



Year 9 GCSE Foundation Year

Key People You Need to Know:

Mr Arnell- Deputy Headteacher

Ms. Conroy -Head of KS3

Mr. Riggs - PPM Head of Year 9

Ms Taylor- DPPM Deputy Head of Year 9

GCSE-Foundation Year

- ▶ Our Role
- ▶ Your Role
- ▶ Attendance needs to be 100%
- ▶ GCSE Pod and Go4schools- your child needs to register

1. Introduction

New GCSEs in English language, English Literature and Maths will be taught in schools in England from September 2015, with the first results issued in August 2017.

Further subjects will see new GCSEs introduced over the following two years.

2. What new GCSEs will look like?

The main features of the new GCSEs are:

- A new grading scale of 9 to 1 will be used, with 9 being the top grade.
- Assessment will be mainly by exam, with other types of assessment used only where they are needed to test essential skills.
- There will be new, more demanding content, which has been developed by government and the exam boards.
- Courses will be designed for two years of study - they will no longer be divided into different modules and students will take all their exams in one period at the end of their course.

New GCSE to be taught from:	First Results will be issued in:	Subjects	New grades from 9 to 1
September 2015	Summer 2017	English Literature English Language Mathematics	Yes
September 2016	Summer 2018	Geography History Biology Chemistry Physics Combined Science Modern Foreign Languages Religious Studies Product Design Graphics Hospitality and Catering (equivalent Level ½ course) Art and Design Drama Music Physical Education Computer Science	Yes
September 2017	Summer 2019	All other GCSE subjects taught from this point will be new, with the current ones withdrawn. Exam boards will have to meet new rules for content and design when deciding which subjects to offer.	Yes

NEW GCSE GRADING STRUCTURE	CURRENT GCSE GRADING STRUCTURE
9	A*
8	
7	A
6	B
5	
4	C
3	D
2	E
1	F
	G
U	U

GOOD PASS (DfE)
5 and above = top of C and above

AWARDING
4 and above = bottom of C and above

AQA GCSE



English

New Specification:

First Exam 2017

The Big Change

100% exam based



AQA English Language

- ▶ Paper 1:
Explorations in
Creative Reading
and Writing
- ▶ Paper 2:
- ▶ Writers'
Viewpoints and
Perspectives

- ▶ Both Exams
- ▶ 1 hour 45 each
- ▶ 80 marks each
- ▶ 50% of GCSE each

AQA English Literature

Paper 1: Shakespeare and the 19th Century novel

- ▶ **Exam = 1hr 45**
- ▶ **64 marks**
- ▶ **40% of GCSE**

Paper 2: Modern texts and poetry

- ▶ **Exam = 2 hrs
15**
- ▶ **96 marks**
- ▶ **60% of GCSE**



Outline of the year 9
course for English at
Claremont High
Foundation year of GCSEs
English Literature and
English Language

