

**Coláiste an Spioraid Naoimh**

**Senior Cycle Exam Subjects**

***Information Booklet***



# TABLE OF CONTENTS

Introduction

Subject Choice Guidelines

Points Calculator

Options after the Leaving Certificate

**Option Subject Information:**

Technology

- Construction Studies
- Design & Communication Graphics

Social\Artistic

- Art Craft & Design
- Geography
- History
- Music

Business

- Business
- Accounting
- Economics

Laboratory Science

- Biology
- Physics
- Chemistry
- Applied Maths

# INTRODUCTION

You are about to make a very important decision, namely, Subject Choice. You are asked to select a number of subjects – **7 for Leaving Certificate**. Students are recommended to study 4 **core subjects**:

- 1. Irish**
- 2. English**
- 3. Maths**
- 4. French or German**

To make a good decision it is essential to have accurate information. To help you make the best decision regarding Subject Choice the following have been arranged:

- **Subject Sampling**
- **Information booklet**
- **Career Information Day**
- **UCC & CIT presentations**
- **Meetings with Career Guidance** as required by students.
- **DATS Aptitude Tests.**

Students are also encouraged to:

- Consult **qualifax** and other relevant **websites**
- Check out textbooks and past papers.
- Talk to **other students**
- Consult **Work Experience** reports
- Discuss Subject Choice with your **parents / guardians**
- Interests & personality tests

Choose your “package” of subjects to satisfy your current **career interests** and **career options**.

If you require any further assistance, make an appointment to see your guidance counsellor.

**Course and Entry Requirements** not checked by students can have serious consequences. It must always be pointed out to students that the onus is on them to check the requirements for each of the courses in which they have an interest.

# FACTORS INFLUENCING SUBJECT CHOICE

- **Interest** in the subject will tend to work harder in areas of interest.
- Consider your **Ability / Aptitude** in the different subjects.
- Is the subject **necessary** for chosen career?
- Is the subject **desirable** for chosen career?
- If I am interested in a particular course / career area, what subjects are essential? (Course entry requirements). It is important to check out these subject requirements with a Guidance Counsellor or the course provider and it is ***your responsibility*** to do this. Many third-level courses require not only a certain amount of points upon entry, but also a minimum grade in a certain subject. Basic entry requirements to the college and specific course entry requirements. These are separate requirements and are both essential to be eligible for the course of your choice.

**Avoid the common pitfalls.** Do not choose subjects based on what your friends are choosing. Do not choose a subject because your older sibling did well in it.

REMEMBER IT IS YOUR RESPONSIBILITY TO CHECK COURSE REQUIREMENTS.

**Subject Choice** – ask yourself the following questions:

- Do you prefer subject matter you can learn off?
- Do you like subjects with some “open space” for interpretation / creative thinking?
- Do you prefer subjects where they get to work things out by applying formulae and rules?

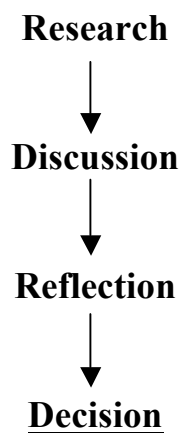
**Research** – securing information from first year upwards – even going back to primary school ...memories of subjects you liked.

It is important to get a sense of the curriculum (ref: [www.skool.ie](http://www.skool.ie), [www.ncca.ie](http://www.ncca.ie))

Learning styles profile

Career clusters profile or similar

**A wise choice of subjects requires:**



Many students will change their minds about their future a number of times in the next two years.

## USEFUL WEBSITES AND RESOURCES

All students should sign up to . This is a valuable resource, not only for up to date careers news to help make career decisions but also for study skills and interesting articles

[www.qualifax.ie](http://www.qualifax.ie)

[www.cao.ie](http://www.cao.ie)

[coa.co.uk](http://coa.co.uk) (aptitude test)

[www.ucas.co.uk](http://www.ucas.co.uk).

