

YEAR 10	
SUBJECT	REVISION TOPICS
English	Literature: Modern Text (Lord of the Flies: AF/AL/SCC/PCR, An Inspector Calls: RP) Language paper: imaginative writing
Maths inc. exercise book numbers	Calculations, checking and rounding - 1A-E Factors, multiples and primes and negative numbers - 1F-J Algebra: the basics - 8A-M Fractions - 2A-D, 16A Polygons, angles and parallel lines - 6A-G Ratio and Proportion - 5A-E Averages and Range - 3C-E Perimeter, area and circles - 9A-D Representing and Interpreting data - 3A-B, Ex 18B Setting up rearranging and solving equations, including simultaneous equations - 15A-G Pythagoras' theorem and trigonometry - 11A-P Bearings and scale drawing - 6H Scatter Graphs - 3F Percentages - 2E, F, 5I, J Sequences - 4A-G Standard form and Indices - 14A-E Linear graphs and coordinate geometry - 10A-E, 10G-H Reciprocals, Indices, Roots and Surds - 16B-G 3D forms and volume, cylinders, pyramids, cones and spheres - 9E-I Graphs: the basics and real life graphs - 10F Plotting and solving quadratic equations (factorise and formula) - 17A-D Transformations and symmetry - 7B-G Probability (experimental, two way table, venn diagrams and choices and outcomes) - 13A-E, 16J Direct and Inverse Proportion - 21A-C Further Trigonometry - 22A,B, I – L Similar Shapes - 12A-E Plans and Elevations, Construction and Loci - 7H-K
Biology	The majority of the assessment material, at this time, will be relevant to material mostly covered in school during both Years 9 and 10, and not during lock-down From material covered as part of the GCSE in School in the Autumn term of Year 9 4.1.1.1 Eukaryotes And Prokaryotes 4.1.1.2 Animal And Plant Cells 4.1.1.3 Cell Specialisation 4.1.1.4 Cell Differentiation 4.1.1.5 Microscopy From material covered in the Autumn term of Year 10 prior to this Year's lock down 4.5.3.1 The Human Endocrine System 4.5.1.1 Homeostasis 4.5.2.4 The Control Of Body Temperature 4.5.3.2 Control Of Blood Glucose 4.5.3.3 Maintaining Water And Nitrogen Balance 4.5.3.4 Hormones In Human Reproduction

	<p>4.5.3.5 Contraception</p> <p>4.5.3.6 Use Of Hormones To Treat Infertility</p> <p>4.5.3.7 Negative Feedback</p> <p>4.5.4.1 Plant Hormones; Control And Coordination</p> <p>4.5.4.2 Uses Of Plant Hormones</p> <p>4.4.1.1 Photosynthetic Reaction</p> <p>4.4.1.2 Rate Of Photosynthesis</p> <p>4.4.1.3 Uses Of Glucose From Photosynthesis</p> <p>Work covered in school since lock-down 2021</p> <p>4.7.2.2 How Materials Are Cycled</p> <p>4.7.2.3 Decomposition</p>
Chemistry	<p><u>Metals and reactivity</u></p> <ul style="list-style-type: none"> • Metallic bonding - Pg 92-96 • Alloys and corrosion - Pg285-289 • Reactivity of metals- reactions with acid and water and displacement. - Pg 158-161 • Metal oxides and redox and extraction of metals using carbon - Pg 162-165 <p><u>Practical experiments from this section</u> - Exercise book</p> <p>Electrolysis - Pg 166-172</p> <ul style="list-style-type: none"> - Molten compounds - Extraction of aluminium - Solutions <p><u>Calculations in chemistry</u></p> <p>Topics 3a and 3c only - Pg 110-129 and pg 138-146</p> <p><u>Useful resources</u></p> <p><i>youtube channels</i></p> <ol style="list-style-type: none"> 1) <i>freesciencelessons</i> 2) <i>cognito</i> 3) <i>fuseschool</i> <p><i>websites</i></p> <ol style="list-style-type: none"> 1) <i>bbc bitesize</i> 2) <i>freesciencelessons notes</i> <p><i>CGP books- revision guide and workbook</i></p> <p><i>SAM learning and Kerboodle have a range of practice questions for you to complete as part of your revision</i></p> <p><i>You will need a scientific calculator, ruler, pen, pencil and rubber.</i></p>
Physics	<p><i>The list below covers all the topics which will have been covered in Y10. Remember that questions can be set on the practical activities and that all formulae must be memorised (unless otherwise noted).</i></p> <p><i>The numbers starting "4..." refer to the AQA Specification</i></p> <p>4.1.1 - 4.13 Energy Topic</p> <p>4.3.2 Specific Heat Capacity</p> <p>4.3.2 Specific Latent Heat</p> <p>5.5.2 Work Done</p> <p>5.5.3 Forces and Elasticity</p> <p>4.5.1 Gravity (Weight)</p>

