

# **Committed to Excellence**

# **Options Evening 2020**

Welcome

# **Outline**

- Briefing by the Head of Year
- Core Subjects Presentations
- Opportunity to visit each subject department and discuss the subject with specialists



# Why are we here tonight?

- 1. To gain a better understanding of the options process
- 2. To help your child to make informed decisions
- 3. To give you an opportunity to ask questions with subject specialists



# 1. To gain a better understanding of the options process

- Selecting GCSE subjects that will be examined in 2023
- Online selection system
- Parents have the final say!

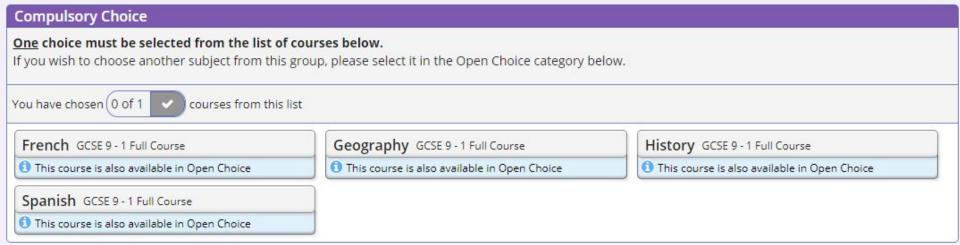


# How to choose

- Students log onto the online SIMS system
- Select the subjects you want and one reserve
- The SIMS system will close on 13th February 2020

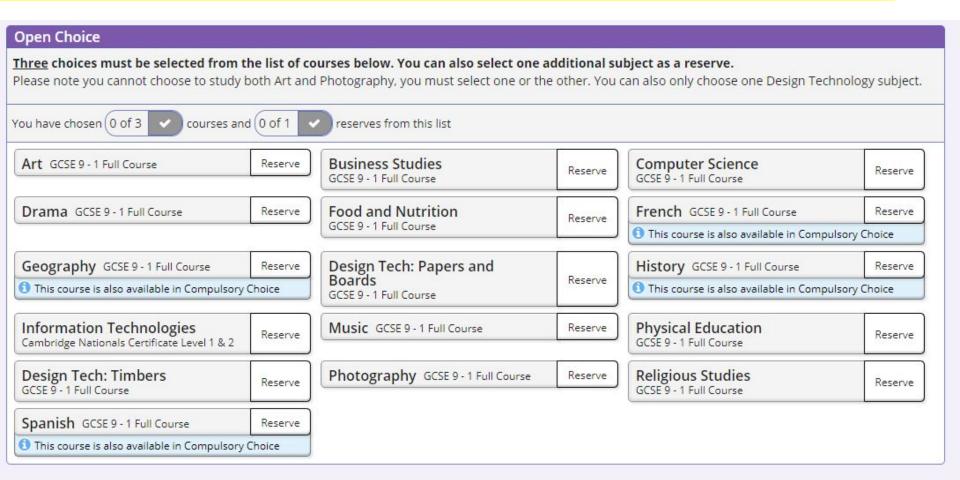


# How to choose: The Compulsory Choice





# **How to choose: Open Choice**



# How To Choose: What's possible and what's not

You can only choose one technology subject in total

Art and Photography CANNOT both be chosen

All the information is available at the front of the students' booklet

Committed to Excellence

# 2. How has the school prepared the students to make informed decisions?

- GCSE information lessons
- Student guidance booklets
- Interviews for some students
- Form Tutor discussions opportunities
- Students have logged into the online choice system
- The School Report
- Parents Evening feedback from teachers



# 3. What are the important questions to ask?

- What are the key skills needed for the subject?
- Is there any coursework?
- What is the exam structure like question types, time allowed, equipment needed?
- What career prospects would the subject provide?
- Is my son/daughter suited to the subject?





