Biology, Chemistry and Physics within a cross-referenced, scientifically coherent syllabus. It is a double award qualification, earning two grades. Learners gain an understanding of the basic principles of each subject through a mix of theoretical and practical studies, while also developing an understanding of the scientific skills essential for further study.

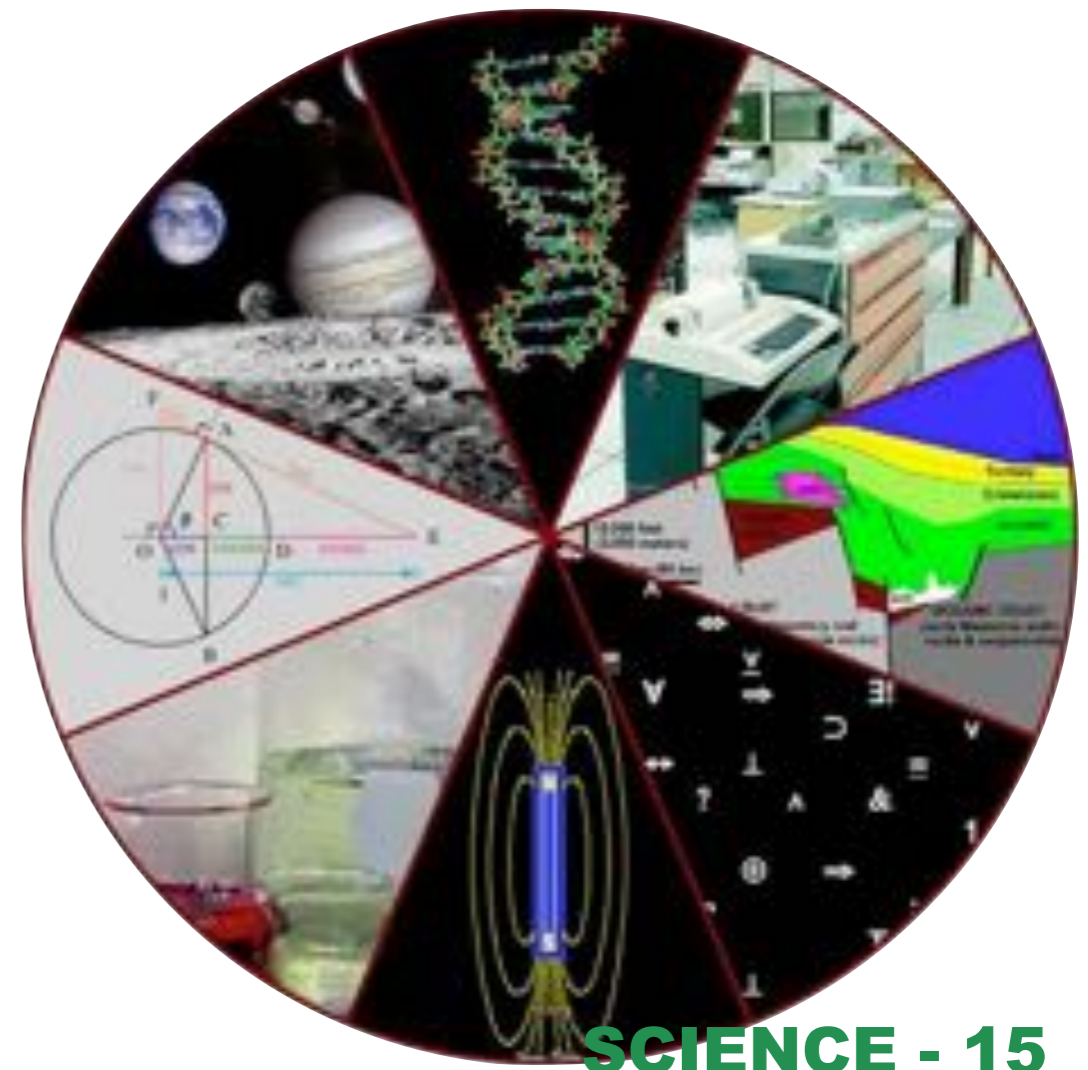
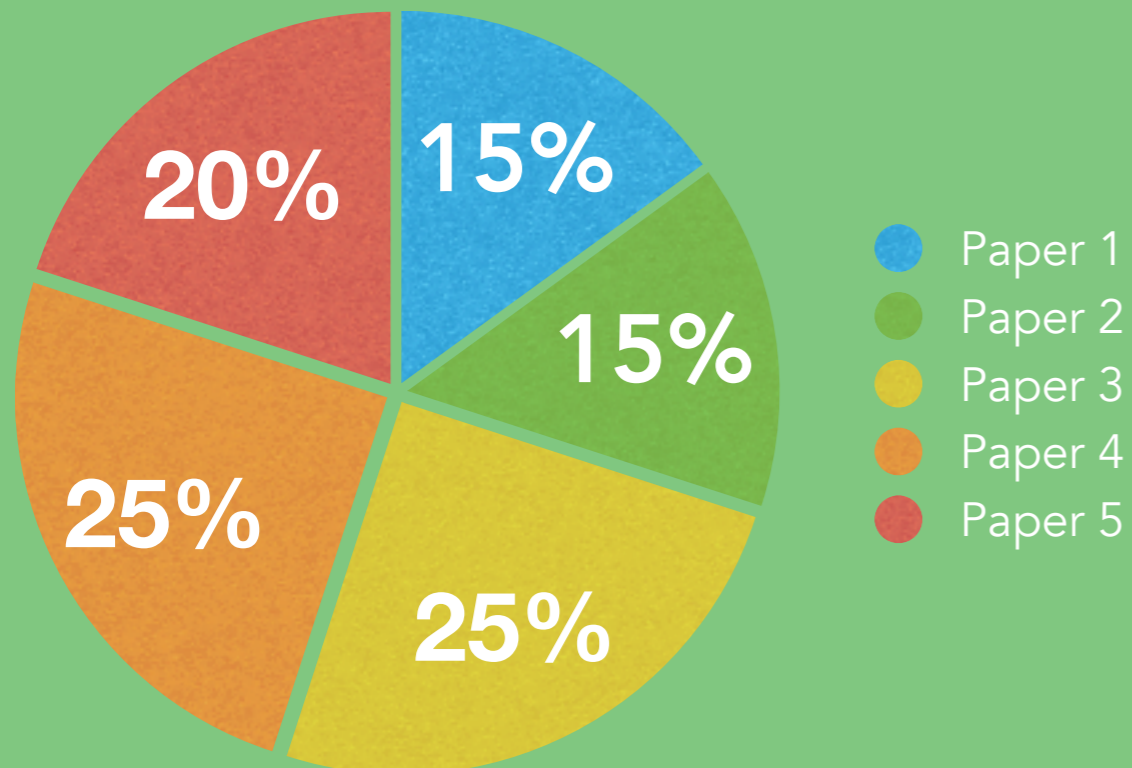
They learn how science is studied and practised, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment. As well as focusing on the individual sciences, the syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments.

