

## YEAR 7 REVISION TOPICS

### BIOLOGY

<b>CELLS</b>
● Basic unit of life. Animal and Plant cells, structure, similarities and differences and functioning of all parts.
● Light microscope - Parts and Use
● Life Processes
● Cell specialisation
● Cell organisation -Tissue-Organ- Organ System
<b>FLOWERING PLANT REPRODUCTION</b>
● Flower structure and functions of parts
● Pollination -Insect/Wind comparison
● Fertilisation
● Seeds - Structure and Dispersal
● Fruits - Dispersal agents - adaptations
<b>VARIATION &amp; CLASSIFICATION</b>
● Genetic and Environmental Variation
● Reasons for Classification
● Binomial system
● Kingdoms - classification features
● Phylum Arthropod classification features and those of its classes, including:-
● Class Insect
● Phylum Vertebrate - classification features
● Classification features of the main plant groups
<b>FITNESS &amp; HEALTH (part 1) Lungs, Breathing and Smoking</b>
● Lung structure and function
● Gas Exchange - Alveoli - structure, function and adaptations

### CHEMISTRY

The following topics are to be assessed and additional information on each can be found in the RGS Chemistry specification as shared with you via TEAMS/Onenote and on Sharepoint:

- Introduction and Safety
- Particle Theory
- Elements, Mixtures and Compounds
- Solubility and Separation Techniques

### ENGLISH

#### **Romantic Poetry**

Y7 students will cover four Romantic poems in preparation for their End of Year exam. They will cover the key historical context of the time period and relevant information about the poets. They will critically analyse each poem and will need to feel confident in exploring the language, form and structure. Just ONE poem will appear in the end of year exam and students will need to explore the given theme in the question presenting a strong literary argument with a critical academic register and a range of ideas.

The key poems studied are:

- 'The Tyger' by William Blake
- 'Ozymandias' by Percy Bysshe Shelley
- 'London' by William Blake
- 'Composed Upon Westminster Bridge' by William Wordsworth

## **FRENCH**

- Greetings
- Personal details (name, age, etc.)
- Classroom objects
- Town and where you live (places and directions)
- Family
- House (rooms and furniture)
- Numbers 1-100
- Animals
- Colours
- Festivals
- Presents
- Clothes
- Descriptions
- Weather
- Activities
- Months / Days/ Seasons
- Time
- Likes and dislikes
- Etre, Avoir, Aller, ER verbs

## **GEOGRAPHY**

- What is Geography and UK places
- Mapwork
- Settlement
- Coasts

These are the general topics that will be examined, but please note that more detailed guidance will be given closer to the exams.

## **HISTORY**

Please revise the big enquiry questions you have been studying since September:

- Why is 1066 one of the most famous dates in English history?
- Who had power: the Crown or the Church?
- Does King John deserve his terrible reputation?
- Was it all mud, muck and misery for medieval peasants?
- What happened when two worlds clashed? European and Native American encounters.

## **MATHS**

<b>HALF TERM 1</b>	
<b>Topic</b>	<b>Sub-Topics</b>
Induction and Rules of Presentation	
Number Topics	Factors and Multiples
	Finding HCF and LCM Problems
	Positive and Negative Numbers
	Arithmetic of Negative Numbers
	Order of Operations (BIDMAS)
	Non-Calculator Arithmetic Strategies
	Written Non-Calculator Methods
	Word Problems
	Using a Calculator
	Powers and Roots
<b>HALF TERM 2</b>	

Algebra	Substitution
	Simplifying Expressions
	Simplifying Expressions (cont.)
	Using Formulae
	Rearranging Formulae / Changing the subject
Shape	Expanding Single Brackets
	Solving Equations
Shape	Forming Formulae and Equations
	Perimeter of Rectangles and Rectilinear Composite Shapes
Shape	Area of Rectangles and Rectilinear Composite Shapes
	<b>HALF TERM 3</b>
Shape	Areas of Polygons (incl. Triangles, Parallelograms and Trapezia)
	Naming, Drawing and Properties of 3D Shapes
	Investigations in 3D Shapes
	Surface Area and Volume of Cubes, Cuboids and Composites
Statistics	Statistics of Listed Data
	Types of Data
Decimal Arithmetic	Adding and Subtracting Decimals
	Strategies for Multiplying and Dividing Decimal Numbers
<b>HALF TERM 4</b>	
Fractions	Converting between Improper and Mixed Numbers
	Adding and Subtracting Fractions
	Multiplying and Dividing Fractions
Probability	Calculating Probabilities
	2D Sample Spaces
	Experimental Probability
Angles	Measuring and Drawing Angles
	Angles in Triangles, angles in quadrilaterals
<b>HALF TERM 5</b>	
Angles (cont.)	Angles around Point and Parallel Lines
Sequences	Sequences Term to Term Relationships and Missing Terms
	Linear nth Term
	Other Sequences
Graphs	Coordinates in 4 Quadrants
	Graphs of the form $y = ax$
	Graphs in the form $x \pm y = a$
Ratio	Simplifying Ratios
	Sharing Quantities and Ratio Problems

TOPIC	CONTENT
STATIC AND CURRENT ELECTRICITY	Static electricity Conductors and insulators Current in series and parallel circuits
FORCES AND MOTION	Types of forces Mass and weight Force diagrams Speed distance time equations Distance time graphs Balanced and unbalanced forces
SPACE	The solar system Phases of the Moon, eclipses Night, day and seasons