Year 9 English 2016-2017

Term AUTUMN	SPRING	SUMMER	
<p>Content of course:</p> <p>1.1: How writing is being used to engage the reader Use variety of extracts including 19th century and 20th century</p> <p>1.2: Creative writing based on pictures</p>	<p>Content of course</p> <p>2.1 A Christmas Carol Charles Dickens – focus on poverty and social conscience Focus on structure/characterisation and language</p> <p>2.2 Paper 1 introduction to Jamaica Inn – pupils learn how to respond to exam – sit exam trial at end of half term</p>	<p>Content of course:</p> <p>3.1: Preparation for Language Paper 1 NEW GCSE linear exam (AQA)</p> <p>3.2: Introduction to Power and Conflict 3-4 poems</p>	<p>SUMMER HOLIDAY HOMEWORK:</p> <p>READ MODERN NOVEL/PLAY READY FOR YEAR 10 STORYBOARD AND PRODUCE A COLLAGE OF THEMES IN BOOK/PLAY</p>
<p>GCSE link:</p> <p>1.1: English Lang paper 1 Q3 focus 1.2: English Language paper 1 Section B</p>	<p>GCSE Link</p> <p>Eng Lit Paper 1 – how character is presented Eng Lang Paper how language is used</p>	<p>GCSE link:</p> <p>3.1: Lit paper 2 section B comparing poems 3.2: Eng Lang Paper 2</p>	<p>GCSE Link:</p> <p>English Lit paper 2 Section A</p>
<p>Assessment dates:</p> <p>1.1 Mid Half term – starting week of 26th September <u>DIRT work 3rd October on Mid Half Term</u> End of half term - week beginning 17th October</p> <p>1.2 Mid Half term – 21st November <u>DIRT work 5th December</u> w/b 12th December – creative writing assessment</p>	<p>Assessment dates:</p> <p>2.1 <u>w/b 2nd Jan DIRT work on Creative writing</u> Xmas Carol essay based on extract but assessment moved to next half term - w/b 27th Feb in order that enough time on novel <u>DIRT work – 13th to 15th March on Christmas Carol</u></p> <p>2.2 Move on to paper 1 Lang - w/b 17th April pupils sit paper 1 Jamaica Inn exam trial</p>	<p>Assessment dates:</p> <p>3.1 <u>w/b 24th April DIRT work on Jamaica Inn exam trial</u> Pupils continue to work on skills for paper 1 language exam- Exams week beginning 8th May, 2017. <u>DIRT work – on Summer exam</u> <u>3.2 Power and conflict.</u> Cover x 5 poems ensuring cover London and Ozymandias</p>	<p>Assessment dates:</p>



- Autumn term:
- **Analysis of extracts** from 19th and 20th century literature (English Language GCSE Question 3 focus)
- **Creative writing** – (English Language paper 1 section B)
- Spring term – A Christmas Carol (English Literature)

What students should be doing at home?

What does independent study look like at GCSE level? = WIDER READING

**1. read 19th, 20th and 21st century texts
(including drama and poetry)**

**2. identify language techniques and the effect
on the reader**

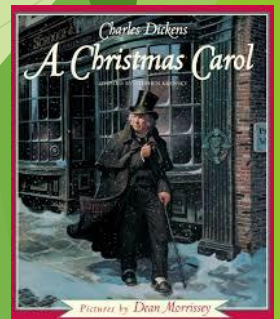
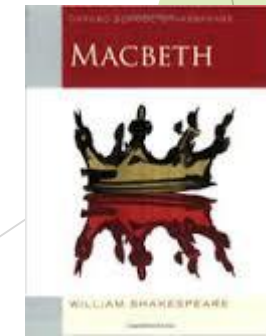
3. refine work to improve grade



Other Useful Resources

- BBC Bitesize
- Study guides (available in school shop/WHSmith/Amazon)
- Texts - read ahead!

A Christmas Carol,
Lord of the Flies,
Macbeth



How to build up your son's/daughter's intertextuality/ general knowledge and knowledge about the context of authors studied.

Try and visit the following:

- **The Globe theatre (£5 tickets available as groundlings)**
- **The National theatre (£12 tickets available to most performances)**
- **The Imperial War museum (free entry)**
- **The British Library (free entry)**



Year 9 Science



What is in Year 9?

- ▶ No more KS3. Three year GCSE course.
- ▶ Exam Board - Edexcel
- ▶ First assessment: **May/June 2019.**
- ▶ Assessing practical - No practical exams but practical skills will be assessed in exam papers (15 %).
- ▶ Maths - Combined Science 20% , Biology 10% , Chemistry 20% , Physics 30%.
- ▶ Physics equations and command words.

How
grading
has
changed
for my
child?