# **Key points to consider - be honest**

- How has your son/daughter been performing in the subject?
- What is their Attitude to Learning like in the subject?
- Would your child be best to do a subject with coursework or not? Are they self motivated, organised and able to keep to deadlines?
- Does your son/daughter have career plans already?
   Could this subject help?
- Does your son/daughter have A level or university plans?

# Pitfalls - don't choose something because...

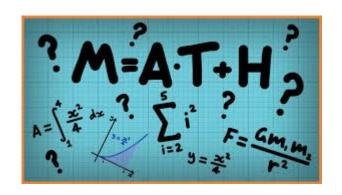
- "I really like the teacher!"
- "My friends are doing that!"
- "I would get better results if I revised!"
- "I just want to do something new!"



# **Important Dates**

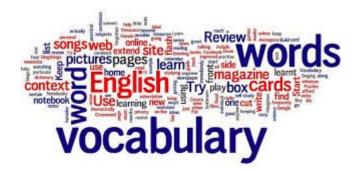
- 13th February online system closes
- March Students *preferred* options sent home.
- Summer Term Students informed of their GCSE option subjects.
- Friday 12th June deadline for changes to be registered with the school to:
   options@johncolet.co.uk
- Thursday 1st October No further changes possible between courses.





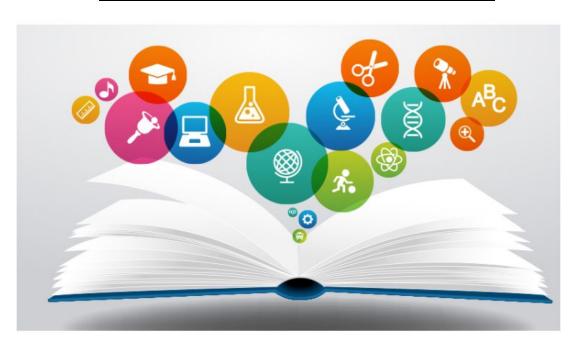


# **Core Subjects**





# SCIENCE GCSE COURSES



# Science

At the end of Year 8 all students complete the KS3 Science Curriculum.

This is a topic based course designed to give students a solid foundation for the Biology, Chemistry and Physics key concepts and practical skills required at GCSEs.

# **Combined** Science **Trilogy** – 2 GCSEs awarded

**Chemistry topics** 

### **Biology topics**

- Cell Biology
- Organisation
- Infection and response
- Bioenergetics
- Homeostasis
- Inheritance, evolution
- Ecology

## Bonding and Matter

Quantitative chemistry

Atomic structure, Periodic table

- Chemical Changes
- Energy Changes
- Rates
- Organic chemistry
- Chemical analysis
- Using resources

2 THIRDS BIOLOGY

2 THIRDS CHEMISTRY

## **Physics topics**

- Forces
- Energy
- Waves
- Electricity
- Magnetism,Electromagnetism
- Particle model of matter
- Atomic structure.

**2 THIRDS PHYSICS** 

ADDED TOGETHER MAKES TWO GCSES

# **GCSE Biology GCSE Chemistry GCSE Physics** 3

# SEPARATE GCSEs awarded

## **Biology Topics**

- Cell Biology
- Organisation
- Infection and response
- Bioenergetics
- Homeostasis
- Inheritance, evolution
- Ecology

## **Chemistry Topics**

- Atomic structure, Periodic table
- Bonding and Matter
- Quantitative chemistry
- Chemical Changes
- Energy Changes
- Rates
- Organic chemistry
- Chemical analysis
- Using resources

### **Physics topics**

- Forces
- Energy
- Waves
- Electricity
- Magnetism,Electromagnetism
- Particle model of matter
- Atomic structure.
- Space Physics

**1 GCSE Biology** 

**1 GCSE Chemistry** 

**1 GCSE Physics** 

# GCSE Science

How are the New Science GCSEs assessed?

All Exams are taken at the end of Yr 11

Combined Science Trilogy – 2 GCSEs

No coursework

6 exam papers lasting 1hr 15mins each.

