



# KS5 Curriculum Plans

Haberdashers' Aske's Crayford Academy

2015-16

## KS5 Curriculum Plan – Art

| Curriculum Content                                     | Assessment   | Year 12   | Year 13   |
|--|--|---|---|
| <b>ART:<br/>THE BUTCHER'S SHOP<br/>ARCHIVE</b>         | Body of work/ sketchbooks/ Final outcomes / 2 day Mock exam at end of year 12<br><br>Personal Portfolio (60%)<br>Externally Set Assignment (40%) | Personal Portfolio /<br>Externally set assignment | Special Project (3000 words)<br>Externally Set Assignment |
| <b>PHOTOGRAPHY:<br/>THE BUTCHER'S SHOP<br/>ARCHIVE</b> | Body of work/ sketchbooks/ Final outcomes / 2 day Mock exam at end of year 12<br><br>Personal Portfolio (60%)<br>Externally Set Assignment (40%) | Personal Portfolio /<br>Externally Set Assignment | Special Project (3000 words)<br>Externally Set Assignment |

## KS5 Curriculum Plan – Computing

| Curriculum Content  | Assessment   | Year 12   | Year 13  |
|---|--|---|--|
| <p><b>Year 12 – AS Level</b></p> <p>Fundamentals of programming<br/>           Fundamentals of data structures<br/>           Systematic approach to problem solving<br/>           Theory of computation<br/>           Fundamentals of data representation<br/>           Fundamentals of computer systems<br/>           Fundamentals of computer organisation and architecture<br/>           Consequences of uses of computing</p>   | <p>Programming tasks and termly Mock exams</p>   | <p><b>Term 1 and 2:</b><br/>           Fundamentals of programming<br/>           Fundamentals of data structures<br/>           Systematic approach to problem solving</p> <p><b>Term 3 and 4</b><br/>           Theory of computation<br/>           Fundamentals of data representation</p> <p><b>Term 5 and 6:</b><br/>           Fundamentals of computer organisation and architecture<br/>           Consequences of uses of computing</p> |  |
| <p><b>Year 13 A Level</b></p> <p>Fundamentals of communication and networking<br/>           Fundamentals of programming<br/>           Fundamentals of data structures<br/>           Fundamentals of algorithms<br/>           Theory of computation<br/>           Fundamentals of data representation<br/>           Fundamentals of computer systems<br/>           Fundamentals of computer organisation and architecture<br/>           Consequences of uses of computing<br/>           Fundamentals of databases<br/>           Big Data<br/>           Fundamentals of functional programming</p> <p><b>Non-exam assessment – the computing practical project</b></p> | <p>Programming tasks and termly Mock exams</p> <p>Non-exam assessment – the computing practical project (20% of A Level)</p> |   | <p><b>Term 1 and 2:</b><br/>           Fundamentals of communication and networking<br/>           Fundamentals of programming<br/>           Fundamentals of data structures</p> <p><b>Term 3 and 4</b><br/>           Fundamentals of algorithms<br/>           Theory of computation<br/>           Fundamentals of data representation<br/>           Fundamentals of computer systems</p> <p><b>Term 5 and 6:</b><br/>           Fundamentals of computer organisation and architecture<br/>           Consequences of uses of computing<br/>           Fundamentals of databases<br/>           Big Data<br/>           Fundamentals of functional programming</p> |

## KS5 Curriculum Plan – Drama

| Curriculum Content  | Assessment  | Year 12                               |
|---|---|---------------------------------------|
| <b>Set text exploration</b>   | Supporting notes in preparation for examination<br>Past papers<br>Practice essays | A Doll's House<br>Antigone            |
| <b>Practical workshops</b><br><b>Presentation of an extract of a play</b> | Supporting notes<br>Performance recorded and assessed                             | Practitioners & approaches to theatre |
| <b>Writing reviews of live theatre</b>                                    | Supporting notes<br>Preparation for examination<br>Past papers<br>Practice essays | Reviews of 2 plays in Oct & Nov       |

