Maths at Claycots

Claycots Primary School

www.claycots.co.uk
Town Hall Campus: 01753 531415
Britwell Campus: 01753 521215

The vision for Maths

At Claycots we aim for all pupils to develop a positive and resilient attitude towards mathematics; find joy in their success and understand the opportunities Maths skills can bring.

We aim to provide a broad, balanced, engaging and relevant curriculum that meets the requirements of the National Curriculum along with high-quality teaching using research-based pedagogy to meet all the needs of our learners.

We aim to equip children with the skills of calculation, reasoning and problem solving to provide a solid foundation for the next phrase of their learning and throughout life providing the very best future for every child.

Subject Intent

At Claycots, we are committed to ensuring that all children are challenged through a rich Maths curriculum which is carefully sequenced to build upon prior learning and provides opportunities to prioritise conceptual understanding over rote learning. Our curriculum ensures core number facts are embedded as we know they are the foundation to procedural fluency as well as allowing opportunities to solve increasingly complex problems and reason using mathematical vocabulary.

Our Maths curriculum aims to help our pupils recognise that mathematics is an interconnected subject in which we want them to be able to move fluently between different representations of mathematical ideas as well as applying their maths knowledge to science and other subjects.

Subject Implementation

At Claycots School, we use a mastery approach focusing on representation & structure; mathematical thinking; variation; fluency and coherence. As a school, our mastery approach has developed each year through our involvement in a number of projects run by the BBO Maths Hub. Lessons are planned and sequenced using our bespoke termly overviews and progression documents so that new knowledge and skills build on what has previously been taught. Teachers use White Rose Maths, NCETM and other resources to support their planning.

As part of our approach to developing mathematic fluency, in each lesson, children have times tables or number bond practice to give them opportunities to improve rapid recall of declarative knowledge linked to their stage of learning. Children use 'Times table Rockstar' to engage in weekly battles and challenges to improve their fluency which allows them to practice in an engaging and interactive way at school and at home. In addition to this, in each lesson, children are given the opportunity to revisit prior learning through their 'Quick Maths' starters.

Throughout the school, teachers use pedagogical approaches to promote high standards including explicit modelling and using the gradual release of responsibility approach, which includes focused feedback to ensure accuracy all whilst creating an environment where children know mistakes are an important part of learning.

We use our school calculation policy, to ensure a consistent approach in teaching formal methods and use of the CPA (concrete, pictorial and abstract) approach to help build mental models and provide Mathematical representations.

We ensure that the curriculum is tailored to meet the needs of each child through carefully planned scaffolding and resources. For children who cannot access their aged-related curriculum we have a bespoke pre-key stage curriculum which covers the engagement model when appropriate.

Nursery

Long term planning

Autumn

Numbers

Songs, Rhymes
Building
Puzzles
Amounts

Week 1-4

Shapre, Spae & Measure

Size and weight

Week 5-6

Numbers 1-3

Reciting
Objects
Cardinality

Week 7-10

Shape, Space & Measure

Timetables, routines
Positional language

Week 11-12

Spring

Numbers
Counting to 5

Week 1-4

Shape
Recognising
Finding shapes
Sorting shapes
Construction

Week 5-6

Shapce, Space & Measure
Spatial awareness
Positional language

Week 7-8

Numbers
Rote counting to 5
Ordering

Week 9-10

Measure

Explore size
Weight
Timetables
Sequence of events

Week 11-12

Summer

Number

Recognise numerals up to 5
Counting objects
Order numbers

Week 1-5

Pattern

Environmental patterns
Patterns on us
Action patterns
Make patterns

Week 6-8

Number

Counting
Recognising numerals
Counting objects and fingers
Ordering numbers to 5
One more to 5

Week 9-12

Reception

Long term planning

CLAYCOTS SCHOOL

Number (1–3) Week 1-4 *Autumn*	**Patterns** Week 5	**Shape, Space & Measure** Week 6-7	**Numbers (1–5)** Week 8-11	**Shape, Space & Measure** Week 12
Number (1–10) Week 1-4 *Spring*	**Shape, Space & Measure** Week 5	**Patterns** Week 6-7	**Numbers (1–10)** Week 8-11	**Shape, Space & Measure** Week 12
Number (1–10) Week 1-4 *Summer*	**Measure** Time Week 5-6	**Number** (Number bonds, number problems) Week 7-10	**Shape, Space & Measure** Week 11	**Patterns** Week 12

Year 1

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1- Number: Place Value				Unit 2- Number: Addition and Subtraction					Unit 3- Geometry: Shape	Consolidation	

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 4- Number: Place Value			Unit 5- Number: Addition and Subtraction			Unit 6- Number: Place Value		Unit 7- Measurement: Length and Height		Unit 8: Measurement : Mass and Length	Consolidation

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 9- Number: Multiplication and Division			Unit 10 - Number: Fractions		Unit 11- Geometry: Position and Direction	Unit 12 Number: Place Value		Unit 13- Measurement: Money	Unit 14- Measurement: Time		Consolidation

Year 2

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1- Number: Place Value				Unit 2- Number: Addition and Subtraction					Unit 3- Geometry: Shape		

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 4- Measurement: Money		Unit 5- Number: Multiplication and Division				Unit 6- Measurement: Length and Height		Unit 7- Measurement: Mass, Capacity and Temperature		Consolidation	

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 8- Number: Fractions			Unit 9- Measurement: Time		Unit 10- Statistics		Unit 13- Geometry: Position and Direction		Consolidation		

Year 3

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1- Number: Place Value			Unit 2- Number: Addition and Subtraction					Unit 3- Number: Multiplication and Division			