[www.examinations.ie](http://www.examinations.ie)

[www.scoilnet.ie](http://www.scoilnet.ie)

[www.nursingboard.ie](http://www.nursingboard.ie) (nursing courses)

[www.hpat.ie](http://www.hpat.ie) & [www.acer.ie](http://www.acer.ie)

[www.fas.ie](http://www.fas.ie) (apprenticeships information)

[www.military.ie](http://www.military.ie) (military career information)

[www.scoilnet](http://www.scoilnet) (educational website)

[www.teagasc.ie](http://www.teagasc.ie) (agricultural courses)

[www.careerdirections.ie](http://www.careerdirections.ie) (career information)

[www.careersportal.ie](http://www.careersportal.ie) (careers website)

[www.studentfinance.ie](http://www.studentfinance.ie) & [www.susi.ie](http://www.susi.ie) (grants)

[www.nui.ie](http://www.nui.ie)

[www.steps.ie](http://www.steps.ie) (engineering resource)

## HEAR & DARE

The **Higher Education Access Route (HEAR)** is a college and University admissions scheme which offers places on reduced points and extra college support to school leavers from socio-economically disadvantaged backgrounds.

The **Disability Access Route to Education (DARE)** is a college and Universities scheme which offers places on a reduced points basis to school leavers with disabilities. See [www.accesscollege.ie](http://www.accesscollege.ie) for more details.

## Revised Common Points Scale in 2017

The Irish universities, Institutes of Technology and all other colleges which accept applications through the CAO, will introduce a revised Common Points Scale in 2017, as follows:

Higher		Ordinary	
Grade	Points	Grade	Points
H1	100		
H2	88		
H3	77		
H4	66		
H5	56	O1	56
H6	46	O2	46
H7	37	O3	37
H8	0	O4	28
		O5	20
		O6	12
		O7	0
		O8	0

**SIX** best subjects of one sitting of the Leaving Certificate to calculate points total

**It continues to award Bonus Points for Higher Level Maths. - 25**

# Business

Business is one of your option subjects for the Leaving Certificate and builds on many of the concepts of the Junior Certificate Business Studies. The Accounting aspects form part of Accounting as a separate subject.

Business is taught in a dynamic and interesting way which reflects the dynamic world of Business. You will easily understand many of the aspects in the running of a business. Case studies of well-known Irish and International businesses are examined from the media and from the companies themselves.

Business is an enjoyable and active Leaving Certificate subject which can include visits from local companies to observe them in action. There are many large international firms here in the Cork area, in the pharmaceutical, technological and scientific areas and this subject attempts to examine how they are run, what kind of workers they recruit, how they market their products and what impact they have on Cork and on Ireland. Every Business course at third level (UCC & CIT) requires a thorough knowledge of at least two of the business subjects and will build on the topics covered at Leaving Certificate. It is highly recommended that you choose at least one of the business subjects.

At some stage you will work for a business and you will learn how it functions, how management operates, what the rights of the workers are, why it exports (to China maybe), etc., and this is where business will help you. You may even own your own business as an entrepreneur and seek advice and knowledge on how to be successful. This is where Business can help you.

A good Business student is one who can describe the features of a business; who can understand how a business operates and expands; who can evaluate the strengths and weaknesses of various business situations; and who builds up his interest in the world of business here in Ireland, the EU and internationally.

A good Business student is organised with his information and keeps helpful notes on the various topics as the course develops. While it is not a scientific subject, Business challenges the student into tackling the issues of the day as they affect the Business world and realises that the course offers a wide selection of topics to choose from.

A more detailed list of the topics in Business is available on request.



# ACCOUNTING

## **Why should I study accounting?**

Perceived as the mathematical side of business. If you are considering studying accountancy or actuarial finance after the Leaving Cert, it would be unwise to leave accounting out of your subject choice.

## **What is covered in the course?**

The course is broadly divided in 2 areas (1) Financial Accounting and (2) Management Accounting.

Financial Accounting topics include: final accounts, control accounts, interpretation of accounts, incomplete records, tabular statements, club and service firm accounts, publish accounts.

Management Accounting topics include: absorption costing, marginal costing, budgets including cash budget, master and subsidiary and flexible budgets.

## **The nature of the subject – work involved**

The course is practical where students learn by doing questions. There are theory elements involved.

## **Assessment**

This is by means of a written exam paper of 3 hours in duration in Leaving Certificate. Separate papers for Higher and Ordinary levels. There is no other form of assessment. Students should access the State Examinations Commission website for examples.

## **Skills:**

Students with numerical and logical skills will have a major advantage. Higher level maths is not essential but again would be an advantage. Deductive powers, good learning memory.