## KS5 Curriculum Plan – History

| Curriculum Content   | Assessment   | Year 12  | Year 13  |
|--|--|--|--|
| <p><b>Terms 1-4</b></p> <p><b>Year 12</b><br/>-Paper 1: In Search of the American Dream: USA 1917-1996<br/>- Paper 2: South Africa, 1948-1994</p> <p><b>Year 13</b><br/>-Coursework<br/>-Paper 3: Rebellion and disorder under the Tudors, 1485-1603</p>   | <p>Year 12 –<br/>Paper 1 and 2 practise essay questions</p> <p>Year 13 –<br/>Paper 1, 2, 3 and coursework (Summer 2017)</p> <p><b>Assessment breakdown:</b><br/>-Paper 1 (30%, 2 hrs 15 mins, 60 marks) In Search of the American Dream: USA 1917-1996<br/>-Paper 2 (20%, 1hr 30 mins, 40 marks) South Africa, 1948-1994<br/>-Paper 3 (30%, 2 hrs 15 mins, 60 marks) Rebellion and disorder under the Tudors, 1485-1603<br/>-Coursework (20%, question set by centre, internally assessed)</p> | <p>-Paper 1: In Search of the American Dream: USA 1917-1996<br/>- Paper 2: South Africa, 1948-1994</p> | <p>-Coursework<br/>-Paper 3: Rebellion and disorder under the Tudors, 1485-1603</p>  |
| <p><b>Term 5</b></p> <p><b>Year 12</b><br/>-Paper 1: In Search of the American Dream: USA 1917-1996<br/>- Paper 2: South Africa, 1948-1994</p> <p><b>Year 13</b><br/>Paper 1, 2 and 3 revision and Coursework moderation</p> <p><b>Term 6</b></p> <p><b>Year 12</b><br/>Start teaching paper 3 and coursework</p> <p><b>Year 13</b><br/>Examination period</p> | <p>Year 12–<br/>Paper 1 and 2 mock</p> <p>Year 13 –<br/>Paper 3 mock</p>   | <p>-Paper 1: In Search of the American Dream: USA 1917-1996<br/>- Paper 2: South Africa, 1948-1994</p> | <p>Revision<br/>-Paper 1: In Search of the American Dream: USA 1917-1996<br/>- Paper 2: South Africa, 1948-1994<br/>-Paper 3: Rebellion and disorder under the Tudors, 1485-1603</p> |

## KS5 Curriculum Plan – MFL Spanish

| Curriculum Content   | Assessment   | Year 12   |
|--|--|---|
| <p><b>Term 1: MEDIA</b></p> <p>Television -</p> <ul style="list-style-type: none"> <li>• TV viewing habits</li> <li>• Range of programmes, eg their appeal and popularity</li> <li>• Range of channels including satellite and internet</li> <li>• Benefits and dangers of watching TV</li> </ul> <p>Advertising-</p> <ul style="list-style-type: none"> <li>• Purposes of advertising</li> <li>• Advertising techniques</li> <li>• Curbs on advertising, eg tobacco, alcohol</li> <li>• Benefits and drawbacks of advertising</li> </ul> <p>Communication technology -</p> <ul style="list-style-type: none"> <li>• Popularity of mobile phones, MP3 players, etc</li> <li>• Benefits and dangers of mobile phones, MP3 players, etc</li> <li>• Internet - its current and potential usage</li> <li>• Benefits and dangers of the internet</li> </ul> | <p>Weekly vocabulary tests</p> <p>One essay</p> <p>End of unit exam on topic of media. (reading/listening/writing)</p>           | <p>Weekly vocabulary tests.</p> <p>W/B 28<sup>th</sup> – 2<sup>nd</sup> October 2015:</p> <p><b>Essay:</b></p> <p>¿la televisión es beneficiosa o es un desastre?</p> <p>W/B 12<sup>th</sup> – 16<sup>th</sup> October 2015</p> <p>Kerboodle test on LOS MEDIOS including essay question (open book)</p>  |
| <p><b>Term 2: POPULAR CULTURE</b></p> <p>Cinema –</p> <ul style="list-style-type: none"> <li>• Types of film, changing trends</li> <li>• The place of cinema in popular culture</li> <li>• A good film I have seen</li> <li>• Cinema versus alternative ways of viewing films</li> </ul> <p>Music –</p> <ul style="list-style-type: none"> <li>• Types of music, changing trends</li> <li>• The place of music in popular culture</li> <li>• Music I like</li> <li>• How music defines personal identity</li> </ul> <p>Fashion/trends -</p>  | <p>Weekly vocabulary tests</p> <p>One essay</p> <p>End of unit exam on topic of popular culture. (reading/listening/writing)</p> | <p>Weekly vocabulary tests.</p> <p>W/B 30<sup>st</sup>-4<sup>th</sup> December 2015</p> <p>Essay</p> <p>Con el uso de ejemplos, explica tu opinión sobre la calidad de los artistas y su música hoy en día.</p> <p>W/B 14<sup>th</sup>-18<sup>th</sup> December 2015</p> <p>Kerboodle test on LA CULTURA DE TODOS LOS DIAS including essay question</p> |