**New
Grade**

old

9

A*

8

A

7

A

6

B+

5

C+

4

D+

3

E+

2

F+

1

F

Combined Science/ Dual

Biology 1
Paper 1
1hr 10
60 marks

Chemistry 1
Paper 3
1hr 10
60 marks

Physics 1
Paper 5
1hr 10
60 marks

Biology 2
Paper 2
1hr 10
60 marks

Chemistry 2
Paper 4
1hr 10
60 marks

Physics 2
Paper 6
1hr 10
60 marks

Separate Science /Triple

**GCSE (9–1)
Biology**

Biology 1
Paper 1
1hr 45
100 marks

Biology 2
Paper 2
1hr 45
100 marks

**GCSE (9–1)
Chemistry**

Chemistry 1
Paper 1
1hr 45
100 marks

Chemistry 2
Paper 2
1hr 45
100 marks

**GCSE (9–1)
Physics**

Physics 1
Paper 1
1hr 45
100 marks

Physics 2
Paper 2
1hr 45
100 marks

Which route should my child choose?

- ▶ Combined Science in Year 9.
- ▶ In Year 10 they will choose either Separate Science or Combined Science.

Which topics will my child cover?

Physics

1. Motion and Forces
2. Conservation of Energy
3. Waves
4. Light and electromagnetic spectrum

Chemistry

1. States of matter and mixtures
2. Atomic Structure
3. Bonding

Biology

1. Key Concepts in Biology
2. Cells and control.

How will the assessments look like?

- ▶ We will have a mix of question types which will include a mix of multiple choice questions, short answers, and longer extended answers (worth up to 6 marks).
- ▶ Topic tests/ Mock exams.
- ▶ HW packs/Exam practice questions
- ▶ Monitoring progress- not dropping below their target grade.

What support materials are there for my child?

- ▶ The online resource **Active Learn Digital Service**
- ▶ <http://qualifications.pearson.com/en/home.htm>
↓
- ▶ BBC GCSE Science bitesize
- ▶ www.gcsepod.com
- ▶ HW/CW packs
- ▶ Intervention sessions

The Student Book

- ▶ Edexcel GCSE (9-1) **Biology** Student Book
ISBN: 9781292120201
- ▶ Edexcel GCSE (9-1) **Chemistry** Student Book
ISBN: 9781292120218
- ▶ Edexcel GCSE (9-1) **Physics** Student Book
ISBN: 9781292120225

Publisher: Pearson

Or

- ▶ Edexcel GCSE (9-1) **Combined Science Student Book**
- ▶ Publisher: Pearson
- ▶ Author: Mark Levesley, Penny Johnson, Iain Brand, Susan Kearsley, Nigel Saunders, Sue Robilliard, John Ling, Carol Tear
- ▶ ISBN: 9781292120195



How can I help my child?

- ▶ Students should be doing at least 2 pieces of science homework a week- please check they are doing it!
- ▶ If they don't have homework they should be memorising key words and formulae, making flash cards, mind maps and using the active book to revise.
- ▶ Students must take good care of all their notes from Yr9-11 as there will be a lot to revise at the end of Year 11!

Secret recipe for the success

- ▶ Ask questions.
- ▶ Consistency. (Work everyday)
- ▶ Organise notes.
- ▶ Practice exam questions.
- ▶ Try 6 marks questions.
- ▶ Contact your teacher or Mr Jodha
harendra.jodha@Claremont-high.org.uk



Year 9 Mathematics

Foundation GCSE Year

Ms Solanki
Maths KS3 Co-ordinator



Foundation (grades 1-5)

Paper 1 Non-calculator

33.3% weighting



Paper 2 Calculator

33.3% weighting



Paper 3 Calculator

33.3% weighting



Higher (grades 4-9)