## **Careers and Future Courses:**

A knowledge of accounting is an advantage for any business course at Third Level. Graduates with accounting enter a diverse range of career areas from general management to marketing to taxation to financial regulation to financial services, accounting, auditing, etc.

This subject leads to a professional career and accounting turns up in all business courses at 3<sup>rd</sup> level at some point so it makes access easier.

# ECONOMICS

## **Why should I study economics?**

Economics is regarded as the more practical business subject.

Economics is a business subject whereby you deal with the economy in which all business units operate or work. Example how mobile phones, laptops are priced? What influences the cost of text messages? Who decides on the price of match tickets, clothes, electrical goods etc. Who decides what the level of pay and salaries should be.

What kind of student might Economics suit?

- Students who maybe considering a future career in any area of business or finance.
- Students who enjoyed Junior Certificate Business
- Students who take an interest in current affairs, psychology, politics and how the economy works.

The course is divided into two sections:

- A. Micro-Economics-Dealing with individual business units and structures.
- B. Macro-Economics-Dealing with the economy regarding inflation and government policy, employment and job prospects, rate of inflation and the European Central Bank.

There is a big difference between higher and ordinary level as outside reading is required for the higher level course. The course is quite short in comparison to the business course for the Leaving certificate.

All business courses require an economic content so having done economics in school will be an advantage to students.

Careers that is would be useful for include banking, insurance, finance and journalism or communications economics would be a good choice.

*“A good Economics student should have an interest in how the Economy works.” Economics Department*

# BIOLOGY

## **Why should I choose biology?**

Biology is the study of life. Students should have an interest in living things and the environment. The syllabus is long.

Biology can be useful or **necessary** for careers in medicine, nursing, ecology, biotechnology, physiotherapy, and all related courses, biology will benefit you hugely throughout your studies.

## **What is covered in the Biology course?**

The course is divided into three main areas.

- 30% human biology
- 30% plant biology
- 40% Genetics/Ecology/Enzymes

## **What is the nature of the subject? Is there practical work or projects involved?**

There are 22 mandatory experiments. These experiments are not allocated marks but guaranteed 3 questions in Leaving Cert exam.

## **How is Biology assessed?**

Written exam at the end of 6<sup>th</sup> Year (Leaving Cert year). Two papers are available, Higher and Ordinary level. A three hour paper (400 marks), divided into three sections:

## **What skills are useful for this subject?**

- Drawing of simple diagrams
- Interpretation of experimental results
- Language skills. There is an extensive vocabulary for students to become familiar with and learn accurately.
- Students should be good attendees as there is only one opportunity to do these practicals.

## **What careers / courses does Biology lead in to?**

Medical, paramedical, scientific, nutritional, sports science areas, etc.

# PHYSICS

## **Why should I study physics?**

For students considering a career in engineering, medicine, dentistry astronomy and all other related courses, physics will be of huge importance in further studies.

## **What topics are covered in the Leaving Certificate Physics Course?**

The physics course covers the following topics: geometrical optics, linear motion, momentum, force, circular motion, simple harmonic motion, temperature, Heat eg.temp wave motion, light and sound waves, electricity, magnetism, electricity generation, radioactivity, nuclear energy and particle physics.

## **What is the nature of the subject? Is there practical work or projects involved?**

The course involves a good mixture of theory, problem solving and practical work. During the two-year course students must perform 24(H.L) 22(O.L). Mandatory experiments. There is no project worked involved.

## **How is Physics assessed?**

At present Physics is assessed with a single three-hour paper (400 marks). The paper is divided into two sections, A and B. Section A (120 marks) assesses knowledge and understanding of the 24 mandatory experiments. Section B (280 marks) assesses knowledge and understanding of theory and other experiments. It also assesses problem-solving ability. There is internal choice in both sections.

## **What careers does Physics lead to?**

Physics is the science that leads to understanding measurement. Physics is a core subject for further study in the areas of civil, electrical and mechanical engineering, medicine, veterinary and dentistry. Physics is the basis of all technological development of the current age.

## **What skills are useful of the subject?**

- A logical mind. Problem solving.
- A wish to understand the subject before learning or applying it.
- A need to be able to manipulate formulae.
- Interest in current scientific discovery
- Science in the media
- Ability to work in groups
- Overlaps well with Chemistry, Maths and Applied Maths.

