Year 9 Revision List

Computing:

Edublocks

- Following instructions
- Iterations

Computational Thinking

- Abstraction
- Decomposition
- Pattern recognition
- Algorithm
- Bubble sort
- Linear search
- Binary search
- Encoding
- Character set
- Unicode
- Images – resolution
- Sound: Digital v analogue

Business project

Spreadsheet

Spreadsheets

- Mathematical operators and how they are used in formulae
- How to write formulae

Spanish:

A listening and a reading assessment (no writing). It will take 1-2 lessons to complete.

Topics:

- Hobbies - likes / dislikes - films
- Jobs
- Healthy lives
- Young people - rights and responsibilities

German:

A listening and a reading assessment (no writing). It will take 1-2 lessons to complete.

Topics:

- Role models and music
- My ambitions - jobs
- My childhood
- Rights and responsibilities

English:

Assessment - Poetry comparison, one poem given and they compare to another from memory (revision notes allowed) and creative writing

2 full lessons in class.

Revision – revision notes on *Partition of a Homeland, Search for my Tongue, A Difficult Birth, Belfast Confetti, Phenomenal Woman* and *Havisham*; knowledge of structures for poetry comparison; knowledge of structures for creative writing; knowledge of success criteria for effective creative writing.

History:

1hr 15 mins

Topics - The Holocaust = Anti-Semitism before WWII, Nazi policies

Migration through time = Medieval migration (Anglo Saxons, Norman's, Romans), early modern (the Huguenots, black African migrants), industrial (rural to urban, Irish, Indian, Italian), modern (the Windrush, South Asian)

The making of modern Britain = suffragists & suffragettes, equal pay, liberal reforms, beveridge report & NHS, civil rights movement

Food Technology:

Hygiene & Safety

- Full personal hygiene routine
- Types of contamination
- High risk foods (especially **raw chicken**)
- Food poisoning
- Correct food storage temperatures
- Risk assessments
- Personal and legal responsibility when preparing food

Knife Skills

- Confident and consistent **claw grip**
- Precision and accuracy
- Advances knife techniques
- Speed with safety
- Knife cleaning, care and safe storage

Eatwell Guide

- Planning balances meals using the Eatwell Guide
- Evaluation dishes against the guide
- Adapting meals for
- Understanding strengths and limitations of the Eatwell Guide
- GCSE style evaluation questions

Practical Skills: Dough and Baking

Bread Making

- Functions of ingredients
- Dough formation
- Kneading techniques
- Proving conditions
- Shaping and baking
- Evaluation texture and rise

Pizza Dough

- Similarities and differences from bread dough
- Dough consistency and elasticity
- Stretching and shaping bases
- Adding balanced toppings

- Baking safely and evenly

Practical Skills: Baking Desserts

Sticky Toffee Pudding

- Creaming and mixing methods
- Use of eggs safely
- Control of oven temperature
- Making a sauce safely
- Evaluating

Practical Skills: Cooking with Children

- Safe handling of raw chicken
- Preventing cross-contamination
- Correct storage of raw poultry
- Cooking methods
- Evaluating flavour, texture and doneness

Sensory Analysis (GCSE Style Evaluation)

- Using subject specific vocabulary
- Analysing
- Explaining **why** outcomes happened
- Suggesting justified improvements
- Linking results to methods and ingredients

Kitchen Equipment & Techniques

- Confident use of:
- Choosing the correct equipment independently
- Thorough cleaning and hygienic storage
- Working safely with minimal support

Nutrition Knowledge:

- Macronutrients
- Micronutrients
- Energy needs and lifestyle
- Special diets
- Linking nutrition to practical outcomes

Maths:

