YEAR 7 REVISION TOPICS 2019

BIOLOGY

CELLS

- 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

FLOWERING PLANT REPRODUCTION

- Flower structure and functions of parts
- Pollination -Insect/Wind comparison
- Fertilisation
- Seeds - Structure and Dispersal
- Fruits - Dispersal agents - adaptations

VARIATION & CLASSIFICATION

- 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

FITNESS & HEALTH (part 1) Lungs, Breathing and Smoking

- Lung structure and function
- Breathing mechanism including how the air is processed on entry and the role of cilia and mucus
- Gas Exchange - Alveoli - structure, function and adaptations
- Smoking - the harmful substances and common resulting conditions

ENVIRONMENT & FEEDING RELATIONSHIPS

- How organisms are affected by the environment
- Adaptation and Survival, Daily and seasonal cycles
- Food Chains and Webs, Pyramids of Number

CHEMISTRY

The following topics are to be assessed and additional information on each can be found in the RGS Chemistry specification on the VLE:

- Introduction and Safety
- Particle Theory
- Elements, Mixtures and Compounds
- Solubility and Separation Techniques
- Carrying out an investigation (you did the Jelly investigation as an example)

ENGLISH

Romantic Poetry

Y7 students will receive a revision booklet with four poems in it. With their teacher, they will learn about the plot, themes, images and language use of each of the poems. ONE of the poems will appear in the end of year exam and the students will be examined on, predominantly, their ability to write and maintain a strong literary argument. Their marks will then increase based on the complexity of their vocabulary, ideas and analysis. A typical exam essay question will be "How does the poet convey XXX in their poem 'XXX'?

50% of the students' end of year grade has already been attained through an accuracy test and autobiographical writing assessment – the marks of these will be added to the overall mark of the exam paper to create the final grade.

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?
- Map Work
- Settlements
- Sustainable Cities

Detailed revision lists will be given out closer to the exams

HISTORY

Please note there is a selection of topics in the exam to choose from. You will have covered enough topics to be able to choose from amongst the questions in the exam. You may not have looked at all the sub-topics with your teacher. **Revise only those topics taught by your teacher**

The Norman Conquest

- The Battle of Hastings
- The Battle of Stamford Bridge
- Control after Hastings

The Life of a Medieval Peasant

- The Black Death
- Consequences of the Black Death
- The Feudal System

The Murder of Thomas Becket

King John - the worst King in England's history?

- Magna Carta

Islamic Civilisations

Life in Al-Andalus

Islamic Renaissance

Native Americans

- Battle of Little Bighorn

MATHS

Number - Tests for divisibility - Financial Maths - Arithmetic of Negative Nos.	**Sequences** - Function machines - Sequences and rules - Missing terms - nth term of linear sequence	**Shape** - Regular shapes - Compound shapes - Surface area and volume of cubes and cuboids	**Decimals** - Powers of 10 - Ordering decimals / estimates - Four Rules of Decimals
Number - Squares and square roots - Rounding (dp and sf) - BIDMAS - Multiplication and division non-calculator - Measurements in calculations / conversions - Using a calculator	**Data** - Mode, mean, median, range - Statistical diagrams - Collecting and using data	**Algebra** - Expressions and substitution - Simplifying expressions - Using and writing formulae	**Fractions** - Equivalent fractions - Adding and subtracting fractions - Mixed numbers and improper fractions - Calculations with mixed numbers - Mixed numbers
Angles - Measuring and drawing angles - Calculating angles - Corresponding and alternate angles - Angles in a triangle and - Quadrilaterals - Properties of triangles and quadrilaterals	**Co-ordinates and Graphs** - Coordinates in 4 Quadrants - Graphs from relationships - Predicting graphs from - Relationships - Graphs of fixed values of x and y, y = x and y = -x - Graphs of the form x + y = a - Graphs from the real world	**Fractions, Decimals and Percentages** - Fractions, Decimals and - Fractions of a quantity - Calculating simple percentages - Percentage change	**Probability** - Probability Scales - Activity - Play your cards right - Combined Events - Activity- Scores on a spinner - Experimental Probability
Transformations - Line symmetry and rotational symmetry - Reflections - Rotations - Tessellations	**Algebra** - Brick Wall Problems - Solving Simple Equations - Solving more complex equations - Setting up and solving equations	**Statistical Diagrams** - Pie Charts - Comparing mean and range - Statistical surveys	**Shape** - Naming and drawing 3D shapes - Using nets to construct 3D shapes
Ratio - Introduction to ratios - Simplifying ratios - Ratios and sharing - Solving problems			

PHYSICS

TOPIC	CONTENT
STATIC AND CURRENT ELECTRICITY	Static electricity Conductors and insulators Connecting ammeters and circuit rules
ENERGY, HEATING AND COOLING	Energy types and transfers Heat vs temperature Conduction, convection, radiation
FORCES 1	Types of forces Force diagrams Presenting data in graphs
SOLAR SYSTEM	Earth's place in space The Moon Time zones and season