# TOPICS

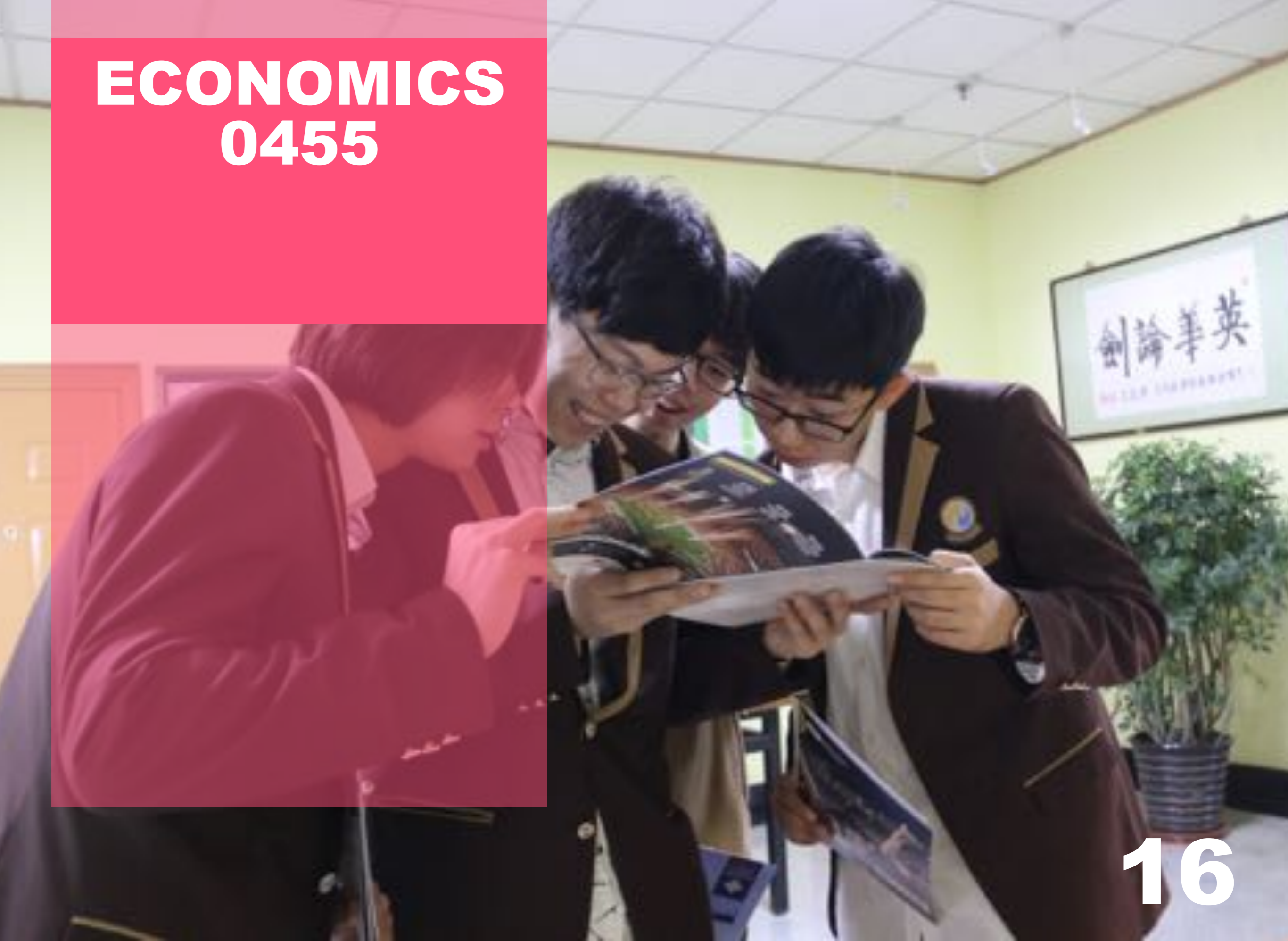
Biology	Chemistry	Physics
Characteristics of living organisms	The particulate nature of matter	Motion
Cells	Experimental techniques	Work, energy and power
Biological molecules	Atoms, elements and compounds	Thermal physics
Enzymes	Stoichiometry	Properties of waves, including light and sound
Plant nutrition	Electricity and chemistry	Electricity and magnetism
Animal nutrition	Energy changes in chemical reactions	Electric circuits
Transport	Chemical reactions	Electromagnetic effects
Gas exchange and respiration	Acids, bases and salts	Atomic physics
Coordination and response	The Periodic Table	
Reproduction	Metals	
Inheritance	Air and water	
Organisms and their environment	Sulfur	
Human influences on ecosystems	Carbonates	
	Organic chemistry	

## SKILLS AND AIMS

# ASSESSMENT



# ECONOMICS 0455



# ABOUT

Cambridge International IGCSE Economics programme and qualifications develop not only subject knowledge but also skills. We encourage

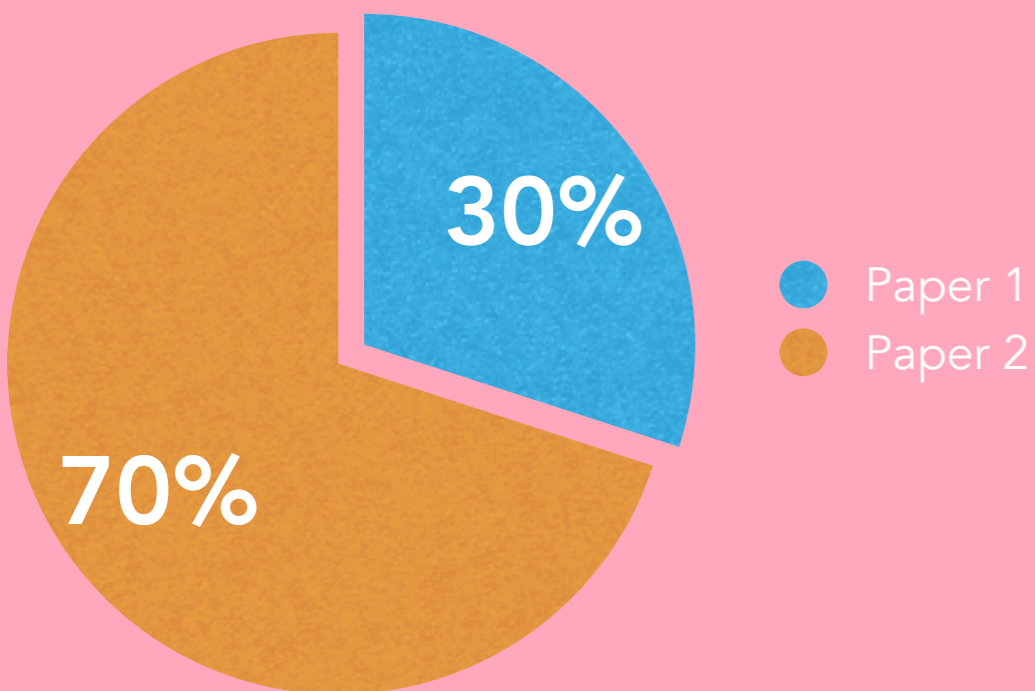
Cambridge learners to be:

