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| **KS5** |  **Computer Science KS5 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 Computer Science include:Theory 80%NEA 20%**Year 12****H446/01 Computer Systems**Unit 1 Components of a computerUnit 2 Systems softwareUnit 3 Software developmentUnit 4 Exchanging dataUnit 5 Networks**H446/02 Algorithms and programming** Unit 11 Programming techniquesUnit 12 Algorithms NEA programming project **Year 13****H446/01 Computer Systems**Unit 6 Data typesUnit 8 Boolean algebraUnit 9 Legal and cultural issues**H446/02 Algorithms and programming** Unit 10 Computational thinking Unit 7 Data structuresNEA programming project  | **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 OctoberDeadline for Summative Assessment 2: W/C 14th DecemberDeadline for Summative Assessment 3: W/C 22nd FebruaryDeadline for Summative Assessment 4: W/C 19th AprilEnd of Year Exams W/C 21st June**Year 13:**End Year 12 Exams: W/C 12th OctoberDeadline for Summative Assessment 2: W/C 14th DecemberMock Exams: W/C 1st FebruaryDeadline for Summative Assessment 4: W/C 29th March**NEA Programming Project (Component 03 Repository) – 20% of overall grade. NEA exam board submission date 15 May** **Submission of work:**NEA project deadlines for check-up to ensure student are continually working on projects: - January 2020April 2020July 2020November 2021February 2021April 2021  |
| **Weekly Implementation** | Key strategies of effective formative assessment in action **in hourly lessons** within KS4 Computer Science include:* Questioning to assess prior knowledge and understanding, challenge new learning, and promote links between topics and other subjects (usually mathematics).
* Programming tasks completing programming challenges and exam question pseudocode
* Peer and self- assessment of worksheets and homework sheets.
* Teacher assessment of end of unit assessment and exam questions used in lessons
* Doddle presentations for knowledge recap and quizzes for PLC
* Revision guide for each topic area
* Revision booklets for each topic area
* PLC tracker to self-assess student’s confidence are in each topic sub area
* Teaching student how to interpret mark schemes
* Model answers
* Learning objectives, keywords, new vocabulary, recaps at start of lessons, focused questioning, mini whiteboards, discussions, plenaries
* Regular homework to reinforce learning and promote independent learning

**NEA Programming Project (Component 03 Repository) – 20% of overall grade** 03 Assessment Objectives to be completed: -2.2 Analysis (10 marks)3.1 Design (15 marks)3.2 Developing the coded solution (25 marks)Testing and inform development (10 marks)3.3 Evaluation (20 marks)Evaluation of solution (15 marks)**Learning talks:**Regular learning talks with students about NEA, each programming project is different and based on any subject matter the student wants. Student can program the project in any language, student needs to demonstrate program is working in accordance to their success criteria.**Project guidance:**Only once student has made a choice and started to program (to ensure students programming skills are realistic) can the analysis and designs be drawn up. There will be different versions of the design showing different prototypes as the solution is being developed. The project evolution must to evidenced, to gain the highest grade. A front-end GUI - graphic user interface and backend database are required to access A/A\* grade boundaries. The evaluation can only take place once programming project is programmed to the best of the student’s ability. |  |