|  |   |   |
|--|---|---|
| <ul style="list-style-type: none"> <li>• How we can alter our image</li> <li>• Does how we look define who we are?</li> <li>• Lifestyle and leisure activities</li> <li>• The cult of the celebrity</li> </ul>   |   |   |
| <p><b>Term 3: HEALTHY LIVING/LIFESTYLE</b></p> <p>Sport/exercise -</p> <ul style="list-style-type: none"> <li>• Traditional sports versus 'fun' sports</li> <li>• Reasons for taking part in sport / physical exercise</li> <li>• Factors influencing participation in sport / physical</li> </ul> <p>Exercise</p> <ul style="list-style-type: none"> <li>• Links between physical exercise and health</li> </ul> <p>Health and well-being -</p> <ul style="list-style-type: none"> <li>• Alcohol, tobacco, other drugs</li> <li>• Diet, including eating disorders</li> <li>• The 'work/life balance'</li> <li>• Risks to health through accidents</li> </ul> <p>Holidays -</p> <ul style="list-style-type: none"> <li>• Types of holiday and holiday activities</li> <li>• The impact of tourism on holiday destinations</li> <li>• Purposes and benefits of holidays</li> <li>• Changing attitudes to holidays</li> </ul> | <p>Trial exam (TBC)</p> <p>Weekly vocabulary tests</p> <p>One essay</p> <p>End of unit exam on topic of healthy lifestyles. (reading/listening/writing)</p> | <p>Weekly vocabulary tests.</p> <p>Trial exam (TBC)</p> <p>W/B 25<sup>th</sup> – 29<sup>h</sup> January 2016</p> <p>¿Para qué sirve gastar dinero haciéndose miembro de un club de deporte?</p> <p>W/B: 8<sup>th</sup> – 12<sup>th</sup> February 2016</p> <p>Kerboodle test on LA VIDA SANA including essay question</p> |
| <p><b>Term 4: FAMILY/RELATIONSHIPS</b></p> <p>Relationships within the family -</p> <ul style="list-style-type: none"> <li>• Role of parents and importance of good parenting</li> <li>• Attitudes of young people towards other family members</li> <li>• Conflict between young people and other family members</li> <li>• Changing models of family and parenting</li> </ul> <p>Friendships -</p> <ul style="list-style-type: none"> <li>• Characteristics and roles of friends</li> <li>• Conflicts with friends</li> <li>• Importance of friends</li> <li>• Friendship versus love</li> </ul>   | <p>Weekly vocabulary tests</p> <p>Mock speaking examination</p> <p>End of unit exam on topic of family.</p> <p>Full past paper</p>                          | <p>Weekly vocabulary tests.</p> <p>W/B 29<sup>th</sup>-4<sup>th</sup> March 2016</p> <p>En tu opinión, ¿Qué tipos de problemas existen en las familias hoy? ¿Hay soluciones?</p> <p>21<sup>st</sup>-25<sup>th</sup> March 2016</p> <p>Full past paper in lesson / speaking mock in speaking lesson.</p>                   |