	Paper 1	
Questions	Topic	Sparx Code
1a	Term-to-term rules	U213
1b	Term-to-term rules	U213
1c	Term-to-term rules	U213
1d	Multiplying and dividing with negative numbers	U548
2a	Finding the lowest common multiple (LCM)	U751
2b	Finding factors and using divisibility tests	U211
2c	Finding prime numbers	U236
2d	Calculating with roots and powers	U851
3	Drawing and interpreting pictograms	U506
4a	Using and finding equations of linear real-life graphs	U862
4b	Using and finding equations of linear real-life graphs	U862
5	Using a written method to multiply and divide integers	U127, U453
6	Using a written method to multiply and divide integers	U127, U453
7a	Solving direct proportion word problems	U721
7b	Solving direct proportion word problems	U721
8	Solving direct proportion word problems	U721
9a	Writing and simplifying ratios	U687
9b	Writing probabilities as fractions	U408
10	Substituting into expressions	U201
11	Using a pair of compasses	U678
12a	Finding fractions of amounts without a calculator	U881
12b	Sharing amounts in a given ratio	U577
13	Angles on a line and about a point	U390
14a	Estimating calculations	U225
14b	Estimating calculations	U225
15a	Properties of 3D shapes	U719
15b	Finding the volume of spheres	U617
16a	Substituting into real-life formulae	U144
16b	Substituting into real-life formulae	U144
17	Identifying parts of circles	U767
18	Calculating with density	U910
19	Choosing suitable averages and solving problems	U717
20a	Using standard form with negative indices	U534
20b	Multiplying and dividing numbers in standard form	U264
21	Nets of 3D shapes	U761
22	Frequency trees, Sharing amounts in a given ratio	U280, U577
23	Adding and subtracting fractions, Dividing fractions	U736, U544
24	Ordering fractions, Reciprocals	U746, M216
25	Using the exact values of trigonometric ratios	U627
26	Expanding double brackets, Factorising to solve quadratic equations	U768, U228

Geography:

Your End of Year Assessment will ask you questions about the topics and places you have learned about in **Year 9 Units 1–5**. Your assessment is **50 minutes** and there will be **50 marks** available. You can use a calculator.

The assessment will have:

- Questions that ask about figures and diagrams.
- Several questions between one and six marks.
- One longer essay of nine marks.

Maximise your revision by focusing on information from the four boxes below.

1. Key terms

- ablation
- altitude
- arête
- communication
- coral bleaching
- corrie
- disparities
- environment
- glacier
- global conveyor belt
- globalisation
- hotspot
- income
- inequality
- latitude
- literacy
- moraine
- nutrient
- ocean layer
- permafrost
- tectonic plate boundary
- regional
- snout

2. Big ideas

- **Ocean layers** (U1, L2)
- Global ocean **currents** (U1, L4)
- Characteristics of **coral reefs** (U1, L6)
- **Coral bleaching** (U1, L7)
- Geological **hotspots** (U2, L4)
- Destructive **plate boundaries** (U2, L5)
- Past reasons for **globalisation** advancing (U3, L4)
- Factors that **limit development** (U4, L3–4)
- Reasons for **regional disparities** (U4, L6)
- **Development strategies** (U4, L7)
- Location of **ice landscapes** (U5, L2)
- **Glacier** formation and landforms (U5, L3–5)

3. Key topic – Development strategies

Key idea: How might development strategies help reduce regional disparities and what are their limitations?

Key lesson: **Unit 4 Lesson 6–7**

Key terms: aid, infrastructure, poor, income, agriculture, scale, Educate Girls, Delhi–Mumbai Expressway, urban, rural, multiplier effect, literacy, healthcare, transport, climate, targeting poor, inequality, Bihar, Maharashtra, national, regional, local, community, government, access to services.

Skills: Providing advantages and disadvantages of different strategies. Weighing up two sides of an argument e.g. on the one hand, on the other hand. Putting forward your reasoned opinion.

