

YEAR 8 REVISION TOPICS 2021

BIOLOGY

FITNESS AND HEALTH

- Relate fitness systems to the human body
- Fitness is different for different individuals
- Balanced diet requires carbohydrates, fats, proteins, vitamins, minerals and water in the correct proportions
- What the components of a balanced diet are used for in the body
- Different people have different energy requirements
- The effects of alcohol on the functioning of the body
- Different classes of drug
- The effect of different drugs on the functioning of the body

HEART AND CIRCULATION

- The need for a circulatory system in animals
- Structure and function of arteries, veins and capillaries
- The structure of the mammalian heart and labels
- Circulation of blood through the heart
- Identification of the right and left side of the heart

BONES AND JOINTS

- How simple joint function
- Structure of a synovial joint
- Names of the bones of the forearm
- Antagonistic muscles

THE DIGESTIVE SYSTEM

- Structure of the human gut
- Role of the different regions of the gut
- Breakdown of the three main food groups
- Peristalsis
- Structure of a villus
- Absorption in the small intestine
- Model gut experiment
- Enzymes and digestion
- The conditions required for enzymes to work efficiently

THE REPRODUCTIVE SYSTEM

- The human life cycle
- The changes associated with puberty
- Structure and function of the male reproductive organs
- Structure and function of the female reproductive organs
- The menstrual cycle in a female
- Fertilization
- Development of a baby
- Birth and care of a baby

PLANTS AND PHOTOSYNTHESIS

- Photosynthesis equation
- Structure of a leaf
- Investigating photosynthesis

CHEMISTRY

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

- pH and indicators
- acids and neutralisation
- patterns of reactivity
- fuels and global warming
- carrying out an investigation (you did the denture tablet investigation as an example)
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Key concepts introduced in Year 7 are examinable. This includes writing word equations, safety, carrying out experiments and separation techniques.

CLASSICAL CIVILISATION

All work covered to date; this will include but is not limited to:

Myths, Gods and Heroes:

- Myths, heroes and monsters (focusing on Heracles, Theseus, Perseus)
- Features of heroes and how they are represented in mythology
- Greek Theatre - the format and structure
- A Greek tragedy: Euripides' Bacchae: events, plots, characters, message

History:

- How do we know about the ancient Greeks (understanding evidence)?
- The Minoans
- The Mycenaeans
- The Dark Ages
- Archaic Era: developments, lifestyle, democracy and the legal system
- A Greek comedy: Aristophanes' Wasps - events, plots, characters, message
- Classical Era - Athens

ENGLISH

One exam: 1 hour 15 minutes

Novel: John Steinbeck's 'The Pearl'

In this exam you will find an extract from the novel, with an accompanying question. The question might ask how a character is portrayed in this extract, or how a theme is explored at this moment. You will write a literature essay response during the exam, focusing on the given extract. You will not be expected to remember quotations from elsewhere in the novel, but you should choose several quotations from the extract to analyse, showing off their skills of language analysis that you have practised with your English teachers since starting at RGS. In your essays you will also be expected to bring in relevant contextual knowledge, for example about the historical, societal or biographical contexts in which the novel was written.

FRENCH

- Food
- Shops
- Quantities
- Countries
- Transport
- School
- Descriptions
- Housework
- Daily routine
- Grammar - IR verbs, RE verbs, Aller, Pouvoir, Vouloir, Apprendre, Comprendre, Venir, Dire, Lire, Ecrire, Reflexive verbs, Perfect tense

GEOGRAPHY

- Hydrological Cycle
- Rocks and Energy Issues
- Population Issues
- Oceans

Detailed revision lists will be given out closer to the exams.

GERMAN

All work covered to date in this academic year. Topics tested are:

- Introducing yourself
- Family and life at home
- School
- Free time and hobbies
- Home
- Where you live
- Types of houses
- Rooms and furniture

Grammar includes the present tense, the genders of nouns and the nominative and accusative and dative case.

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.

Richard III: Evil murderer or vilified King?

How has Shakespeare shaped our view of Richard III?

What can we learn from Richard III's skeleton?

How did Richard III become King of England?

What role did Richard III play in the disappearance of the 'Princes in the Tower'?

Was Richard III any worse than other medieval monarchs?

