

YEAR 8 REVISION TOPICS

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 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
• Structure and function of the male reproductive organs
• Structure and function of the female reproductive organs
• Fertilisation

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:

- 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)

Key concepts introduced in Year 7 are examinable. This includes writing word equations, safety, carrying out experiments and separation techniques.

Classical Civilisation

Mrs Webber's section:

- Everything covered in Chapters 1, 7, 8, 10, 12, 13, 14, 15 and 16 of the textbooks - Tales of the Greek Heroes by Roger Lancelyn Green.
- Key elements of a Greek myth and qualities of the Greek heroes we have studied

Mrs Dicks' section:

- Greek History - key periods, Minoans, Mycenaeans (not Linear B), Archaic Greece
- Athens: politics (includes different political systems), society, democracy, legal system, The Wasps, Greek theatre, The Bacchae.

English

The Pearl

Students are revisiting *The Pearl* this half term, focusing on closely analysing key extracts in preparation for their End of Year exam. The exam will consist of one extract question which students will need to consider critically using their knowledge of language and its effects. They should choose key quotations from the extract, considering the theme presented in the question, and present a strong literary argument. They should use the PQA structure to explore the effects of Steinbeck's choices closely and should link to key historical context using a critical academic register.

French

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

Geography

- Geology and energy use in the UK
- Hydrology and Rivers
- Europe and Population Issues
- Oceans

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

German

Students should revise the topics below for the End of Year exam. They can access the **ZOOM German 1** textbook and vocabulary lists on Kerboodle (institution code: SO4).

Los geht's!	• Greetings • Introduction to Germany and German-speaking countries; names of towns and countries	• <i>Das ist ...</i> • Gender: <i>ein, eine</i>
Unit 0 Hallo!	• Greetings; introduce yourself and spell your name • Numbers up to 31; months • Say your age and birthday • Say which country you're from, where you live and what languages you speak	• The German alphabet • <i>Ich bin, du bist; ich habe, du hast</i> • Word order in simple sentences • Ordinal numbers • Extra Plus: Masc. and fem. forms of nationalities

Unit 1A Meine Familie	• Family, brothers and sisters • Pets • Colours • Descriptions of self and others	• <i>Mein(e), dein(e)</i> • Ich habe (k)ein(e)(n) ... • Er, sie, es • Noun plurals • Ich bin, du bist, er/sie/es ist + adjectives
Unit 1B Meine Schule	• Classroom objects; items in a school bag • Opinions of school subjects • Ask and say what time it is; talk about school timetables • Days of the week	• Gender: der, die, das • Ich habe (k)ein(e)(n) ... • Ich habe, du hast, er/sie hat, wir <i>haben</i> • “Verb second” word order
Unit 2A Freizeit und Hobbys	• Sports and musical instruments • Hobbies: talk about what you like doing and prefer doing, and what your favourite hobby is • Say how often you do something	• Gern, nicht gern, lieber, am liebsten • Present tense of a regular verb (spielen) and irregular verbs (fahren, lesen, sehen) • <i>Denn</i> • How to say “them” (<i>sie</i>) • Word order with time phrases
Unit 2B Wo wohnst du?	• Countries, regions and the weather • Types of neighbourhood; types of houses; rooms in a house or flat; bedroom descriptions • Numbers up to 100	• Present tense of <i>wohnen</i> • Prepositions + dative (einem/einer/einem, dem/der/dem) • Es gibt + accusative (einen/eine/ ein)
Unit 3A Guten Appetit!	• Food: likes, dislikes and what you eat for different meals • Order a snack • Numbers up to 1000; quantities and packaging; food shopping • Healthy eating	• “Verb second” word order • Ich möchte + noun • Singular and plural nouns (units of quantity) • Man soll + infinitive • Ich esse + kein(e)(n) ...

History

Please revise the big enquiry questions you have been studying since September 2021:

- How accurate was Shakespeare's interpretation of Richard III?
- Why was the Tudor period a time of religious turmoil?
- How far was King Charles I the worst English monarch?
- What can three locations reveal about the impact of the Transatlantic Slave Trade: Akan Kingdoms, Barbados, Bristol?