# CHEMISTRY

## **Why should I choose chemistry?**

If you have an interest in Science. If you enjoy practical work in the laboratory. If you are reasonably good at maths. If you are a logical thinker. If you analyse material. If you are considering a science based course at Third level.

## **What is covered in the Chemistry course?**

Acids bases. Volumetric Analysis. Water.

The atom; The Periodic Table; Bonding

Organic Chemistry. Industrial and Atmospheric Chemistry. Electrochemistry

## **What is the nature of the subject? Is there practical work or projects involved?**

There is a strong emphasis on practical work with 28 mandatory experiments and some specified demonstrations, all of which are examinable

Chemistry students must be able to draw graphs, interpret them and answer questions based on them

Students are required to recall formulae and to manipulate these in calculations

There are many definitions across the course and in order to be awarded marks in the Leaving Cert these must be precise A high level of accuracy and attention to detail is required throughout

## **How is chemistry assessed?**

Chemistry is assessed by written exam only. Marking of Leaving Cert Chemistry is exact and consistent. The exam consists of a 3 hour paper divided into 2 sections:

## **What skills are useful for the subject?**

Students should be able to write concise and precise answers. Students should be able to interpret questions and complete relevant calculations. Students should be able to sketch chemical apparatus and remember chemical symbols and formulae, Students should be comfortable with conceptualising reactions and systems. Students should be comfortable working in the laboratory. Students should enjoy working in groups.

## **What careers / courses does Chemistry lead to?**

Chemistry is a requirement for the following Third Level courses: **Dentistry, Pharmacy, Medicine, Veterinary Science and Human Nutrition and Dietetics..** Chemistry is **advantageous** for Public Health, Nutrition, Chemical Engineering Nursing, Food Science, Biochemistry and all science based courses.

*“A good chemistry student in Colaiste Spioraid Naoimh demonstrates a wiliness to work consistently and engages fully in practical work. He actively works at developing the technique of answering questions in concise and precise form. He strives to be accurate in his work and is conscious of the emphasis on detail in Leaving Cert.” – B. Moriarty, N.Brett.*

# HISTORY

## **Why should I study history?**

History improves students' critical thinking.

## **Syllabus**

The course is quite large. Students study four topics, two from Irish history and two from European history. Topics covered in the past have included Dictatorship and Democracy (Hitler, Stalin, etc.), U.S. History (Vietnam, Space Race, Film)

## **Nature of the subject?**

Each of the four topics are examined in the Leaving Cert. The Research Topic (Project) is worth 20%

## **Assessment**

The terminal written exam takes the form of four questions.

Each of the four topics is examined.	4 x 20	=	80%	
The Research Topic is pre-submitted		=	<u>20%</u>	100%

One of the four topics is prescribed (compulsory) and is studied using Case Studies using primary documents (speeches, posters, video, etc.)

## **Skills**

An essential skill is a good grasp of English; communication skills, research skills and analytical skills. The new History syllabus emphasises the use and analysis of primary resources using multi-media and IT.

## **Career relevance**

As well as more obvious careers such as teaching and lecturing, History gives many insights into human behaviour and a deeper understanding of current affairs that is relevant to many careers. History also develops an ability to think independently without jumping to unsupported conclusions. Employers tend to look for people who are independent thinkers, open-minded, disciplined, good at problem solving and able to pick out the essential from the trivial. ICT sources help make History relevant to modern life and the workplace of the twenty-first century.

*“A good History student will be able to think critically and logically. Organised and clear expression is an aid. An interest in current and past affairs is used for successful History students.” Mr. O’ Flynn*

# GEOGRAPHY

## **Why should I study geography?**

Geography is a hugely popular subject. Geography is the study of people and their environment.

## **What is covered in the Geography course?**

- Physical Geography: Earth's internal forces and structures
- Regions: Dynamic / how regions change over time-European + International
- Human Geography: population issues/Economic geography
- Fieldwork / investigation
- Geocology – Higher level only – soils and biomes

## **What is the nature of the subject? Is there practical work or projects involved?**

Project work = field investigation = 20% of Leaving Certificate grade for both Higher and Ordinary Level and 80% of grade for coursework.

## **How is Geography assessed?**

Written exam at the end of 6<sup>th</sup> Year (Leaving Cert year) higher and ordinary level.

Fieldwork project pre-submitted in April. Practice drafts completed in advance.