|  |  |  |
|--|--|--|
| <p>Marriage/partnerships -</p> <ul style="list-style-type: none"> <li>• Changing attitudes towards marriage or cohabitation</li> <li>• Separation and divorce</li> <li>• Staying single: benefits and drawbacks</li> <li>• Changing roles within the home</li> </ul> |  |  |
| <p><b>Term 5:</b><br/>Revision of all course content: of media, popular culture, healthy living and family.</p>  | <p>Unit 2 Speaking assessment to take place, date TBC by exam board.</p> <p>Unit 1 listening/reading/writing exam (2 hours) date TBC by exam board</p> | <p>25<sup>th</sup> April – 29<sup>th</sup> April 2016</p> <p>Timed essay</p> <p>2nd-6<sup>th</sup> May 2016</p> <p>Mock paper</p> <p>ACTUAL EXAM</p> |
| <p><u>Term 6:</u></p> <p>Cultural project on Spanish film and literature as preparation for A2 course</p>  | <p>Presentation based – oral and content based assessment</p>  | <p><i>Cultural speaking assessment.</i></p>  |



## KS5 Curriculum Plan – Science (Biology)

| Curriculum Content  | Core practical   | Assessment        | Teaching time (doubles) | Teacher 1 (4 lessons) DOW   | Teacher 2 (2 lessons) LIH |
|---|--|-------------------|-------------------------|-----------------------------|---------------------------|
| <b>Topic 1: Biological Molecules</b><br>1.1 Carbohydrates<br>1.2 Lipids<br>1.3 Proteins<br>1.4 DNA and Protein synthesis<br>1.5 Enzymes<br>1.6 Inorganic ions<br>1.7 Water  | 1.5 Investigate a factor affecting the initial rate of an enzyme controlled reaction   | End of topic test | 14 lessons              | Term 1 (may go into Term 2) |                           |
| <b>Topic 2: Cells, Viruses and Reproduction of living things</b><br>2.1 Eukaryotic and prokaryotic structure and function<br>2.2 Viruses<br>2.3 Eukaryotic cell cycle and division<br>2.4 Sexual reproduction in mammals<br>2.5 Sexual reproduction in plants | 2.1 Use of the light microscope, including simple stage and eyepiece micrometres and drawing small numbers of cells from a specialised tissue.<br><br>2.3 Make a temporary squash preparation of a root tip to show stages of mitosis in the meristem under the light microscope.<br><br>2.5 Investigate the effect of sucrose concentrations on pollen tube growth. | End of topic test | 7 lessons               |                             | Term 1 – Term 2           |
| <b>Topic 3: Classification and Biodiversity</b><br>3.1 Classification<br>3.2 Natural Selection<br>3.3 Biodiversity  |  | End of topic test |                         |                             | Term 2 –Term 3            |
| <b>Topic 4: Exchange and transport</b><br>4.1 Surface area to volume ratio  | 4.2 Investigate the effect of temperature on beetroot membrane permeability.   | End of topic test |                         | Term 2-Term 4               |                           |