Paper 1 Non-calculator

33.3% weighting



Paper 2 Calculator

33.3% weighting



Paper 3 Calculator

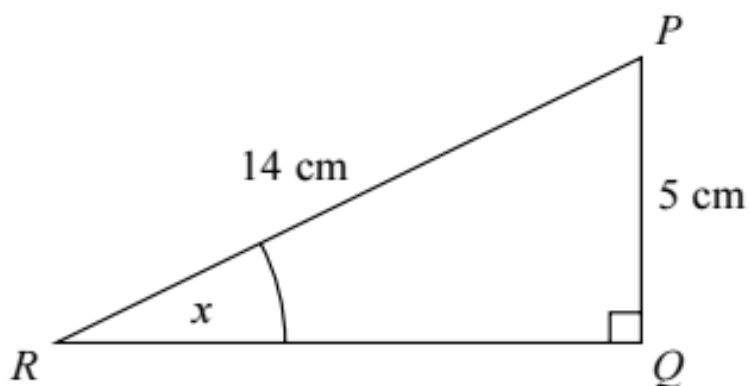
33.3% weighting





A01 Questions:

PQR is a right-angled triangle.



Work out the size of the angle marked x .
Give your answer correct to 1 decimal place.

.....
(Total for Question 2 is 2 marks)

AO1 question – accurately recalling facts, terminology and definitions and accurately carrying out routine procedures

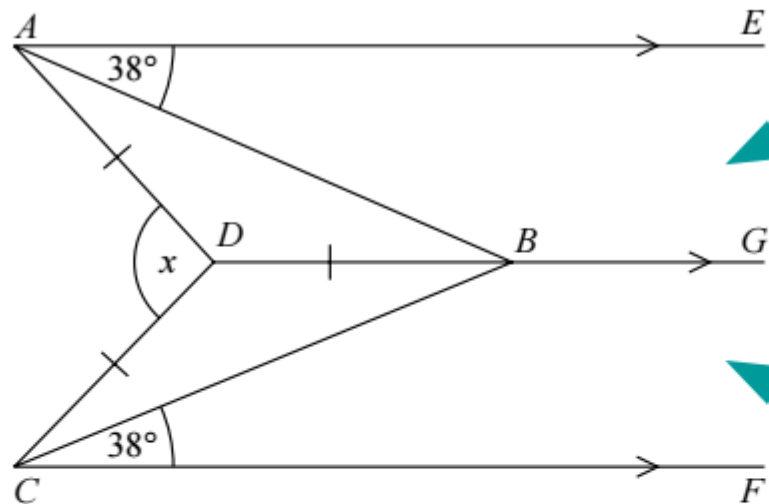
Assessing trigonometry without context (clearly presented problem)



A02 Questions:

3

Question from
non-calculator paper



AE , DBG and CF are parallel.
 $DA = DB = DC$.
Angle $EAB = \text{angle } BCF = 38^\circ$

Work out the size of the angle marked x .
You must show your working.

(Total for Question 3 is 3 marks)

Using familiar angle
properties in more
complex problem

AO2 question –
making deductions
to draw conclusions
from mathematical
information



A03 Questions

5 Henry is thinking of having a water meter.

These are the two ways he can pay for the water he uses.

Water Meter

A charge of £28.20 per year

plus

91.22p for every cubic metre of water used

1 cubic metre = 1000 litres

No Water Meter

A charge of £107 per year

Henry uses an average of 180 litres of water each day.

Use this information to determine whether or not Henry should have a water meter.

(Total for Question 5 is 5 marks)

Numeracy assessed
in realistic context

AO3 question – translating
problems in non-mathematical
contexts into a series of
mathematical processes
+ interpreting results in the
context of the given problem
with AO1 mark for accurately
carrying out set tasks
requiring multi-step solutions



Year 9

- ▶ This year is designed to bridge the gap between KS3 and KS4
- ▶ The scheme of work has been structured in the same way as KS4 but with an increased emphasis on problem solving.
- ▶ Students will be assessed using the 9-1 grades.
- ▶ In the summer term students will sit a baseline test which helps us to decide the grade they are working at and the most appropriate set for years 10 and 11.