- Confident in working with information and ideas – their own and those of others
- Responsible for themselves, responsive to others
- Reflective as learners, developing their ability to learn
- Innovative and equipped for new and future challenges
- Engaged intellectually and socially, ready to make a difference.

In addition, during their learning, students will develop the ability to apply the tools of economic analysis

- The ability to distinguish between facts and value judgments in economic issues
- An understanding of, and an ability to use, basic economic numeracy and literacy
- The ability to take a greater part in decision-making processes in everyday life
- An understanding of the economies of developed and developing nations
- An excellent foundation for advanced study in economics.

## ASSESSMENT



## TOPICS

IGCSE Economics curriculum covers:

1. Basic economic problem: choice and the allocation of resources
2. The allocation of resources: how the market works; market failure
3. The individual as producer, consumer and borrower
4. The private firm as producer and employer
5. Role of government in an economy
6. Economic indicators
7. Developed and developing economies: trends in production, population and living standards
8. International aspects

# SKILLS AND AIMS

The aims of learning IGCSE Economics are to: develop candidates' knowledge and understanding of economic terminology, principles and theories; develop candidates' basic economic numeracy and literacy and their ability to handle simple data including graphs and diagrams; develop candidates' ability to use the tools of economic analysis in a particular situation; show candidates how to identify and discriminate between differing sources of information and how to distinguish between facts and value judgments in economic issues; develop candidates' ability to use economic skills (with reference to individuals, groups and organisations) to understand better the world in which they live; develop candidates' understanding of the economies of developed and developing nations and of the relationships between them; and to develop their appreciation of these relationships from the perspective of both developed and developing nations.



## WHY

This course will help learners develop an informed curiosity and a lasting passion for learning. As an international Qualification, it is recognised by the world's best universities and employers, giving students a wide range of options in their education and career. In addition, IGCSE Economics is a high-quality educational programme that can unlock learners' potential.

# **ENGLISH AS A SECOND LANGUAGE 0511**



# ABOUT

English as a Second Language offers learners the opportunity to gain lifelong skills and knowledge including:

- Better communicative ability in English
- Improved ability to understand English in a range of everyday situations and in a variety of social registers and styles
- Greater awareness of the nature of language and language-learning skills
- Wider international perspective.
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This course is compulsory for IGCSE students as it satisfies the English requirement for a significant number of universities worldwide.

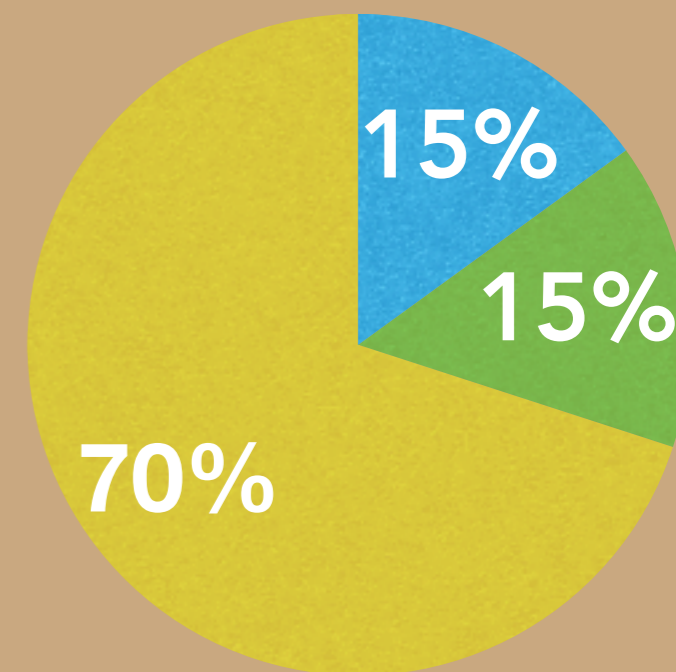
# ASSESSMENT

## TOPICS

Students will improve their skills in Reading, Listening, Speaking and Writing by studying the following set texts with guided questions in the style of exam questions. Each component is designed to run for approximately six to eight weeks.

