

YEAR 7 REVISION TOPICS 2021

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 Onenote / Sharepoint:

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

ENGLISH

Exam: 1 hour 15 minutes

Section A: Romantic Poetry

You will receive a revision booklet of Romantic poetry. With your teacher, you will learn about the plot, themes, images and language for each poem. ONE of the poems will appear in the end of year exam and you will be asked to write part of an essay response to a question. You will need to write an introduction and one analytical paragraph, but not a full literature essay. A typical exam essay question will be "How does the poet convey XXX in their poem 'XXX'?"

Section B: Creative Writing

The second part of the exam will give you an image and you will be asked to write a description or opening to a story, based on the image. Teachers will prepare you for this creative writing task, and you will be required to show off your best vocabulary, imagery and fluency in your piece of writing.

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

Detailed revision lists will be given out closer to the exams

- What is Geography?
- Map Work
- Local Geography
- Coasts

HISTORY

Please note there are a selection of topics in the exam to choose from. You will have covered enough to have a selection to choose from. Therefore, you may have not looked at all the sub-topics with your teacher. Focus on the parts that you have studied.

Why is 1066 one of the most famous dates in English history?

Why was 1066 a year of crisis for England?

Why did William win the Battle of Hastings?

How did William consolidate his control over England?

How far did the Norman conquest change England?

What was the significance of the Norman Conquest?

Who had power: the Crown or the Church?

Why was the Church so important in medieval times?

What did Crown and Church argue about?

What does Beckett's murder reveal about power in medieval times?

Does King John deserve his terrible reputation?

What is the traditional view of King John?

Should we believe the monks' accounts of King John?

How successfully did John deal with the main problems of his reign? Should so much fuss be made about Magna Carta?

Was John's brother Richard any more successful?

Which interpretation of John do you agree with the most?

Was it all mud, muck and misery for medieval peasants?

What does the Luttrell Psalter reveal about peasant life?

How did peasants have fun?

To what extent did the Black Death benefit peasants?

Why did the peasants' revolt?

What happened when two worlds clashed?

What were the Native America nations?

What can we learn from Native American stories about their beliefs?

How was Native American society organized?

How and why was the Native American way of life destroyed?

MATHS

Number <ul style="list-style-type: none"> - Tests for divisibility - Financial Maths - Arithmetic of Negative Nos. 	Sequences <ul style="list-style-type: none"> - Function machines - Sequences and rules - Missing terms - nth term of linear sequence 	Shape <ul style="list-style-type: none"> - Regular shapes - Compound shapes - Surface area and volume of cubes and cuboids 	Decimals <ul style="list-style-type: none"> - Powers of 10 - Ordering decimals / estimates - Four Rules of Decimals
Number <ul style="list-style-type: none"> - Squares and square roots - Rounding (dp and sf) - BIDMAS - Multiplication and division non-calculator - Measurements in calculations / conversions - Using a calculator 	Data <ul style="list-style-type: none"> - Mode, mean, median, range - Statistical diagrams - Collecting and using data 	Algebra <ul style="list-style-type: none"> - Expressions and substitution - Simplifying expressions - Using and writing formulae 	Fractions <ul style="list-style-type: none"> - Equivalent fractions - Adding and subtracting fractions - Mixed numbers and improper fractions - Calculations with mixed numbers - Mixed numbers
Angles <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - Fractions, Decimals and - Fractions of a quantity - Calculating simple percentages - Percentage change 	Probability <ul style="list-style-type: none"> - Probability Scales - Activity - Play your cards right - Combined Events - Activity- Scores on a spinner - Experimental Probability
Transformations <ul style="list-style-type: none"> - Line symmetry and rotational symmetry - Reflections - Rotations - Tessellations 	Algebra <ul style="list-style-type: none"> - Brick Wall Problems - Solving Simple Equations - Solving more complex equations - Setting up and solving equations 	Statistical Diagrams <ul style="list-style-type: none"> - Pie Charts - Comparing mean and range - Statistical surveys 	Shape <ul style="list-style-type: none"> - Naming and drawing 3D shapes - Using nets to construct 3D shapes

Ratio - Introduction to ratios - Simplifying ratios - Ratios and sharing - Solving problems			
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PHYSICS

TOPIC	CONTENT
STATIC AND CURRENT ELECTRICITY	Static electricity Conductors and insulators Connecting ammeters and circuit rules
SPEEDING UP	Speed distance time and changing units Distance-time graphs
FORCES 1	Types of forces Force diagrams Presenting data in graphs
FORCES 2	Balanced and unbalanced forces Resultant forces and motion
SOLAR SYSTEM	Earth's place in space The Moon and Sun Seasons