

## Subject curriculum intent-Mathematics

### Why is your curriculum shaped the way it is?

- The Mathematics curriculum at Croft Community School is planned in a way that develops knowledge and understanding of number and geometry with topics like algebra and statistics introduced later. The Mathematics curriculum at Key Stage 1 and 2 reflects some of the key personal goals we want our pupils to succeed in, to enquire, to develop their resilience, communication, cooperation and adaptability. Pupils learn to perform simple addition tasks, counting numbers and look at simple multiplication that is modelled by teachers. Students are supported in their numeracy work with differing scaffolding including calculators, number squares, multiplication squares, cubes etc. There are different expected outcomes for students depending upon the level that they are working at. The curriculum at Key Stage Three builds on these key skills. It has been created with the needs of our students in mind but still mirrors that of the National Curriculum, thus providing our students with skills and experiences that are beneficial across other areas of their studies. Students start to look at more complex areas of Mathematics including the basics of Algebra, for example - Collecting Like Terms. The curriculum is planned to act like a 'helter-skelter' starting with basics and moving onto other areas before coming back and building on previous knowledge. The mathematics that students learn is designed to be broad and support them into adulthood.

### What values have guided your decisions about the curriculum you have in place? How does your curriculum reflect your school's context?

- The school values are embedded within the teaching of Mathematics and Numeracy, the teaching of a positive mindset occurs frequently lessons where pupils are encouraged to develop an attitude where they can complete set tasks independently.
- Students are frequently challenged within Mathematics lessons where expectations are high, all staff have high expectations of each student and want them to achieve to the best of their respective ability. Students are set tasks that encourage independence and resilience and that can extend their learning. Students are provided with learning outcomes in each lesson and expectations of the progress they should make during each topic related to the progression outcomes. Students are set outcomes they need to achieve and these are recorded accordingly using booklets at the front of their exercise books (KS3&4)
- Pupils are supported to develop emotional and social resilience, they are encouraged not to give up if they find a task too challenging and staff support this by finding alternative methods to encourage students including the use of technology. Pupils are encouraged to take part in lessons, to not be afraid to get an answer incorrect, to persevere with pronunciation and with key spellings, to work independently.
- Positive behaviour and social skills which will prepare pupils for adulthood and enable them to progress confidently to the next stage of their lives are always

prevalent in the teaching of Mathematics. During discussion lessons students are encouraged to follow social conventions related to turn-taking, being respectful of others opinions and views as well as using thinking time to help them articulate their ideas.

- The teaching of Mathematics encourages pupils to see the uses and areas of Numeracy that occur within and without school, within other subjects and other subjects within Mathematics. Students are encouraged to see how different topics are useful to them and what they want to do in their lives.

### What are the objectives for your curriculum? What do you want pupils to be able to know and do by the time they leave?

Through our Mathematics curriculum we aim to enable pupils to develop their self-confidence in use of operations and symbols, writing differing sums from worded problems and developing calculating techniques and appreciation of numerous methods to solve a problem. We want students to learn Numeracy through interesting contexts, be resilient in attacking a question and appreciate the use of Mathematics in solving different problems.

- We want students to be able to use the vocabulary and keywords that they have learned in a variety of different contexts.
- By the time students leave we want them to be able to understand how to attempt a worded problem, to solve with increasing confidence, keep improving their Numeracy skills and extending their knowledge.

### How does your curriculum plan set out the sequence and structure of how it's going to be implemented?

Mathematics is taught following a sequence of lessons three or four times a week which begins with the introduction and big picture at the start of each topic unit and then work to develop and extend this. Long term plans have been created with an overview of each topic. There are also medium term plans created for each half term topic of work. Students are asked to recall and use previously learned knowledge and skills and apply these in different aspects of the subject. Common themes run throughout the curriculum, that of developing problem solving skills, reading and comprehension, use of prior knowledge. Students are encouraged to develop these skills throughout Mathematics and at a level that is appropriate to that which they are working. By the end of the programme of study students will have developed their skills accordingly and this is recorded using the school assessment system.

### How is your curriculum differentiated to meet the diverse needs of pupils at Croft?

- Curriculum is differentiated across all the lessons within the subject area. The Progression assessment system is used across school to ensure that students are baselined correctly and their progress recorded against key assessment criteria. Tasks to develop skills and to meet the requirements of the course content are provided for students and lessons are differentiated accordingly across different

pathways that students can follow. These relate to the Progression steps of Number, Geometry, Statistics etc. The curriculum and programmes of study are differentiated across these key themes. Students' progress at their own pace, support is provided to enable students to acquire key skills, and to meet the course requirements. Learning needs are met via a variety of different methods such as differentiated flexible paced learning, collaborative learning, progressive tasks, and staff input.