1. Novella – Of Mice and Men – John Steinbeck
2. Play – The History Boys – Alan Bennet
3. Poetry – Selected poems from Touched with Fire – Jack Hyde
4. Exam Practice – Exam techniques and Past Papers

- Speaking
- Listening
- Reading and Writing



# SKILLS AND AIMS

The aims of English as a Second Language are to:

- Develop ability to use English effectively for the purpose of practical communication
- Form a solid foundation for the skills required for further study or employment using English as the medium
- Develop awareness of the nature of language and language-learning skills
- Promote personal development.

## WHY

This course offers an excellent foundation to academic English. It helps prepare students for studying and living in English-speaking schools and countries, as well as providing a solid base for advanced English courses. Taking the course will also help students to demonstrate their English ability or to build the skills for other examinations which will satisfy university language requirements.



# **FIRST LANGUAGE ENGLISH 0500**



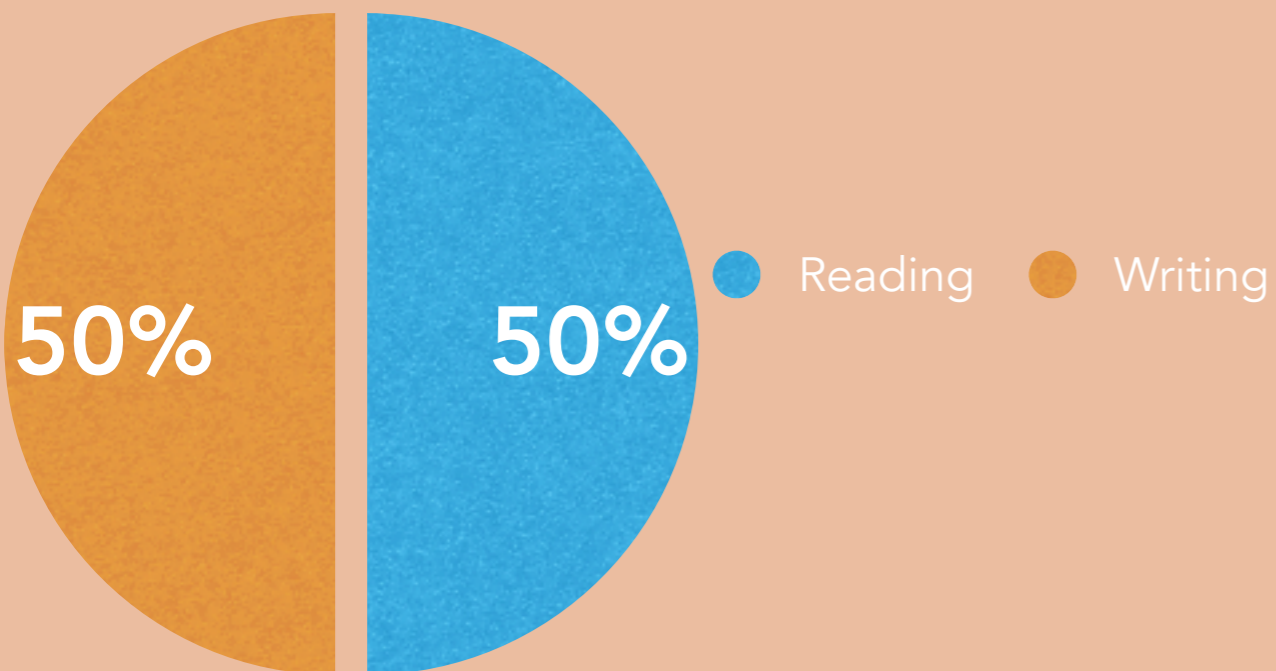
# ABOUT

Cambridge IGCSE First Language English offers candidates the opportunity to respond knowledgeably to a rich array of reading passages. Candidates will use these passages to inform and inspire their own writing, and write in a range of text types for different audiences. Candidates also have the opportunity to develop both their speaking and listening skills, presenting to others and responding to feedback and questions.