Was Richard III a hero at the Battle of Bosworth?

Why was the Tudor period a time of religious turmoil?

Why did Roman Catholic Europe break apart in the 16th Century?

Why did Henry decide to break from Rome?

Which Tudor monarch changed religion the most; Henry VIII, Edward V, Mary I, Elizabeth I?

Should Mary I be characterised as 'Bloody Mary'?

How did Elizabeth deal with the two main threat to her religious settlement: Mary Queen of Scots and the Spanish Armada?

Why did Charles I lose control of his Kingdom?

What were the steps to civil war?

How can the causes of the civil war be categorised?

What were the key events in the civil war?

Which civil war battle was the most significant?

What was Britain's role in the Transatlantic Slave Trade?

What was the Triangular Trade?

How was slavery resisted?

How did slave money help make Britain great?

Does William Wilberforce deserve all the credit for ending the transatlantic slave trade?

LATIN

All work covered to date in Cambridge Latin Course books 1 – 2. This will include but is not limited to:

- vocabulary from the checklists at the end of each chapter
- nouns cases: nominative, accusative, dative
- verbs: present, imperfect, perfect, pluperfect, infinitives including irregular verbs (sum, volo, nolo, possum)
- adjectives
- relative pronouns and clauses

MATHS

Number Revision <ul style="list-style-type: none">- Negative Numbers- Powers and Roots- Prime Factors- HCF and LCM- Powers of 10- Significant Figures- Standard Form	Algebra <ul style="list-style-type: none">- Equations with brackets- Equations with variables on both sides- More complex equations- Rearranging formula- Trial and improvement	Sequences <ul style="list-style-type: none">- Revise linear sequences including finding the nth term- Recognise quadratics, cubics, quartics and quintics by differencing	Simultaneous Equations <ul style="list-style-type: none">- Elimination, revision and the need to multiply one or two equations- Substitution- Graphical
Area and Volume <ul style="list-style-type: none">- Metric units for area and volume- Surface area of prisms- Volume of prisms- Circumference and area of a circle	Shape <ul style="list-style-type: none">- Congruent shapes- Transformations including negative and fractional s.f- Combinations of transformations- Pythagoras' theorem	Straight Lines <ul style="list-style-type: none">- Graphs from linear- Gradients- Quadratic graphs- Real-life graphs- Midpoints- Regions defined by inequalities	Interpreting Data <ul style="list-style-type: none">- Graphs and diagrams- Pie charts- Scatter graphs and correlation
Fractions, Decimals and Percentages <ul style="list-style-type: none">- Revision of addition and subtraction of fractions- Multiplication and division- % increase / decrease/ change- Know what a recurring decimal is a fraction	Probability <ul style="list-style-type: none">- Mutually exclusive and exhaustive events- Sample space- Estimates of probability- Venn Diagrams	Comparing Data <ul style="list-style-type: none">- Averages including grouped data- Grouped frequency table- Comparing data- Stem and leaf diagrams	Constructions <ul style="list-style-type: none">- Perpendicular bisector and angle bisector- The perpendicular from a point to the line- The perpendicular from a point on a line
Algebra <ul style="list-style-type: none">- Algebraic Notation- Like terms- Expanding brackets- Index notation	Ratio and Proportion <ul style="list-style-type: none">- Ratio revision- Direct proportion- Graphs and direct proportion- Inverse proportion	Angles Revision <ul style="list-style-type: none">- Angle facts- Interior and exterior angles of polygons	Bearings and Scale Drawings

PHYSICS

TOPIC	CONTENT
LIGHT	Reflection and refraction ray diagrams Colour
SPEEDING UP	Speed distance time and changing units Distance time graphs
FORCES 2	Balanced and unbalanced forces Resultant forces Link to motion and to d/t graphs
CIRCUITS 2: VOLTAGE	Voltage as a measure of energy Connecting voltmeters Voltage circuit rules
PRESSURE	Solid pressure Liquids and gases - pressure at depth Explosions / implosions.

SPANISH

Year 8 topics for revision:

- Classroom objects
- Family
- Animals
- Physical descriptions
- Personality descriptions
- School
- Weather and seasons
- Houses
- Sports
- Free time
- Present tense verb conjugations

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