B1 C1 P1 B2 C2 P2

GCSE Biology GCSE Chemistry GCSE Physics

No coursework

6 exam papers lasting 1hr

45mins each

B1 C1 P1

(Additional content examined in each paper)

# There is No coursework in GCSE Science

Investigative skills and practical knowledge are now assessed in the terminal exam papers – Required Practicals

#### REQUIRED PRACTICAL

#### Electrolysis

Investigating the elements formed at each electrode when different salt solutions are electrolysed.

#### Method

- Add 50cm<sup>3</sup> of copper chloride solution to a 100cm<sup>3</sup> beaker.
- 2. Insert carbon electrodes (ensure they do not touch)
- Connect the electrodes to a 4V power supply.
- 4. Observe changes at the electrodes, such as bubbling.
- Hold a piece of blue litmus paper in the solution next to the positive electrode.
- 6. Switch off the power supply after a maximum of 5 minutes.
- 7. Examine the negative electrode. Is there a coating on it?
- 8. Clean the equipment and repeat steps 1 to 7 with other solutions.

#### Other solutions to test

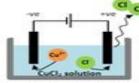
- · Copper sulphate
- Sodium chloride
- Sodium sulphate

#### Risk Assessment

- Copper sulphate solution may irritate skin and eyes. Wear goggles, rinse skin or eyes if it comes into contact.
- Chlorine gas produced. Use low concentrations of solution. Carry out in ventilated room, use 4V maximum and for 5 minutes maximum.

#### The Science

Positive metal ions collect on the negative electrode.



Negative ions collect at the positive electrode.

#### When electrolysing aqueous solution (salts dissolved in water):

If a halide (group 7) ion is present it will form a gas at the negative electrode. For example a solution of sodium chloride will form Cl<sub>2</sub> gas. Otherwise, oxygen will form (eg. copper sulphate will produce oxygen)

If the metal is more reactive than hydrogen it will stay in solution and hydrogen will form. Copper is less reactive so forms on the electrode.

This is to test for chlorine, which will turn the litmus paper red (it is acidic) then white (chlorine is a bleach). If oxygen is produced the litmus paper will not change colour.

#### Half equations

At the positive electrode ions lose electrons:  $2CI \rightarrow Cl_2 + 2e^- OR 2CI - 2e^- \rightarrow Cl_2$ 

At the negative electrode ions gain electrons: Cu²+ + 2e' → Cu

# **BOTH PATHS LEAD TO A LEVELS**

# **GCSE Combined Science Trilogy**

Double award - Two GCSEs awarded

**Linear course - Examined June of Yr11** 

6 papers each lasting 1hr 15 minutes

GCSE Biology,	<b>GCSE</b>	Chemistry,	<b>GCSE</b>
Physics			

Triple award - Three separate GCSEs awarded

Linear course - Examined June of Yr 11

6 papers Each lasting 1hr 45 minutes

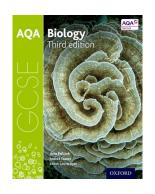
Biology 1	Chemistry 1	Physics 1
<b>Topics 1,2,3,4</b>	Topics 1,2,3,4,5	Topics 2,4,6,7
Biology 2	Chemistry 2	Physics 2
<b>Topics 5,6,7</b>	Topics 6,7,8,9,10	<b>Topics 1,3,5</b>

Biology 1	Chemistry 1	Physics 1
Topics 1,2,3,4	Topics 1,2,3,4,5	Topics 2,4,6,7
Biology 2	Chemistry 2	Physics 2
<b>Topics 5,6,7</b>	Topics 6,7,8,9,10	Topics 1,3,5,8

# In Year 9 and 10 ALL STUDENTS are taught Biology, Chemistry and Physics topics

Year 9		
Biology (3)	Chemistry (3)	Physics (3)
Communicable disease	The periodic table	Forces 1
classification	Fuels and feedstocks	Motion
Heart and Lifestyle disease	Rates of reaction	National and global energy resources