Candidates are able to develop a range of skills in organising content and adapting their written and spoken language to meet the needs of the purpose and audience. Candidates are encouraged to become appreciative and critical readers, writers, speakers and listeners.

This programme will start in Year 11 and will be completed in one year.

## ASSESSMENT



## TOPICS

- Unit 1 Developing Reading Skills
- Unit 2 Developing Writing Skills
- Unit 3 Writing Summaries
- Unit 4 Commenting on Language Techniques
- Unit 5 Directed Writing
- Unit 6 Speaking and Listening
- Unit 7 Composition Writing

# SKILLS AND AIMS

The aims are to enable learners to

- Understand and respond to what they hear, read and experience
- Communicate accurately, appropriately, confidently and effectively
- Enjoy and appreciate a variety of language
- Complement their ability to work with information and ideas in other areas of study, for example, by developing skills of analysis, synthesis and the drawing of inferences
- Promote personal development and an understanding of themselves and others



## WHY

The aims are to enable learners to

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- Promote personal development and an understanding of themselves and others

# GLOBAL PERSPECTIVES 0457



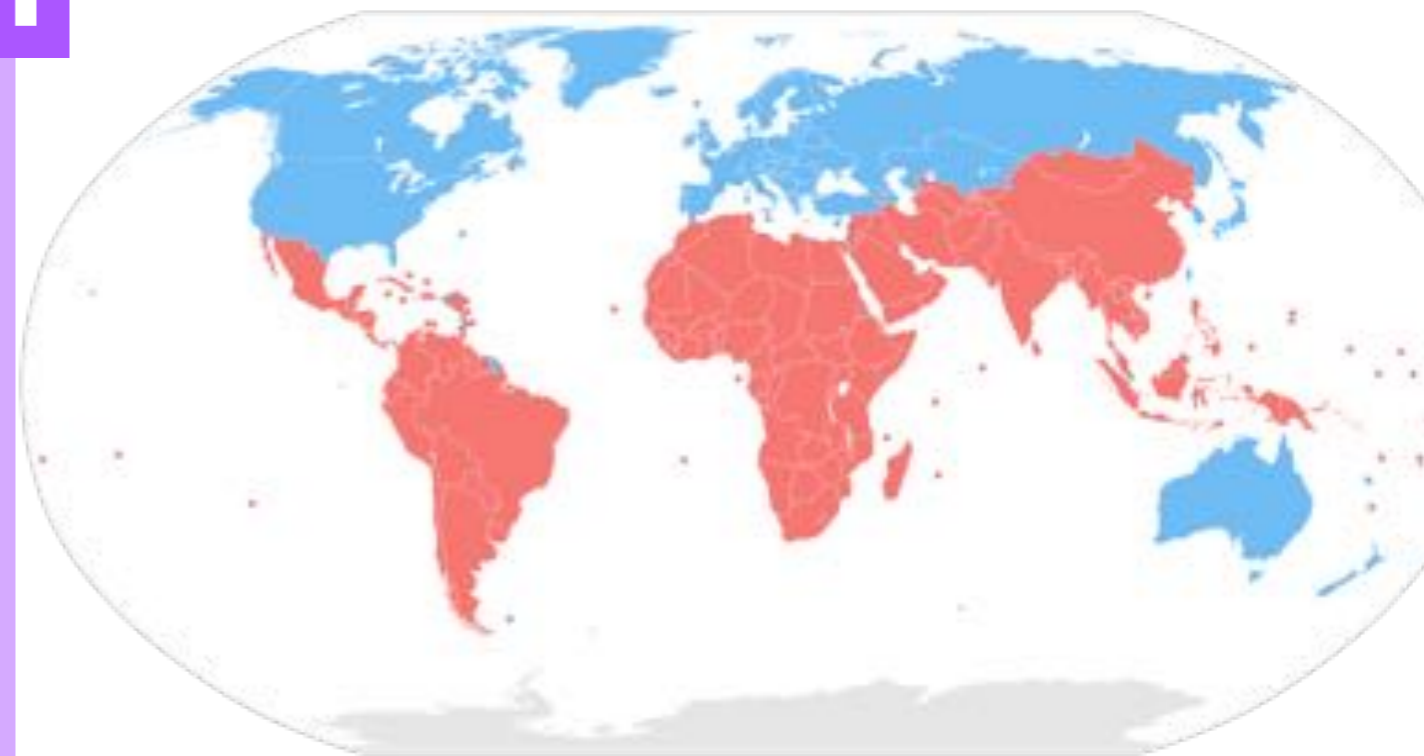
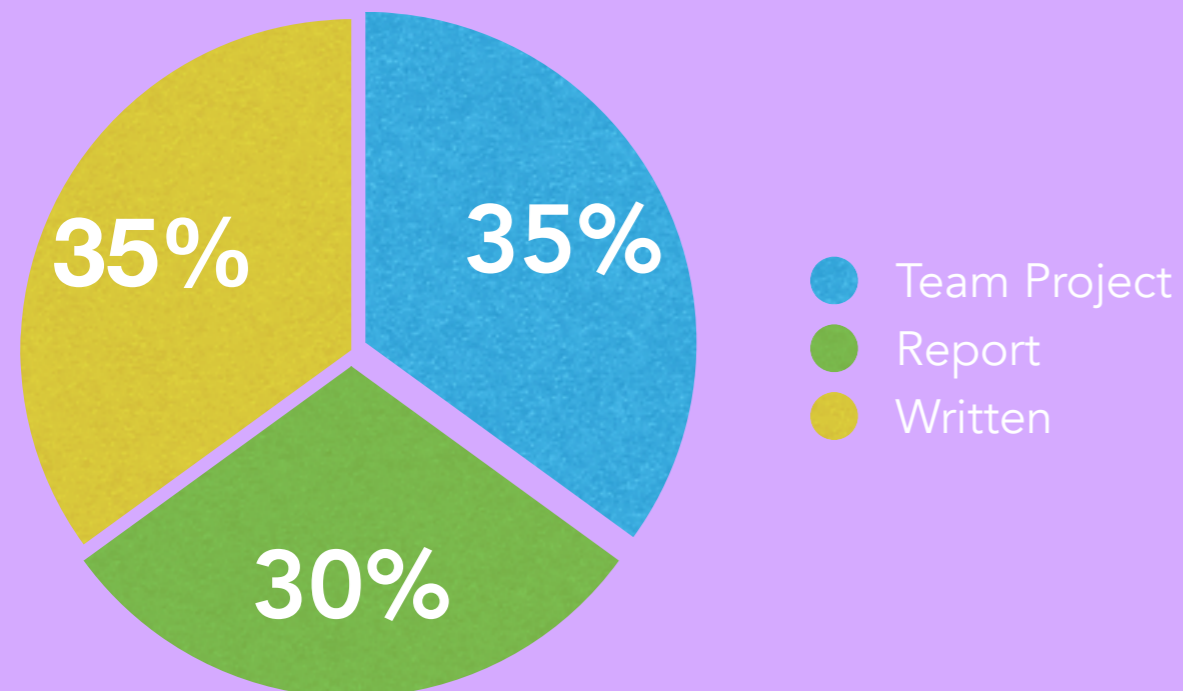
# ABOUT

