

AUTUMN TERM DISCOVERING MATHS 7AA 2021-22

Rights Respecting Schools (RRS) in Maths

In order to support and develop RRS in Maths at Clyst Vale Community College all teachers in the Maths Department will make sure that the following happens in every Maths lesson:

Every child is taught maths without discrimination, whatever their ethnicity, gender, religion, language or ability. (Article 2- non- discrimination)

Every child's best interests are top priority in every Maths lesson (Article 3-best interests of the child)

In all Maths lessons every child is given the right to express their views and ideas about a particular area of work and these views and ideas are considered, taken seriously and responded to by both other students and teachers. (Article 12-respect for the views of the child)

In all Maths lessons every child is free to express their thoughts and opinions about a particular area of work. Every child is given access to all information that is required (Article 13-freedom of expression)

Discipline in the Maths classroom is consistent and respects every child's dignity and their right. Every child in the classroom has the right to an education (Article 28-right to education)

Every child's mathematical ability and talent will be developed to the full. They will be encouraged to show their peers and teachers the respect that they deserve (Article 29-goals of education)

Differentiation in Maths Lessons

Differentiation is about tailoring lessons for students with individual needs. We must change the content delivery or methods of learning to ensure that every child learns in a way that is suitable for them. When done right differentiation in teaching challenges every student at an appropriate level. It allows the student to grow and succeed in a way that is fair to them. In Maths lessons we try to incorporate the following in all lessons:

Maths teachers target the majority and differentiate around.

Maths teachers keep it short and simple (KISS).

Maths teachers know their students and are clear about what they want them to achieve.

We use support staff wisely.

Maths teachers are flexible and they use a range of strategies-if it doesn't work then we stop!

We access the students' learning using a variety of methods: formative assessment, questioning, no hands up, quizzes, think pair share, open ended tasks, tiered resources...and many more

Every Maths classroom is managed to create a safe and supportive environment.

Maths teachers share their own strengths and weaknesses.

Thought provoking questions are posed to encourage students to think for themselves and become more independent learners.

Students are encouraged to ask questions and investigate their own ideas to improve their problem solving skills as well as gain a deeper understanding of mathematical concepts.

For the students in set 4 out of 4 we are using a CPA approach – CONTEXT, PICTORIAL, ABSTRACT. We are trying to follow the 7A SOW but focusing on 1 topic area each week (see below) **Staff can use Kerboodle – Book 1A**

WEEK 1 MON 13TH SEPT

- State the place values of the digits in whole numbers
- Understand and write integers up to one billion in words and figures
- Order and compare whole numbers

WEEK 2 MON 20th SEPT

- Add whole numbers using different methods by hand

WEEK 3 MON 27TH SEPT

- Subtract whole numbers using different methods by hand
- Recognise and use the inverse relationship between addition and subtraction

WEEK 4 MON 4TH OCT

- Use addition and subtraction to solve real-life problems

WEEK 5 MON 11TH OCT

- Double and half whole numbers

WEEK 6 MON 18TH OCT

- Know that when a number is multiplied by 10, 100, 1000, etc. that it may appear that zeroes are being added, but the digits are moving places to the left and zeroes added in to 'hold' the places
- Be able to complete calculations such as 30×700 , 20×58 , etc.

SAT 23RD OCT-SUN 31ST OCT HALF TERM

WEEK 7 MON 1ST NOV

- Know that when a number is divided by 10, 100, 1000, etc. that it may appear that zeroes are being removed, but the digits are moving places to the right and zeroes added in to 'hold' the places
- Be able to complete calculations such as $400 \div 40$, $240 \div 8$, $56 \div 4$ etc
- Recognise the inverse relationship between multiplication and division

WEEK 8 MON 8TH NOV

- Be able to list multiples for any whole number
- Be able to find all of the factors for any number on the times table grid

WEEK 9 MON 15TH NOV

- Round integers to the nearest power of 10
- Round to the nearest whole number, 10, 100, 1 000 or 10 000

WEEK 10 MON 22ND NOV

- Use the order of operations
- Use a calculator

WEEK 11 MON 29TH NOV

- Use letters to represent numbers
- Make algebra cards
- Collect like terms and simplify expressions

WEEK 12 MON 6TH DEC

- Substitute whole numbers for letters
- Use and interpret simple algebraic notation

WEEK 13 MON 13TH DEC ASSESSMENT WEEK