Latin

All work covered to date in Suburani Book 1 Chapters 9 – 10. This includes:

- Vocabulary checklists 1 - 10 (see pages 266 – 268 of textbook; also on website and under Resources on Teams)
- Grammar:
 - Verbs – present, imperfect, perfect tenses
 - Verbs – infinitive forms
 - Verbs – irregular verbs – *volo, nolo, possum*
 - Nouns – nominative, accusative, dative, ablative cases
 - Prepositions (with accusative and ablative)
 - Adjectives – superlative forms
 - Adjectives – 1st, 2nd and 3rd declension adjectives

Revision Help and Trainers:

- For vocabulary: https://hands-up-education.org/suburani_full/activities/vt.html
- For verbs: https://hands-up-education.org/suburani_full/activities/verbs.html?c=16

Maths

Content – Half Term 1	Topics
Number Properties	Decompose numbers into prime factors in index form Use a prime factorisation to work out HCF and LCM
Algebra 1	Use correct algebraic notation Apply multiplication and addition in algebraic concept Expand a single bracket with a factor
Probability	Use the properties of mutually exclusive outcomes and exhaustive outcomes to help solve problems Express outcomes of probability in a sample space
Percentages	Calculate a percentage of a value Increase and decrease values by a percentage Calculate the percentage change between a new and original value
Sequences	Express a linear sequence as an algebraic expression (Linear nth term) Express a quadratic sequence as an algebraic expression (Quadratic nth term) Recognise and calculate terms of a geometric sequence

Content – Half Term 2	Topics
Congruent Triangles	Recognise the 4 different means of congruency Express clearly and prove whether two different triangles are congruent
Surface Area and Volumes of Prisms	Calculate the surface area of triangular and rectangular faced prisms. Calculate the volume of a prism using the cross-sectional area and height
Ratio 1	Use ratios between shapes to compare their lengths, areas and volumes Use ratios in the context of map scale factors
Graphs 1	Plot and draw lines of the form $y = mx + c$ Plot other graphs such as quadratic graphs using a table of values Use graphs and their coordinates to work out the gradient and y-intercept of the equation $y = mx + c$

Content – Half Term 3	Topics
Standard Form	Express large and small numbers in standard form using the relevant power of 10 Perform four operations on numbers in standard form
Algebra 2	Solve equations involving an expanding of brackets Solve equations with variables on both sides of the equation Change the subject of an equation
Graphs 2	Plot points on a graph using data given in a table Draw a line of best fit on the graph Evaluate the correlation of scatter graph
Fractions	Do fraction arithmetic of all operations

Content – Half Term 4	Topics
Proportion	Increase one quantity at the same rate as the other using the unitary method Derive and use a direct proportion equation Derive and use an inverse proportion equation
Circles	Calculate the circumference of a circle Calculate the area of a circle Rearrange these equations to find diameter and radii Use these equations in context of semi-circles and compound shapes
Angles	Use angle facts to explain and calculate other angles Understand the properties of angles in triangles and quadrilaterals

Transformations	Translate a shape by a vector Rotate a shape by 90 and 180 degrees Enlarge a shape by a fraction and/or negative scale factor
Constructions	Construct a perpendicular and angle bisector Use the properties of circles in exact distance problems on diagrams

Content – Half Term 5	Topics
Statistics	Calculate means, ranges, medians and modes from single value and grouped frequency tables Draw a Histogram based on grouped data Draw a Frequency Polygon on grouped data
Pythagoras' Theorem	Calculate the hypotenuse of a right-angled triangle Calculate other sides of a right-angled triangle Use right-angled triangles in contextual problems
Ratio 2	Understand how a ratio represents parts of a whole Convert between ratios and fraction Use ratios to compare two quantities

Physics

Topic	Content
LIGHT	Reflection & refraction ray diagrams
	Colour
HEAT TRANSFER	Energy types and transfers
	Particle model
	Conductions, convection and radiation
	Expansion and contraction
CIRCUITS 2: VOLTAGE	Voltage as energy carried by the charge
	Connecting voltmeters
	Voltage in series and parallel circuits
PRESSURE	Solid pressure
	Liquids & gases - pressure at depth
	Atmospheric pressure

Spanish

What to revise for listening and reading?

Anything that we have done this year may come up. Use quizlet, teams and your notes and revise vocab on these topics:

- Pencil case objects
- Family members
- Pets
- Ages and months
- Physical description
- Personality traits
- Sports and hobbies
- Likes and dislikes
- Weather
- Rooms in the house
- Places in town

What to revise for writing?

The writing paper has 3 parts:

Part 1. 90 word writing task. You will need to show that you can answer the bullet points using varied vocab, opinions, connectives, when expressions and verbs in present and immediate future tense.

Part 2. You will have to translate some sentences into English and into Spanish on any topic covered this year.

Part 3. You will have to conjugate in Present Tense one AR verb, one ER verb and one IR verb. Relearn the endings for these verbs, you can use this [link](#).