Cambridge IGCSE Global Perspectives provides opportunities for enquiry into, and reflection on, key global issues from different perspectives: personal, local/national and global.

Cambridge IGCSE Global Perspectives encourages awareness of global problems and offers a range of opportunities to explore solutions through cooperation and collaboration.

The course is not about getting everybody to think identically; rather it is a matter of opening minds to the complexity of the world and of human thought, and encouraging empathy for the diversity of human experience and feeling.

# ASSESSMENT



## SKILLS AND AIMS

Candidates who are awarded grades C to A\* in Cambridge IGCSE Global Perspectives are well prepared to follow courses leading to Cambridge International AS and A Level or the equivalent in a wide variety of subjects, especially across the humanities and social sciences. In particular, this IGCSE syllabus allows progression to Advanced Level Global Perspectives qualifications.

## TOPICS

Cambridge IGCSE Global Perspectives emphasises the development and application of skills rather than the acquisition of knowledge. Candidates develop transferable skills that will be useful for further study and for young people as active citizens of the future. Cambridge IGCSE Global Perspectives candidates will have opportunities to acquire and apply a range of skills to support them in these challenges, including:

- Researching, analysing and evaluating information
- Developing and justifying a line of reasoning
- Reflecting on processes and outcomes
- Communicating information and reasoning
- Collaborating to achieve a common outcome.