4. Skills

- Referring to **figures as evidence in questions**. (Very important)
- Describing distribution (U1, L6 and U5, L2)
- Interpreting diagrams (U2, L3)
- Locating latitude on a map (U2, L4 and U4, L5)
- Interpreting regional maps with a key (U2, L6)
- Choropleth maps of income data (U3, L1)
- Interpreting line graphs (U3, L3)
- Interpreting photographs (U3, L5)
- Calculating the difference (U4, L3)
- Interpreting percentage data (U4, L6)
- Identifying key features on a diagram (U5, L4–5).
- Matching OS maps to photos (U5, L4–5)

You may wish to use some of the following strategies to help you revise:

Revise the glossaries for Units

Create flash cards.

Practice the skills mentioned in box 4.

Discuss strategies to reduce regional development disparities.

Science:

Exam Paper Details:

Paper	Topics	Length of Exam
Biology	**1. Growth and Differentiation** **2. Human Interaction** **3. Genetics**	**50 minutes**
Chemistry	**1. The periodic table** **2. Introduction to Quantitative Chemistry** **3. Using resources**	**50 minutes**
Physics	**1. Acceleration** **2. Heating** **3. Sound and waves** **4. Home electricity**	**50 minutes**

What You Need to Revise:

Biology:

- Compare eukaryotic and prokaryotic cells
- Explain diffusion, osmosis and active transport
- Describe mitosis and meiosis
- Compare sexual and asexual reproduction
- Explain cancer and stem cells
- Define biodiversity
- Explain how humans affect biodiversity
- Explain pollution and global warming
- Interpret pyramids of biomass and numbers
- Describe the structure of DNA
- Define genes and alleles
- Use Punnett squares to predict inheritance
- State examples of inherited disorders

Chemistry:

- Complete electron configuration diagrams
- Define isotopes
- Describe trends in alkali metals, halogens, noble gases and transition metals
- Calculate relative formula mass and percentage by mass
- Balance chemical equations
- Calculate concentration and uncertainty
- Explain concentration using particle theory
- Describe how to make pure dry crystals
- Compare boiling and evaporation

- Describe the water cycle and water treatment
- Explain finite resources and sustainable development
- State examples of ceramics and composites
- Explain why life cycle assessments are used

Physics:

- Compare scalar and vector quantities
- Calculate resultant vectors and acceleration
- State Newton's 3 laws
- Interpret velocity-time graphs
- Describe methods to investigate acceleration
- Define internal energy and energy transfers
- Explain insulation and reducing heat transfer
- Define specific heat capacity and latent heat
- Describe SHC and SLH practical methods
- Compare transverse and longitudinal waves
- Label waves and calculate wave speed
- Explain reflection and refraction using ray diagrams
- Describe ripple tank experiments
- Explain how humans hear sound
- Compare AC and DC electricity
- Describe plug wiring and safety
- Calculate power and energy transferred
- Compare renewable and non-renewable resources
- Describe the National Grid and transformers

Skills You Will Be Tested On

- Understanding command words (e.g. State, Describe, Explain, Analyse, Compare)
- Describing the trends from graphs
- Predicting values using graphs
- Calculating percentages
- Writing balanced symbol equations
- Choosing appropriate equipment
- Identifying three variables in an experiment (independent, dependent and control)

How to Revise Well

- *Make flashcards*
- *Test yourself using retrieval questions – All core questions available from science team.*
- *Complete past paper questions*
- *Mark them using model answers*

- *Revisit anything you got wrong*
- *Use AI responsibly to test you.*
  Give a very precise instruction "Test me only on questions that could be found in KS3 Science. Make sure these are very similar in style to real exam questions." "The topics I need to cover are_____[insert topics on this sheet]_____"
  Then type your answer in and ask for it to give you feedback. "now mark my answers and give me feedback"

Where to Find Revision Resources

- *Sparx / Exampro*
- *Past paper questions*
- *'Free science lessons' on Youtube.*

Help & Support

- Speak to your teacher if you need help. We are more than happy to help!

Music:

Music KS3 exams will be on the key vocabulary pupils have covered on the 4 Schemes of work that have been completed. It will last 30 minutes.

1. Ground Bass Variations
2. Songwriting 1(3 little Birds)
3. Songwriting 2 (Composing your Reggae song)
4. Club Dance Remix