|  |  |                   |  |        |  |
|--|--|-------------------|--|--------|--|
| <p>4.2 Cell transport and mechanisms</p> <p>4.3 Gas Exchange</p> <p>4.4 Circulation</p> <p>4.5 Transport of gases in the blood</p> <p>4.6 Transfer of materials between the circulatory system and cells</p>   | <p>4.2 Determine the water potential of a plant tissue.</p> <p>4.3 Dissect an insect to show the structure of the gas exchange system.</p> <p>4.2 Investigate factors affecting water uptake by plant shoots using a photometer.</p>   |                   |  |        |  |
| <p><b>Topic 5: Energy for Biological processes</b></p> <p>5.1 Aerobic respiration</p> <p>5.2 Glycolysis</p> <p>5.3 Link Reaction and Krebs Cycle</p> <p>5.4 Oxidative phosphorylation</p> <p>5.5 Anaerobic respiration</p> <p>5.6 Photosynthetic pigments</p> <p>5.7 Photosynthesis</p>                      | <p>5.1 Investigate factors affecting the rate of respiration using a respirometer.</p> <p>5.6 Investigate the effects of different wavelengths of light on the rate of photosynthesis.</p> <p>5.6 Investigate the presence of different chloroplast pigments using chromatography.</p> | End of topic test |  |        |  |
| <p><b>Topic 6: Microbiology and Pathogens</b></p> <p>6.1 Microbial techniques</p> <p>6.2 Bacteria as pathogens</p> <p>6.3 Action of antibiotics</p> <p>6.4 Antibiotic resistance</p> <p>6.5 Other pathogenic agents</p> <p>6.6 Problems of controlling endemic diseases</p> <p>6.7 Response to infection</p> | <p>6.1 Investigate the rate of growth of bacteria in liquid culture.</p> <p>6.1 Isolate individual species from a mixed culture of bacteria using streak plating.</p>  | End of topic test |  |        |  |
| <p><b>Topic 7: Modern Genetics</b></p> <p>7.1 Using gene sequencing</p> <p>7.2 Factors affecting gene expression</p> <p>7.3 Stem cells</p> <p>7.4 Gene technology</p>  |  | End of topic test |  | Term 2 |  |

|  |   |                   |  |  |  |
|--|---|-------------------|--|--|--|
| <p><b>Topic 8: Origins of Genetic Variation</b><br/>       8.1 Origins of genetic variation<br/>       8.2 Transfer of genetic information<br/>       8.3 Gene pools</p>   |   | End of topic test |  |  |  |
| <p><b>Topic 9: Control systems</b><br/>       9.1 Homeostasis<br/>       9.2 Chemical control in mammals<br/>       9.3 Chemical control in plants<br/>       9.4 Structure and function of the mammalian nervous system<br/>       9.5 Nervous transmission<br/>       9.6 Effects of drugs on the nervous system<br/>       9.7 Detection of light by mammals<br/>       9.8 Control of heart rate in mammals<br/>       9.9 Osmoregulation and temperature regulation</p> | 9.3 Investigate the effect of gibberellin on the production of amylase in germinating cereals using | End of topic test |  |  |  |
| <p><b>Topic 10: Ecosystems</b><br/>       10.1 The nature of ecosystems<br/>       10.2 Energy transfer through ecosystems<br/>       10.3 Changes in ecosystems<br/>       10.4 Human effects on ecosystems</p>   |   | End of topic test |  |  |  |

## KS5 Curriculum Plan – Science (Chemistry)

| Curriculum Content   | Core practical  | Assessment  | Teaching time (doubles)  | Teacher 1 (4 lessons)   | Teacher 2 (2 lessons)   |
|--|---|---|--|---|---|
| <b>Module 1: Practical Skills in Chemistry</b><br>1.1.1 Planning<br>1.1.2 Implementing<br>1.1.3 Analysis<br>1.1.4 Evaluation   |   | End of topic test (At start of course after given as summer work)<br><br>2014 Controlled assessment tasks in term 6 | (15 lessons)<br>Embedded into other units plus 6 lessons for controlled assessment tasks | Throughout the course along with main content and core practicals<br><br>Term 6 | Throughout the course along with main content and core practicals<br><br>Term 6 |
| <b>Module 2.1: Foundations in chemistry – Atoms and reactions</b><br>2.1.1 Atomic structure and isotopes<br>2.1.2 Compounds formulae and equations<br>2.1.3 Amount of substance and the mole<br>2.1.4 Acids<br>2.1.5 Redox | 2.1.2 Calculating the formula of magnesium oxide (practical 1)<br><br>2.1.3 Finding the relative atomic mass of an unknown metal by gas collection (Practical 3)<br><br>2.1.4 Investigating the reactions of bases, alkalis and carbonates with acids (Practical 2)<br>2.1.4 Determination of water of crystallisation (optional)<br>2.1.4 Finding the relative molecular mass of washing soda by titration (Practical 4) | End of topic test (term 2 up to 2.13)   | 20 lessons   | Term 2 & 3  |   |