## WHY

Cambridge Global Perspectives is an ideal course for students preparing to go to university. As many of our students will be preparing to go to a university abroad, Global Perspectives gives students the opportunity to study in a way more attributed to western culture. They will learn skills that are vital to succeeding at university and will have the opportunity to learn about Global Issues that are not covered in other subjects.

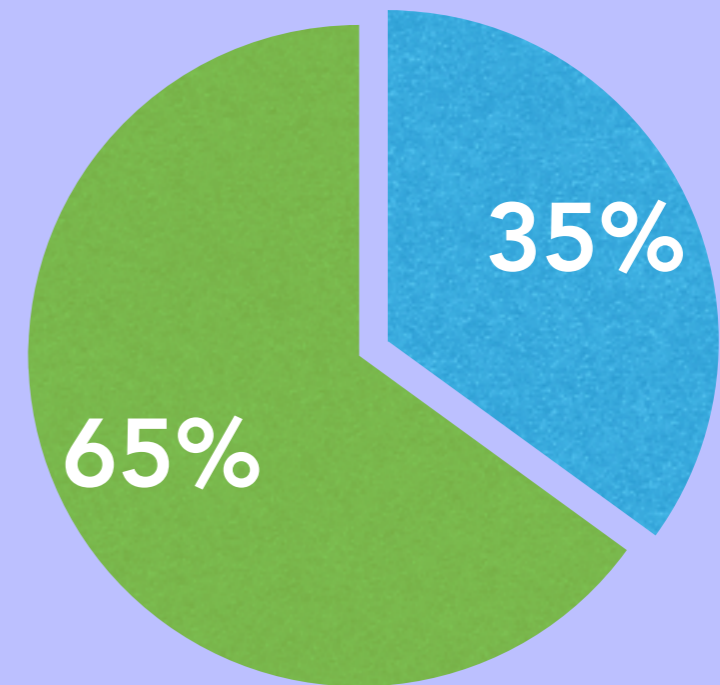
# **MATHEMATICS IGCSE 0580**



# ABOUT

It is recommended that students who are beginning this course should have previously studied an appropriate lower secondary mathematics programme. All students in Y10 will follow the Extended curriculum. Students who are awarded grades A\* to C in Cambridge IGCSE Mathematics Extended curriculum are well prepared to follow courses leading to Cambridge International AS and A Level Mathematics. For a detailed syllabus of the course see [www.cie.org.uk/igcse](http://www.cie.org.uk/igcse) for further information.

# ASSESSMENT



● Paper 2 ● Paper 4

# TOPICS

1. Number
2. Algebra and graphs
3. Geometry
4. Mensuration
5. Co-ordinate geometry
6. Trigonometry
7. Matrices and transformations
8. Probability
9. Statistics

# SKILLS AND AIMS

The aims are to enable candidates to:

- Develop their mathematical knowledge and oral, written and practical skills in a way which encourages confidence and provides satisfaction and enjoyment
  - Read mathematics, and write and talk about the subject in a variety of ways
  - Develop a feel for number, carry out calculations and understand the significance of the results obtained
  - Apply mathematics in everyday situations and develop an understanding of the part which mathematics plays in the world around them
  - Solve problems, present the solutions clearly, check and interpret the results
  - Develop an understanding of mathematical principles
  - Recognise when and how a situation may be represented mathematically, identify and interpret relevant factors and, where necessary, select an appropriate mathematical method to solve the problem
  - Use mathematics as a means of communication with emphasis on the use of clear expression
  - Develop an ability to apply mathematics in other subjects, particularly science and technology
  - Develop the abilities to reason logically, to classify, to generalise and to prove
  - Appreciate patterns and relationships in mathematics
  - Produce and appreciate imaginative and creative work arising from mathematical ideas
  - Develop their mathematical abilities by considering problems and conducting individual and co-operative enquiry and experiment, including extended pieces of work of a practical and investigative kind
  - Appreciate the interdependence of different branches of mathematics
- acquire a foundation appropriate to their further study of mathematics and of other disciplines.

## WHY

Cambridge IGCSE Mathematics is accepted by universities and employers as proof of mathematical knowledge and understanding. Successful candidates gain lifelong skills, including:

- Deeper understanding of mathematical principles
- The further development of mathematical skills including the use of applications of mathematics in the context of everyday situations and in other subjects that they may be studying
- The ability to analyse problems logically, recognising when and how a situation may be represented mathematically
- The use of mathematics as a means of communication
- A solid foundation for further study.

# **Hedong International Academy**



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