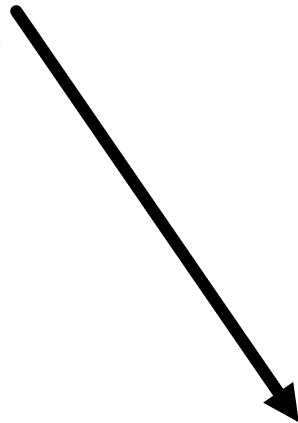
Topics covered

- ▶ Calculations
- ▶ Formulae
- ▶ Number Properties
- ▶ Ratio & Proportion
- ▶ Angles
- ▶ Probability
- ▶ Straight Line Graphs
- ▶ Area
- ▶ Transformations

- ▶ Data Handling (Start of GCSE SOW in final term)



These Grades reflect expected final GCSE grade if the related subject content is mastered in year 9.



Number Properties and Fractions			
LEARNING CHECKLIST			
REFLECTIVE LEARNERS KNOW WHAT LEVEL THEY ARE WORKING AT			
AT			
I know this colour green		I'm not sure colour yellow	I don't know this colour red
GRADE		START	END
2	I can find multiples of a given number.		
	I can find simple fractions of a quantity (one half, one third, one quarter)		
	I can shade a given fraction of a shape		
	I can find what fraction of a shape is shaded		
	I can recognise when two fractions are equivalent		
3	I can find factors of a given number.		
	I can recognise prime numbers up to 50.		
	I can recognise square numbers up to 100		
	I can find equivalent fractions.		
4	I can simplify fractions to their lowest form.		
	I can find the Highest common factor of 2 or more numbers.		
	I can find the Lowest Common Multiple of 2 or more numbers.		
	I can write a number as a product of its prime factors.		
	I can add and subtract fractions with common denominators.		
5/6	I can find small fractions of an amount.		
	I can order fractions		
	I can recognise Square and cube numbers and their associated roots.		
	I can multiply 2 fractions together		
	I can divide 2 fractions		
	I can use integer powers and their roots to solve problems.		
	I can add any pair of fractions by writing them with a common denominator		
I can subtract any pair of fractions by writing them with a common denominator			
7	I know the laws for multiplying and dividing indices.		
	I know that the power of a half means square root and the power of a third means cube root.		
	I can convert between ordinary numbers and standard form		
	I can calculate using standard form		



5/6

I can recognise Square and cube numbers and their associated roots.

I can multiply 2 fractions together

I can divide 2 fractions

I can use integer powers and their roots to solve problems.

I can add any pair of fractions by writing them with a common denominator

I can subtract any pair of fractions by writing them with a common denominator

7

I know the laws for multiplying and dividing indices.

I know that the power of a half means square root and the power of a third means cube root.

I can convert between ordinary numbers and standard form

I can calculate using standard form



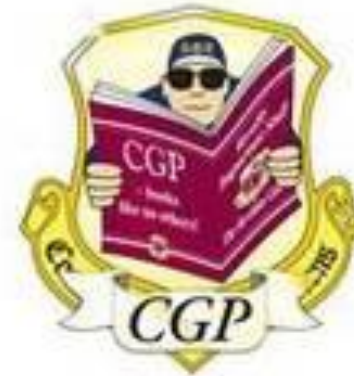
Workbook

Pupils are expected to complete GCSE style questions in these books to develop and master a particular topic understanding

CGP

Key Stage Three **Mathematics**

Higher Level



The Workbook

Includes Answers & Free Online Edition



Other Revision Aids

► www.mymaths.co.uk

(school username and password needed)

Username: **claremont**

Password: **prime**

► www.mathswatchvle.com

School ID: Claremont

(Individual usernames and passwords will be provided this week)

► **Youtube**

Khan Academy

Hegarty Maths





Websites

- Youtube - Khan Academy
- Hegarty Maths

- <http://www.mathsgenie.co.uk/>

- <https://corbettmaths.com/>





Formula Wall

Trigonometry

SIN	0	30	45	60	90
COS	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$	0
TAN	0	$\frac{1}{\sqrt{3}}$	1	$\sqrt{3}$	∞