|   |   |  |            |            |               |
|---|---|--|------------|------------|---------------|
| <b>Module 2.2: Foundations in chemistry – Electrons, Bonding and structure</b><br>2.2.1 Electron Structure<br>2.2.2 Bonding and Structure                   |   |  | 12 lessons | Term 1     |               |
| <b>Module 3.1: Periodic table and energy – The periodic table</b><br>3.1.1 Periodicity<br>3.1.2 Group 2<br>3.1.3 The halogens<br>3.1.4 Qualitative analysis | 3.1.3 Investigating halogen displacement reactions (Practical 5)<br>3.1.3 Testing for halide ions (Practical 6)   |  | 12 lessons |            | Term 1 & 2    |
| <b>Module 3.2: Periodic table and energy – Physical chemistry</b><br>3.2.1 Enthalpy changes<br>3.2.2 Reaction Rates<br>3.2.3 Chemical equilibrium           | 3.2.1 Calculating the enthalpy change for the reaction between zinc and copper sulfate using a direct method (Practical 7)<br><br>3.2.2 The effect of temperature on rate of reaction (Practical 9)<br>3.2.2 The reaction between calcium carbonate and hydrochloric acid (Practical 8)<br><br>3.2.3 Investigating the qualitative effect of concentration on equilibrium (Practical 10)<br>3.2.3 Investigating the qualitative effect of temperature on equilibrium (Practical 11) |  | 18 lessons |            | Term 2, 3 & 4 |
| <b>Module 4.1: Core organic Chemistry – Basic concepts and hydrocarbons</b>   |   |  | 10 lessons | Term 3 & 4 |               |

|   |   |                       |                       |  |  |
|---|---|-----------------------|-----------------------|--|--|
| 4.1.1 Basic concepts of organic chemistry<br>4.1.2 Alkanes<br>4.1.3 Alkenes   |   |                       |                       |  |  |
| <b>Module 4.2: Core organic Chemistry – Alcohols, haloalkanes and analysis</b><br>4.2.1 Alcohols<br>4.2.2 Haloalkanes<br>4.2.3 Organic synthesis<br>4.2.4 Analytical techniques | 4.2.1 Eliminating water from cyclohexanol (Practical 12)<br>4.2.1 Oxidising ethanol to ethanoic acid (Practical 13)<br><br>4.2.2 Comparing the rates of hydrolysis of haloalkanes (Practical 14)<br>4.2.2 Making a haloalkanes (Practical 15) |                       | 14 lessons            | Term 4 & 5 (4.2.1 and 4.2.2 - 9 lessons) | Term 4 & 5 (4.2.3 and 4.2.4 – 5 lessons) |
| <b>Module 5.1: Physical chemistry and transition elements – Rates, equilibrium and pH</b><br>5.1.1 How fast?<br>5.1.2 How far?<br>5.1.3 Acids, bases and buffers                | A-Level Year 2<br>TBC   | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC                    | A-Level Year 2<br>TBC                    |
| <b>Module 5.2: Physical chemistry and transition elements – Energy</b><br>5.2.1 Lattice enthalpy<br>5.2.2 Enthalpy and Entropy<br>5.2.3 Redox and electrode potentials          | A-Level Year 2<br>TBC   | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC                    | A-Level Year 2<br>TBC                    |
| <b>Module 5.3: Physical chemistry and transition</b>  | A-Level Year 2<br>TBC   | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC                    | A-Level Year 2<br>TBC                    |

