

## **SUMMER TERM DISCOVERING MATHS 2AA YEAR 8 2022**

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 assess 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 2A**

### **WEEK 1 WEDS 20<sup>TH</sup> APRIL**

#### **Prior learning**

- Measure and draw angles
- Identify acute, right, obtuse and reflex angles
- Know and use the vocabulary associated with angles
- Calculate missing angles in right angles, on straight lines and in full turns

#### **New**

- Identify and apply the properties of angles on a straight line, vertically opposite angles and angles at a point

### **WEEK 2 MON 25<sup>TH</sup> APRIL**

#### **New**

- Identify and apply the properties of corresponding angles and alternate angles between parallel lines

### **WEEK 3 TUES 3<sup>RD</sup> MAY**

#### **Prior Learning**

- Find perimeters of squares and rectangles
- Find area of squares and rectangles where the sides are given and where squares can be counted

#### **New**

- Calculate the perimeter and area of rectangles and squares

### **WEEK 4 MON 9<sup>TH</sup> MAY**

#### **New**

- Calculate the perimeter and area of triangles

### **WEEK 5 MON 16<sup>TH</sup> MAY**

#### **New**

- Calculate the perimeter and area of simple composite shapes (squares, rectangles and triangles)

### **WEEK 6 MON 23<sup>RD</sup> MAY**

#### **Prior learning**

- Sketch cubes
- Draw nets of cubes
- Calculate the volume of a cube

#### **New**

- Draw the nets of prisms

### **HALF TERM SAT 28<sup>TH</sup> MAY – SUN 5<sup>TH</sup> JUNE**

### **WEEK 7 MON 6<sup>TH</sup> JUNE**

#### **New**

- Calculate the volume of cuboids

### **WEEK 8 MON 13<sup>TH</sup> JUNE**

#### **New**

- Calculate the surface area of cubes and cuboids

## **WEEK 9 MON 20<sup>TH</sup> JUNE**

### **Prior learning**

- Collect, classify, organise and tabulate data
- Draw, read and interpret pictograms
- Draw simple bar charts
- Solve problems with bar charts

### **New**

- Represent data using pie charts

## **Week 10 MON 27<sup>TH</sup> JUNE**

### **New**

- Represent data using line graphs

## **WEEK 11 MON 4<sup>TH</sup> JULY**

### **New**

- Represent data using scatter graphs
- Draw, analyse and interpret scatter graphs

## **WEEK 12 MON 11<sup>TH</sup> JULY**

### **New**

- Describe types of correlation for a scatter graph