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| **KS5**  **Mathematics** | | **Mathematics Key Stage 5 Assessment Map** | |
| **Definition** | | **Formative**  **Formative Assessment** is defined within our assessment policy as the frequent interactive assessment of what students currently know and understand to identify learning needs and adjust teaching appropriately. | **Summative**  **Summative Assessments** are defined within our schemes of work to determine students’ knowledge and understanding, to test the achievement of learning outcomes at the end of a specified period of study. They are assessments used to determine progression, indicate levels of achievement and predicted grades. |
| **Intent** | | At Crompton House School, formative assessment is integral to everyday teaching. It has the needs of our students at its core (to build up confidence and reduce anxiety) and it is embedded into teaching activities within each lesson. Via the use of formative assessment approaches, low stakes testing and retrieval practice techniques, our aim is to be best prepared to help our students to embed and use knowledge fluently to improve long term knowledge retention, to meet all students’ needs through differentiation and adaptation of teaching, and to achieve a greater equity of student outcomes. | The aim of summative assessment at Crompton House School is to help us to know our students better, to assess their potential and improve performance. Our emphasis is on measuring and evaluating student outcome by finding out what students already know, understand and can do, and then using the outcomes from our summative assessments to influence how we teach, plan improvements and identify struggling students. Our aim is a hand in glove relationship that exists between learning objectives, assessments and teaching. |
| **Timescales** | **Annual Implementation and Impact** | Formative assessment at Crompton House School supports students’ progress towards learning of knowledge, concepts and skills by:   * consistently monitoring students' developing knowledge, understanding, and skill related to the topic at hand in order to know how to proceed with instruction in a way that maximizes the opportunity for student growth and success with key content * revisiting topics/concepts/skills throughout each year; this is a core focus of our teaching and homework policies; in applying low stakes testing, students gain a firmer grasp of knowledge so they can recall and apply this much later on * actively involving students in the process of teaching and learning * building students’ skills for peer- and self-assessment helping students to understand their own learning, and developing appropriate strategies for ‘learning to learn’   Our processes of effective formative assessment give teachers confidence in making judgement about the progress of their students. Our students, who are actively building their understanding of new concepts, who have developed a variety of strategies that enable them to place new ideas into a larger context, and who are learning to judge the quality of their own and their peer’s work against well-defined learning goals and criteria, are also developing skills that are invaluable for learning throughout their lives. The little and often approach reinforces good habits and changes attitudes towards learning. Via frequent retrieval practice and low stakes testing, students will become more and more aware of what they are remembering. | If our students are not rigorously assessed, we would have no way to track progress throughout the year and no way to identify problems in time to correct them. We are therefore committed to the implementation of well thought out and carefully written summative assessments, which are directly linked to departmental schemes of work and PLCS (personalised learning checklists) in order to allow for an effective analysis of student strengths and weaknesses and evaluation of student outcomes.  Our summative assessments will demonstrate results that reveal a degree of mastery and analysis of students’ progress towards intended goals.The rigour of questions on each assessment, specifically aligning these to what is taught, will define the rigour of Crompton House, as a school, and in doing so, will determine what our students will achieve. We are focused on creating an environment in which each student is expected to learn at high levels and our summative assessments are written to require a rigorous demonstration of learning. |
| **Interim Implementation**  **(Termly / Half Termly)** | Key strategies of effective formative assessment on **a termly / half termly basis** within KS5 Mathematics include:   * Topic tests at the end of each unit of work: available from the assessment section in the online Pearson text. * Trackers used for each topic test for gap analysis. Intervention classes make use of this data. All students invited to attend and for some attendance is compulsory. * Feedback sheets used for each topic test: students are given a gap analysis and suitable NOW task. * PLCs completed from end of topic tests. * Booklets are peer, teacher and self-assessed. * Student booklets have examination style questions to ensure students are aware of the rigour of the examination. * Regular homework includes examination style questions, mymaths tasks and maths genie topic assessments. | **Summative assessments** are directly linked to PLCs and used as a means to assess the security and depth of understanding a student has attained against the key course content we have defined for them. They are consistent with departmental schemes of work and PLCs. They test the learning outcomes accurately and fairly and are capable of effectively differentiating levels of student achievement where required. Summative assessments are teacher assessed and moderated.  **Year 12:**  **Deadline for Summative Assessment 1: W/C 19th October**  Teacher 1: Pure Mathematics Chapters 1-3  Teacher2: Statistics Chapters 1-4  **Deadline for Summative Assessment 2: W/C 14th December**  Teacher 1: Pure mathematics Chapters 1-4 and 9-10  Teacher 2: Statistics Chapters 1-7 and Pure Chapters 5-6  **Deadline for Summative Assessment 3: W/C 22nd February**  Teacher 1: Pure mathematics Chapters 1-4 and 9-11  Teacher 2: Statistics Chapters 1-7 and Pure Chapters 5-8  **Deadline for Summative Assessment 4: W/C 19th April**  Teacher 1: Pure Chapters 1-4 and 9-11 and Mechanics Chapters 8-9  Teacher 2: Statistics Chapters 1-7 and Pure Chapters 5-8 and 12-13  **End of Year Exams W/C 21st June**  *All students to sit the complete Edexcel AS Mathematics papers from May/June of the current year (grade boundaries used from previous years)*  *Paper1: Pure mathematics (2 hours) 100 marks 62.5%*  *Paper 2: Statistics and Mechanics (1 hour 15 mins) 60 marks 37.5%*  **Year 13:**  **End Year 12 Exams: W/C 12th October**  *Full AS secure mock paper provided by examination board (grade boundaries used from previous years)*  *Paper1: Pure mathematics (2 hours) 100 marks 62.5%*  *Paper 2: Statistics and Mechanics (1 hour 15 mins) 60 marks 37.5%*  **Deadline for Summative Assessment 2: W/C 14th December**  Pure Chapters 1-9  **Mock Exams: W/C 1st February**  **A Level mathematics papers created using the previous years papers: some questions omitted where full coverage not yet complete:** *(grade boundaries used from previous years)*  *Paper 1 Pure Mathematics (2 hours) 100 marks 62.5 %*  *Paper 2 Statistics and mechanics (1 hour 15 mins) 37.5%*  **Deadline for Summative Assessment 4: W/C 29th March: created from questions not yet used in the previous round of testing to ensure full coverage of specification.**  *Paper 1 Pure Mathematics (2 hours) 100 marks 62.5 %*  *Paper 2 Statistics and mechanics (1 hour 15 mins) 37.5%* |
| **Weekly Implementation** | Key strategies of effective formative assessment in action **in hourly lessons** within KS5 Mathematics include:   * Mixed starters to consolidate and retrieve previously learnt skills. * Examination questions used in lessons to develop examination technique with reference to reasoning and problem solving. * Use of mini white boards to aid AFL during all lessons. * Susan Wall activities and Tarsia puzzles to engage and challenge. * Challenging questions to develop independence and resilience. * Routine questions to develop fluency and consolidate key skills. * Students will view mark schemes regularly. * Model answers will be used to support learning. * Collaboration and discussion to develop reasoning skills. * Focussed questioning to develop deep understanding. * Questioning used to challenge students to see links between topics. * Effective questioning for retrieval and connections. |  |