Year 10		
Biology (4)	Chemistry (3)	Physics (3)
Cell structure	Bonding	Waves and Light
Cell division	Nano science	Energy stores
Transport in cells	Reactions of acids	Electricity basics



Every student has access to Kerboodle

www.youtube.co.uk

Freesciencelessons.co.uk

www.bbc.com/bitesize

Required
Practical
Booklets –
Application of technique

**Equation sheet Recall and rearrange** 

# GCSE English Language and English Literature

# 2 separate subjects

English Language & English Literature

Exam Board: AQA

All students will study both subjects, with the same teacher for both

At the end of Year 11 the students will come out with 2 separate GCSEs

Creative writing  Analysing and writing non-fiction texts such as newspaper articles, speeches, letters  Writing persuasive or argumentative pieces where you are putting your opinion across  Understanding how to use language differently with different people and in different contexts  Reading and analysing a range of novels, poems and plays  Looking at the context of these texts — who were they written? What was going on at time? How did this affect what was written interpretations of the texts  Coming up with your own views, ideas and interpretations of the texts  Developing original, independent thought	English Liter	English Language	English Literature
newspaper articles, speeches, letters  Writing persuasive or argumentative pieces where you are putting your opinion across  Understanding how to use language differently with different people and in different contexts  Looking at the context of these texts – who were they written? What was going on at time? How did this affect what was written.  Coming up with your own views, ideas and interpretations of the texts  Developing original, independent thought	, ,	Creative writing	
Writing persuasive or argumentative pieces where you are putting your opinion across Understanding how to use language differently with different people and in different contexts  were they written? What was going on at time? How did this affect what was written  time? How did this affect what was written  Coming up with your own views, ideas and interpretations of the texts  Developing original, independent thought	exts such as	Analysing and writing non-fiction texts such as	
where you are putting your opinion across  Coming up with your own views, ideas and interpretations of the texts  with different people and in different contexts  Developing original, independent thought	<u> </u>	newspaper articles, speeches, letters	
Understanding how to use language differently with different people and in different contexts  Developing original, independent thought	- F		w did this affect what was written?
with different people and in different contexts  Developing original, independent thought	Coming up with your own vi		p with your own views, ideas and
	·	,	ations of the texts
20% of marks will be awarded for accurate	Developing original, indeper		ng original, independent thought
spelling, punctuation and grammar			

# **English Literature texts**

- Macbeth William Shakespeare
- An Inspector Calls J.B. Priestley
- The Strange Case of Dr Jekyll and Mr Hyde Robert Louis Stevenson
- AQA Anthology Past and Present: Power and Conflict poems

No copies of any text can be taken into the exams

# **Assessment Summary**

4 exams at the end of Year 11

2 in English Language

2 in English Literature

There is <u>no</u> coursework

# Speaking and Listening

This will also be assessed separately

The marks will not count towards the English Language grade

A separate Speaking and Listening mark will be awarded

# How it will be taught

The students are currently set by ability in English – this will continue through the GCSE course.

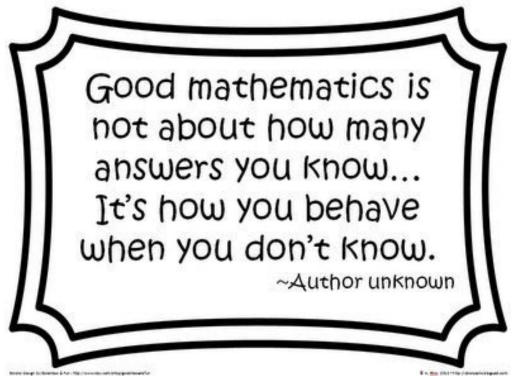
We have 3-4 sets on each side of the year group.