	<p><u>Energy Stores and Systems - Types of energy</u></p> <p>Work done - $W = Fs$ (s=distance) - from section 4.5 Forces</p> <p>Energy Stores and Energy Transfers - transfer of energy from one form into another when work is done</p> <p>Principle of Conservation of Energy - Energy cannot be created or destroyed only transferred from one form into another</p> <p>Heat Dissipation - Convection, conduction and infra-red radiation</p> <p>Insulation - How trapped air and choice of material determines how well an insulator works</p> <p>PRACTICAL ACTIVITY 2 Insulating Beakers</p> <p>Efficiency - efficiency = useful energy out / total energy in</p> <p>Efficiency (%) - efficiency = $100 \times$ useful energy out / total energy in</p> <p>Kinetic and Potential Energy - $E_k = \frac{1}{2} mv^2$</p> <p>Weight Mass and Gravity - $E_p = mgh$ - from section 4.5 Gravity - $w = mg$</p> <p>Hooke's Law and energy stored in stretched spring - $F = ke$ - from section 5.5 Forces and Elasticity</p> <p>Energy stored in a stretched spring - $E_e = \frac{1}{2} ke^2$ - this is supplied on the data sheet</p> <p>PRACTICAL ACTIVITY 6 Investigating springs</p> <p>Power - $P = E/t$</p> <p>Specific Heat capacity - $\Delta E = mc\Delta\theta$ - this is supplied on the data sheet</p> <p>PRACTICAL ACTIVITY 1 Specific Heat Capacity - Calculation the specific heat capacity of a material</p> <p>Specific Latent Heat - $E = mL$ - this is supplied on the data sheet</p> <p><u>Energy Resources</u></p> <p>"Energy Foresight" activities - SAM Learning has a dozen video clips, plus related activities</p> <p>4.4 Atomic structure</p> <p>4.4.1.1 The structure of an atom</p> <p>4.4.1.2 Mass number, atomic number and isotopes - A = mass number, Z = proton number</p> <p>4.4.1.3 The development of the model of the atom - This overlaps with Chemistry and is a prime topic area for questions that test "How Science Works"</p> <p>4.4.2 Atoms and nuclear radiation</p> <p>4.4.2.1 Radioactive decay and nuclear radiation</p> <p>4.4.2.2 Nuclear equations</p> <p>4.4.2.3 Half-lives and the random nature of radioactive decay</p> <p>4.4.2.4 Radioactive contamination</p> <p>4.4.3 Hazards and uses of radioactive emissions and of background radiation</p> <p>4.4.3.1 Background radiation</p> <p>4.4.3.2 Different half-lives of radioactive isotopes</p> <p>4.4.3.3 Uses of nuclear radiation</p> <p>4.4.4.1 Nuclear fission - Both fission and fusion derive their energy from Einstein's</p> <p>4.4.4.2 Nuclear fusion - mass-energy equation: $E = mc^2$</p>
<p>Religious Education</p>	<p><u>Buddhist beliefs and practices</u></p> <p>Life of Buddha</p> <p>Three Marks of existence</p> <p>Four Noble Truths</p> <p>Mahayana and Theravada</p> <p>Pure Land Buddhism</p>

	<p>Dependent arising</p> <p>Temples Puja Meditation Wesak Ceremonies associated with death and dying</p>
Computer Science	Primary and secondary storage, network security. Algorithms, logic gates, images and sound.
Drama	Summer examination will be a practical examination - a devised group piece with a written devising log
DT	Please see teacher
Food & Nutrition	A past paper and will focus on macro and micro nutrients and their functional and nutritional properties.
French	<p>Unit 1 Family, friends and relationships</p> <p>Unit 2: New technology</p> <p>Unit 3: Leisure activities</p> <p>Unit 4: Customs and festivals</p> <p>Unit 5: Home and local area</p> <p>Unit 6: Social issues</p> <p>Unit 7: Global issues</p>
German	<p>Unit 1 Family, friends and relationships</p> <p>Unit 2: New technology</p> <p>Unit 3: Leisure activities</p> <p>Unit 4: Customs and festivals</p> <p>Unit 5: Home and local area</p> <p>Unit 6: Social issues</p> <p>Unit 7: Global issues</p>
Geography	Rivers
History	USA 1920-73
Music	One Long Answer Question on the Set Works studied to date (45min).
PE	<ol style="list-style-type: none"> 1. Skeletal System 2. Muscular System 3. Movement Analysis (movements, levers, planes, axis) 4. Cardiovascular System 5. Respiratory System 6. Effects of Exercise (short and long-term) 7. Components of Fitness (inc. tests) 8. Principles of Training 9. Injury Prevention (inc. warm-up and cool down)

No exams in art