|   |                       |                       |                       |                       |                       |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>elements – Transition elements</b><br>5.3.1 Transition elements<br>5.3.2 Qualitative analysis  |                       |                       | TBC                   |                       |                       |
| <b>Module 6.1: Organic chemistry and analysis – Aromatic compounds, carbonyls and acids</b><br>6.1.1 Aromatic compounds<br>6.1.2 Carbonyl compounds<br>6.1.3 Carboxylic acids and esters  | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC |
| <b>Module 6.2: Organic chemistry and analysis – Nitrogen compounds, polymers and synthesis</b><br>6.2.1 Amines<br>6.2.2 Amino acids, amides and chirality<br>6.2.3 Polyesters and polyamides<br>6.2.4 Carbon-carbon bond formation<br>6.2.5 Organic synthesis | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC |
| <b>Module 6.3: Organic chemistry and analysis – Analysis</b><br>6.3.1 Chromatography and qualitative analysis<br>6.3.2 Spectroscopy   | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC | A-Level Year 2<br>TBC |

## KS5 Curriculum Plan – Science (Physics)

| Topic   | Core practical   | Assessment                                | Teaching Time (doubles) | Teacher 1 (4 periods a week)              | Teacher 2 (2 periods a week)     |
|---|--|---|-------------------------|---|----------------------------------|
| Topic 1: Working as a Physicist <ul style="list-style-type: none"> <li>• Units</li> <li>• Estimation</li> </ul>   |  |   | 6 lessons               | Week 1                                    | Week 1                           |
| Topic 2: Mechanics <ul style="list-style-type: none"> <li>• Motion</li> <li>• Energy</li> <li>• Momentum</li> </ul>   | 1: Acceleration of freely falling object   | End of topic test                         | 14 lessons              | Weeks 2 – 8<br>To half way through term 2 |                                  |
| T3: Electric Circuits <ul style="list-style-type: none"> <li>• Electrical Quantities</li> <li>• Complete Electrical Circuits</li> </ul>                                       | 2: Resistivity of material<br>3: E.m.f and internal resistance of cell                                     | End of topic test                         | 14 lessons              | Weeks 13 – 19<br>To end of term 3         |                                  |
| Topic 4: Materials <ul style="list-style-type: none"> <li>• Fluids</li> <li>• Solid Material Properties</li> </ul>  | 4: Viscosity of liquid<br>5: Young modulus of material   | End of topic test                         | 8 lessons               | Weeks 9 – 12<br>To end of term 2          |                                  |
| Topic 5: Waves and Particle Nature <ul style="list-style-type: none"> <li>• Basic Waves</li> <li>• Behaviour of Waves</li> <li>• Optics</li> <li>• Quantum Physics</li> </ul> | 6: Speed of sound in air<br>7: Behaviour of vibrating string<br>8: Wavelength of light (using diffraction) | Waves test<br>Optics test<br>Quantum test | 18 lessons              |   | Weeks 2 – 19<br>To end of term 3 |
| REVIEW OF AS UNITS (Topics 1-5)   |  | Unit 1 and 2 (AS) exams                   | 15 lessons              | Weeks 20-24<br>Term 4                     | Weeks 20-24<br>Term 4            |
| Topic 6: Further Mechanics  | 9: Force and momentum<br>10: Collisions  | End of topic test                         | 10 lessons              | Term 5                                    |                                  |
| Topic 7: Electric and Magnetic Fields   | 11: Potential difference across capacitors   | End of topic test                         | 16 lessons              | Term 5/6                                  |                                  |



|   |   |                         |            |                  |           |
|---|---|-------------------------|------------|------------------|-----------|
|   | 12: Calibrate thermistor                    |                         |            |                  |           |
| Topic 8: Nuclear and Particle Physics   |   | End of topic test       | 12 lessons | Term 1           |           |
| Topic 9: Thermodynamics   | 13: Specific latent heat<br>14: Boyle's Law | End of topic test       | 12 lessons |                  | Term 5+6  |
| Topic 10: Space   |   | End of topic test       | 6 Lessons  | Term 2 (3 weeks) |           |
| Topic 11: Nuclear Radiation   | 15: Gamma absorption                        | End of topic test       | 6 lessons  |                  | Term 1    |
| Topic 12: Gravitational Fields  |   | End of topic test       | 4 lessons  | Term 2           |           |
| Topic 13: Oscillations  | 16: Mass on a spring                        | End of topic test       | 7 lessons  |                  | Term 2    |
| REVIEW OF ALL UNITS<br><ul style="list-style-type: none"> <li>• Practice of synoptic unit questions</li> <li>• Skills review</li> <li>• Revision</li> </ul> |   | Unit 1,2 & 3 mock exams | --         | Terms 3+4        | Terms 3+4 |