## **What skills are useful for this subject?**

- Ability to do research / collect data / write reports / analysis and interpretation of results
- Concise essay writing skills / Map skills
- Good ability to retain information and analysing questions
- The subject is more theory based and practical so an interest in geography essential and in-depth answers required
- More advanced study at senior level.
- 

## **What careers / courses does Geography lead in to?**

Geography is a useful subject for most careers, particularly town planning, teaching, engineering, Environmental management, Green energy, Cartography (map making), Climatologist (weather), Geology-Earth Science, Transport Management. Working with statistics i.e. CSO.

*“A good geography student is one who is interested in the global environment and capable of analysing the interplay of physical, social and economic factors which underpin issues such as landscape development, population distribution, global warming etc.*

*An interest in fieldwork and geographic research are key characteristics of a good geographer.” Geography department*

# MUSIC

## **What is covered in the music course?**

The syllabus consists of three distinct sections.

- **Performance** Students can play an instrument or sing (as a soloist or in a group) or use music technology
- **Composition** Students develop skills in writing music and providing harmony for melodies sixteen bars in length using four bar phrases using staff notation. Reading, students learn to read and interpret a score.
- **Listening** : Students study a set of prescribed works. Four in total. These works range from the music of Bach to the music of “Bohemian Rhapsody”, by Queen. This section is aimed at developing pupils explicit awareness and understanding of music. Students also listen to a wide range of musical styles and are equipped with the skills to appreciate the music they hear in an intelligent way.

## **Homework?**

Yes. Written exercises and learning. Also practice of performing skills.

## **Assessment**

Practical Exam (20 mins.) near Easter time.

Composing paper

Listening paper

## **Skills**

Good listening ability. An **interest** in music.

Ability to play an **instrument** or **sing** is a requirement.

Guitarists find the harmony section easy as they are simply choosing chords to put with a melody.

## **Careers**

Music is useful for Primary Teaching, Second Level Teaching, Performance, music industry recording, music publishing, journalism and broadcasting.

*“Ideally a student taking Leaving Cert music if they have not done it for the Junior cert should have already had lessons on an instrument or some lessons on the theory of music i.e. musical rudiments and notation.”*



# ART

**What is covered in LC Art** The aim of the LC Art course is to develop students artistic flair and creativity, whilst encouraging their appreciation of the world around them. All students, both ordinary and higher level follow a common course which includes Life Sketching, Still Life, Imaginative Composition, Design, Craftwork and History of Art. All of these sections are worked on and taught throughout the 5th yr, and most of the 6th yr. All leading to them being competent in their chosen discipline in time for the exams. The History of Art component is broad, and covers Irish, European and General Appreciation of Art. The History of Art exam is an essay based exam, so essay writing skills form a solid, ongoing practice throughout the 5th and 6th yr.

The new revised LC art which will begin for all 5th yr students in 2016, involves a 10 week project. This will be undertaken immediately after Christmas in the 6th yr. This will involve investigating a given theme. The students will have to bring together all the skills they have learned throughout 5th yr, and document their findings and investigations along side a completed Still Life/or Imaginative Composition, and a piece of Craftwork. This will account for 50% of the final result. This 50% will be completed within class time in front of the teacher. They will then sit two exams in May and June; Life Drawing 12 ½% Art History 37 ½%

## **What skills are needed?**

A Student does not need to have Art, craft and design at JC level to take up LC Art. Of course they will have a better understanding of the subject, and already have a certain level of standard, but it is certainly not a necessity. The students who have a strong ‘willingness’ to learn are generally the ones who succeed. They will need to be willing to investigate and experiment. And to want to gain an understanding in the importance of observation. They will need to be open to analysing the work of artists, and in turn they will understand how to analyse their own work. A student who is spatially aware, and who has a keen interest in their surroundings will generally excel in Art.

**Careers, courses an options** Art students are lateral thinkers and creative problem solvers. These are attributes that are invaluable in a digital age. Areas in which they generally move onto are –Graphic Design, Illustration, Interior Design, Art teaching, Architecture, Textile Design, Animation and Digital Media, Fashion Design, Community Arts Worker, Advertising, Art History Lecturer, Fine Artist and Gallery/Museum conservators.