Pythagoras' Theorem
 $a^2 + b^2 = c^2$
 $a^2 = c^2 - b^2$
 $b^2 = c^2 - a^2$

SOH CAH TOA

Sin $\theta = \frac{\text{opposite}}{\text{hypotenuse}}$
 Cos $\theta = \frac{\text{adjacent}}{\text{hypotenuse}}$
 Tan $\theta = \frac{\text{opposite}}{\text{adjacent}}$

Area of Triangle
 $A = \frac{1}{2}bh$
 $A = \frac{1}{2}ab \sin C$

Area of Sector
 $A = \frac{\theta}{360} \pi r^2$
 $A = \frac{1}{2} r^2 \theta$

Area of Segment
 $A = \frac{1}{2} r^2 (\theta - \sin \theta)$

Area of Composite Figures

Area of Circle
 $A = \pi r^2$

Area of Annulus
 $A = \pi (R^2 - r^2)$

Area of Sector
 $A = \frac{\theta}{360} \pi r^2$

Area of Segment
 $A = \frac{1}{2} r^2 (\theta - \sin \theta)$

Area of Composite Figures

Area of Circle
 $A = \pi r^2$

Area of Annulus
 $A = \pi (R^2 - r^2)$

Area of Sector
 $A = \frac{\theta}{360} \pi r^2$

Area of Segment
 $A = \frac{1}{2} r^2 (\theta - \sin \theta)$

45 60 90

$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$	1
$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	0
1	$\sqrt{3}$	∞

LAW OF INDICES
 $a^x \times a^y = a^{x+y}$
 $a^x \div a^y = a^{x-y}$
 $(a^x)^y = a^{xy}$
 $a^x = a^{x \cdot 1} = a^{x \cdot \frac{1}{x} \cdot x} = (a^{\frac{1}{x}})^x$
 $a^x = \sqrt[x]{a^x}$

CUMULATIVE F (Curves & box plots)
 Median = $\frac{1}{2}$
 Lower Quartile (LQ) = $\frac{1}{4}$
 Upper Quartile (UQ) = $\frac{3}{4}$
 Interquartile Range (IQR) = UQ - LQ

HISTOGRAMS
 Height of bar = frequency / class width
 Area Length = $\frac{\text{area of area}}{\text{width}}$
 Sector Area = $\frac{\text{angle of sector}}{360} \times \pi r^2$

FORMULAS
 $A = L \times W$
 $A = \frac{1}{2} bh$
 $A = b \times h$
 $A = \frac{1}{2} (a+b)h$
 $A = \pi r^2$
 $C = 2\pi r = C \times \pi r$
 $V = Lwh$
 Area of cross section \times length
 $V = \frac{1}{2} \pi r^2 h$
 $A = 4\pi r^2$
 $V = \frac{4}{3} \pi r^3$
 $A = 4\pi r^2$
 Area of base \times perpendicular height
 $\frac{1}{2} ab \sin C$
 $a^2 = b^2 + c^2 - 2bc \cos A$
 $\frac{1}{2} ab \sin C$
 Area of $\triangle = \frac{1}{2} \times \text{base} \times \text{height}$
 Area of $\triangle = \frac{1}{2} ab \sin C$
 Area of $\triangle = \frac{1}{2} bc \sin A$
 Area of $\triangle = \frac{1}{2} ca \sin B$

1 The angle between the tangent and the radius is 90° .

2 Opposite angles in a cyclic quadrilateral equal to 180° .

3 An angle subtended from an arc is double the size of the angle subtended from the centre of the circle.

4 A triangle that is drawn in a semi-circle is a right angle triangle.

5 Tangents subtended from the same point to the circle are equal.

6 Angles subtended from the same point are equal.

7 An angle between the tangent and the alternate segment.

WINNER

do we have that... are different from... might need to be... which work differently?