## KS5 Curriculum Plan – Science (Psychology)

| Topic  | Assessment        | Teaching Time<br>(doubles)   |
|--|-------------------|------------------------------|
| <b>Year 12</b>   |                   |                              |
| <p>Topic 1: Research methods</p> <ul style="list-style-type: none"> <li>• Experimental methods, pilot studies and controlling variables</li> <li>• Experimental designs and types of experiment</li> <li>• Sampling and ethics</li> <li>• Observational techniques and design</li> <li>• Self-report techniques, design and correlations</li> <li>• Data analysis</li> <li>• Statistical testing</li> <li>• The role of peer review</li> <li>• Test</li> </ul> | End of topic test | 9 lessons<br><br>Weeks 1 - 3 |
| <p>Topic 2: Social Influence</p> <ul style="list-style-type: none"> <li>• Conformity</li> <li>• Research into conformity</li> <li>• Conformity to social roles</li> <li>• Obedience to authority</li> <li>• Resistance to social influence</li> <li>• Minority influence</li> <li>• Social change</li> <li>• Test</li> </ul>   | End of topic test | 8 lessons<br><br>Weeks 4 - 6 |
| <p>Topic 3: Memory</p> <ul style="list-style-type: none"> <li>• Coding, capacity and duration</li> <li>• The multi-store model</li> <li>• Long-term memory</li> <li>• The working memory model</li> <li>• Explanations for forgetting</li> <li>• Eye witness testimony</li> </ul>  | End of topic test | 8 lessons<br><br>Weeks 6 - 9 |

|   |                   |                                       |
|---|-------------------|---------------------------------------|
| <ul style="list-style-type: none"> <li>Improving eye witness testimony</li> <li>Test</li> </ul>   |                   |                                       |
| <p>Topic 4: Attachment</p> <ul style="list-style-type: none"> <li>Introduction and Schaffer stages of attachment</li> <li>Animal studies</li> <li>The learning theory</li> <li>Bowlby's theory</li> <li>Ainsworth's strange situation and cultural variations</li> <li>Maternal deprivation and Institutionalisation</li> <li>Influence of early attachment on later relationships</li> <li>Test</li> </ul> | End of topic test | <p>8 lessons</p> <p>Weeks 9 - 11</p>  |
| <p>Topic 5: Approaches in Psychology</p> <ul style="list-style-type: none"> <li>Origins of psychology</li> <li>The behavioural approach</li> <li>The social learning theory</li> <li>The cognitive approach</li> <li>The biological approach</li> <li>Test</li> </ul>   | End of topic test | <p>6 lessons</p> <p>Weeks 12 - 13</p> |
| <p>Topic 6: Biopsychology</p> <ul style="list-style-type: none"> <li>The nervous system and the endocrine system</li> <li>Neurons and synaptic transmission</li> <li>Test</li> </ul>  | End of topic test | <p>3 lessons</p> <p>Week 14</p>       |
| <p>Topic 7: Psychopathology</p> <ul style="list-style-type: none"> <li>Definitions of abnormality</li> <li>Phobias</li> <li>The behavioural approach to explaining and treating phobias</li> <li>Depression</li> <li>The cognitive approach to explaining and treating depression</li> <li>OCD</li> <li>The biological approach for explaining and treating OCD</li> <li>Test</li> </ul>                    | End of topic test | <p>8 lessons</p> <p>Weeks 15 - 17</p> |
| REVIEW OF ALL UNITS   | End of year test  |                                       |