*‘Art is a subject for everyone, whether it was undertaken at JC level or not. Anyone can be taught to draw if they allow themselves to be. The course is diverse. There is something in it for everyone. All that is needed is a creative, open mind – a good work ethic – and a passion for documenting everything around them in some kind of visual format.’*

*Harriet Ring (Head of Art)*

# Design and Communication Graphics (DCG)

## **What is Design and Communication Graphics (DCG)?**

DCG is an exciting and dynamic subject which covers a broad variety of topics including Projection Systems, Pictorial Projection, Dynamic Mechanisms and Structural Forms. DCG also includes the study of a new course element, Computer Aided Design (CAD) this involves the use of computer software (SolidWorks) to virtually model products and artefacts.

## **Assessment and Project Work:**

For your Leaving Certificate exam, you will complete a DCG Student Assignment worth 40% and an Exam worth 60% of the total grade.

**DCG Student Assignment (40%)** : The assignment is completed between September and January of 6<sup>th</sup> year.

Students are given a design brief which requires them to:

- A Model an existing product such as a perfume bottle, using SolidWorks
- B. Pupils must modify or develop a completely new design concept for the product they designed in Part A.

The assignment is presented in a portfolio which will consist of research evidence, initial design ideas/sketches, working drawings and 3D drawings created using SolidWorks.

## **Subjects that will help with the study of DCG.**

If you have studied any of the following subjects at Junior Cert Level it will greatly help Technical Graphics, Materials Technology Wood, Metalwork, Art and Maths.

Leaving Certificate subjects that compliment DCG: Construction Studies, Engineering, Art, applied Maths and physics.

## **Careers and Future Courses:**

DCG is the stepping stone for any pupils interested in a career in Architecture, Interior Design, Product Design, Mechanical Engineering, Computer Aided Design (CAD) courses, Construction Management, Graphic Design, Computer Game Design, Carpentry/Building apprenticeships, and Secondary School teaching.

*“A DCG student should like a challenge, be a problem solver and have an ability to visualise 3D objects. A DCG student should want to develop their ability to innovate and think creatively.”*

Log on to [www.t4.ie](http://www.t4.ie) to get a better understanding of the course work.

# CONSTRUCTION STUDIES (CS)

## **What is Construction Studies (CS)?**

Construction Studies involves the study of how buildings and structures all around us are designed and built. The course content ranges from the study of: Building Heritage, Planning Permission, Foundation/Wall and Roof Construction to how Electrical, Water and Heating Systems in houses work. This course also includes a practical element.

## **Assignment and Project work.**

For your Leaving Certificate exam you will complete a Practical Project worth 25%, a Skills Test worth 25% and an Exam worth 50% of the total Grade. The project is assessed at common level-Each project must have a written report.

A student can choose to complete one of three types of project:

- Craft project (e.g. furniture design)
- Building detail, incorporating a minimum of three craft practices (e.g. bricklaying, plastering)
- Scale model of an architectural heritage/ an old building structure or a built environment-a house.

## **Subjects that would help with the study of Construction Studies:**

If you have studied any of the following subjects at Junior Cert level it will greatly help: Technical Graphics, Materials Technology Wood, Metalwork, Art, Science and Maths. Leaving Certificate subjects that compliment Construction Studies: Engineering, DCG, Art and Physics.

## **Careers and Future Studies:**

Construction Studies is the stepping stone for any pupils interested in a career in Architecture, Interior Design, Product Design, Mechanical Engineering, Computer Aided Design (CAD) courses, Construction Management, Graphic Design, Carpentry/ Building apprenticeships and Secondary School Teaching.

## **Need more information:**

If you have any questions, talk to any CS teachers or talk to 5<sup>th</sup> year and 6<sup>th</sup> year CS students and ask them about their experience of the subject.

*“A good construction student will have/will be:*

- *Keen interest in design and architecture*
- *Generally good at working with their hands*
- *Good quality sketching and drawing*
- *General interest in the design, construction and materials involved in building an energy efficient house.” –Mr. Linehan*

Log- on to [www.constructionstudies](http://www.constructionstudies.ie) .ie to get a better understanding of the subject and course work.

# Remember

Do your research!

Ask one person – you get their opinion

Ask three people – you form your  
own opinion.

**REMEMBER...**

***“HE WHO AIMS FOR THE STARS, SHOOTS FAR HIGHER  
THAN HE WHO AIMS FOR A TREE”.***