**Assessment Rationale – Sciences**

Candidates at all levels in Biology, Human Biology, Chemistry and Physics will sit three papers. The results of these three papers will be combined and calculated as a percentage of the total marks to determine the final grade.

All dates are subject to pupils class columns as per assessment calendar, pupils should also be able to find this information in their google classrooms. There are roughly two weeks between each.

Each paper will include a mixture of knowledge from the unit and problem solving questions.

The assessments will be sat in pupils own classrooms unless alternative assessment arrangements exist for the pupil.

After each of the papers have been completed a sample will be cross-marked by teachers across the faculty and also by teachers at other schools in the authority.

Final grades will be awarded in line with the following boundaries across all levels:

70% - 100% = A

60% - 69% = B

50% - 59% = C

40% – 49% = D

0 - 40% = F

After analysis of how all of the candidates have performed in the paper we may alter the grade boundaries slightly to reflect the difficulties of the papers e.g. if all candidates get question 2a wrong, this may mean that the level of demand of the question was harder than anticipated so the grade boundaries would move down slightly.

The tables below show the topics covered in each paper, the total number of marks available in each paper and the time allocation that candidates will have to complete each paper.

**Biology**

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| --- | --- | --- | --- |
| Paper | N5 Biology | Higher Biology | Higher Human Biology |
| 1 | Life on Earth35 marks – 53 minutes  | Sustainability and Interdependence 41 marks – 62 minutes | Neurobiology + Immunology35 marks – 53 minutes |
| 2 | Multicellular Organisms37 marks – 56 minutes | DNA and The Genome 29 marks – 44 minutes |  Physiology + Health42 marks- 63 mins |
| 3 | Cell Biology 33 marks – 50 minutes  | Metabolism and Survival 50 marks – 75 minutes | Human Cells43 marks- 65 mins |

**Chemistry**

|  |  |  |  |
| --- | --- | --- | --- |
| Paper | N5 Chemistry | Higher Chemistry | Advanced Higher Chemistry |
| 1 |  Chemistry in Society38 marks = 57 minutes | Chemistry in Society 34 marks - 51 minutes |  Organic43 marks - 72 mins |
| 2 |  Nature's Chemistry22 marks = 33 minutes |  Chemical Changes and Structure40 marks = 60 minutes |  Physical & Inorganic37 marks 59 minutes |
| 3 | Chemical Changes and Structure40 marks = 60 minutes | Nature's Chemistry46 marks = 69 minutes | Researching Chemistry30 marks 49 minutes |

**Physics**

|  |  |  |
| --- | --- | --- |
| Paper  | N5 Physics | Higher Physics |
| 1 | Dynamics and Space44 marks - 50 minutes | Our Dynamic Universe53 marks  - 62 minutes |
| 2 | Electricity and PoM47 marks - 50 minutes | Particles and Waves64 marks - 74 minutes |
| 3 | Waves and Radiation44 marks - 50 minutes | Electricity38 marks - 44 minutes |