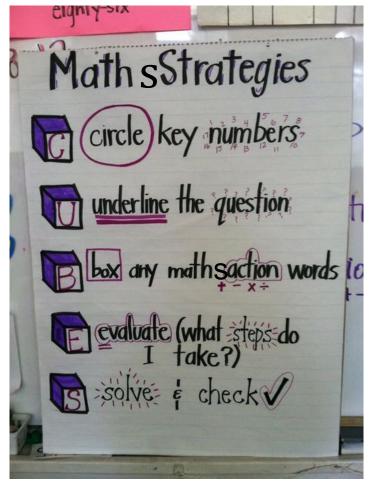
There will be movement between sets as necessary.

# Assessment

- With the removal of coursework, the students will be regularly assessed under exam conditions throughout the GCSE course
- They will have formal assessments throughout each term
- End of year exams at the end of Years 9 and 10
- Mock exams in Year 11

# GCSE MATHS





# Mathematics subject information

# Exam board: EDEXCEL

- \* 3 papers: 33.3% each.
- \* 80 marks each
- \* 1 non-calculator paper + 2 calculator papers
- \* Higher tier: grades 9-4
- \* Foundation tier: grades 5-1

# Mathematics subject information Exam board: EDEXCEL

\*\*\*\*Minimum grade requirements for entry to post 16 education is Grade 4. If this is not achieved, students will need to continue with GCSE Maths post Year 11 \*\*\*\*

Check courses/Sixth form/what you want to do next as you may need a higher grade than a pass.

To study A Level Maths at John Colet you need a Grade 6+

# MATHEMATICS - the road to success!

HOMEWORK is very important. Those students who complete homework to a high standard get consistently better results.

Those students that attend REVISION better sessions perform better in their exams

EQUIPMENT: pen, pencil, ruler, rubber protractor, compass and CALCULATOR EVERY LESSON!

## FOUNDATION:

Assessment Objectives	Overall weighting of AOs (%)
Number	28%
Algebra	23%
Ratio, Proportion and Rates of change	28%
Geometry and Measures	18%
Statistics and Probability	18%

# HIGHER

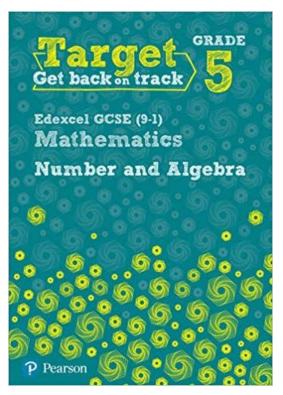
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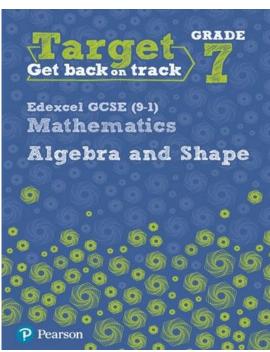
The assessment objectives place more emphasis on reasoning and problem solving.

# Support and helpful websites

- Student tracker sheet following the mocks/in class past papers:
   Please use this to identify topics that need revisiting.
- Maths Staff: We operate an open door policy and are available for help-just come and find us!
- MathsGenie.co.uk: past papers and past paper questions on individual topics
- Mymaths.co.uk: Maths Boosters- these tasks provide students with the opportunity to cover the key Grade 5, 6 and 7 Grade topics. Login: colet
  - Password: probability
- Corbett Maths: Maths videos with worksheets attached and answers. www.corbettmaths.com
- Intervention you may be asked to attend intervention in a small group!

# Revision guides





- Available on Amazon
- There is one for each of the topic areas
- They help you through exam questions step by step

# Students: Questions you should be asking yourselves. BE PROACTIVE!



# **Thank you**

Questions? See Miss Smith or Mrs Abslom in the Hall



Subject	Room
Art	AR2
Business Studies	BS2
Computing	IT2
Drama	Drama Studio
Food Preparation and Nutrition	TE4
French	LA2
Geography	HU2
History	HU3
ICT	IT2
Music	MU1
Papers and Boards	TE6
Physical Education	PE1
Photography	AR2
Religious Education	HU5
Spanish	LA2
Timbers	TE2