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 4- Number: Multiplication and Division			Unit 5- Measurement: Length and Perimeter			Unit 6- Number: Fractions			Unit 7- Measurement: Mass and Capacity		

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 8- Number: Fractions		Unit 9- Measurement: Money		Unit 10- Measurement: Time			Unit 11- Geometry: Shape		Unit 13- Statistics		Consolidation

Year 4

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1- Number: Place Value				Unit 2- Number: Addition and Subtraction		Unit 3- Measurement: Area	Unit 4- Number: Multiplication and Division			Consolidation	

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 5- Number: Multiplication and Division			Unit 6- Measurement: Length and Perimeter		Unit 6- Number: Fractions				Unit 7- Number: Decimals		

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 8- Number: Decimals		Unit 9- Measurement: Money		Unit 10- Measurement: Time		Unit 11- Geometry: Shape		Unit 12- Statistics	Unit 13- Geometry: Position and Directions		Consolidation

Year 5

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1 - Number: Place value			Unit 2 - Number: Addition and subtraction		Unit 3 - Number: Multiplication and division		Unit 4 - Number: Fractions				Consolidation

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 5 - Number: Multiplication and division			Unit 6 - Number: Fractions		Unit 7 - Number: Decimals and percentages			Unit 8 - Measurement: Perimeter and area		Unit 9 - Statistics	

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 10 - Geometry: Shape			Unit 11- Geometry: Position and direction		Unit 12 - Number: decimals			Unit 13 - Number: Negative numbers	Unit 14 - Measurement: converting units		Unit 15 - Measurement: Volume

Year 6

Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 1 - Number: Place value		Unit 2 - Number: Addition, subtraction, multiplication and division				Unit 3 - Number: Fractions			Unit 4: Converting units	Unit 5: Number: ratio	

Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Unit 6- Number: Algebra		Unit 7- Number: Decimals		Unit 8- Number: Fractions, Decimals and percentages		Unit 9 – Measurement: Area, Perimeter and Volume		Unit 10- Statistics	Unit 11- Geometry: Shape		Unit 13- Geometry: Position and Direction

Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Consolidation				Themed projects, consolidation and problem solving							

How we measure progress

At Claycots we use end of unit tests, times tables and termly assessments to help teachers gather a deeper understanding of their pupil's existing and developing knowledge and skills. However, we are aware that testing can lead to judgeing performance rather than learning therefore teachers also use formative assessment daily in their lessons to measure learning over time.

Using this wide range of data, we measure pupil progress on a termly basis and at the end of the year, the expectation is that children achieve Age Related Expectations (ARE) for their year group. Some children may have progressed further and achieve Greater Depth (GD). Those pupils who have been identified as having gaps in their knowledge receive appropriate support and intervention, inside and outside of the usual classroom Maths lesson.

By the end of Year 6, children will have developed a range of efficient skills that can be used to calculate effectively, they will be fluent in the fundamentals of Maths with a conceptual understanding and have the ability to recall and apply key facts accurately.

Visits and experiences

HSBC

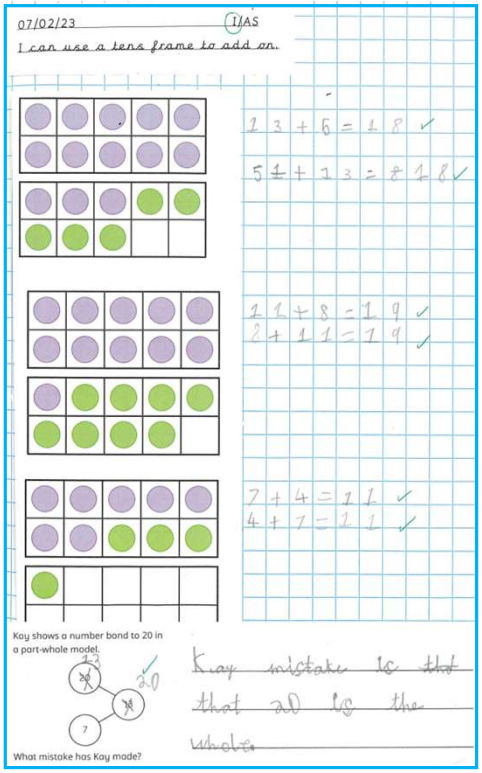
Educational Financial lessons
(EYFS, KS1 & KS2)

STEM
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

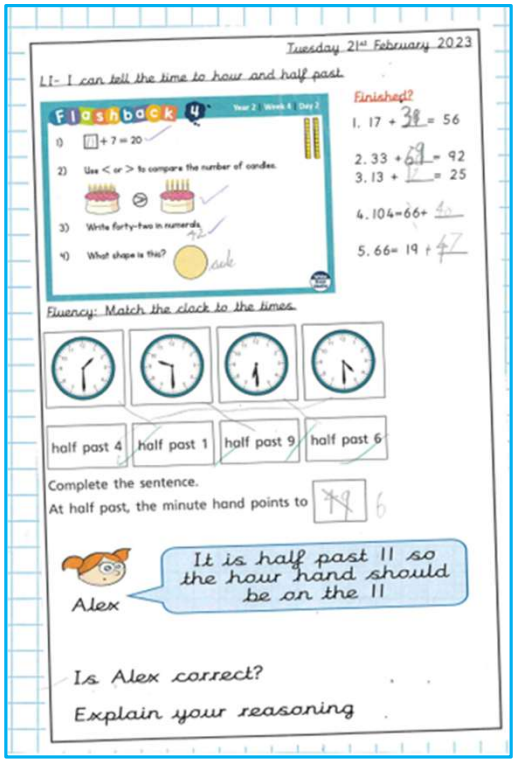
STEM Lego Workshop
(Key Stage 2)

Examples of learning KS1

Year 1

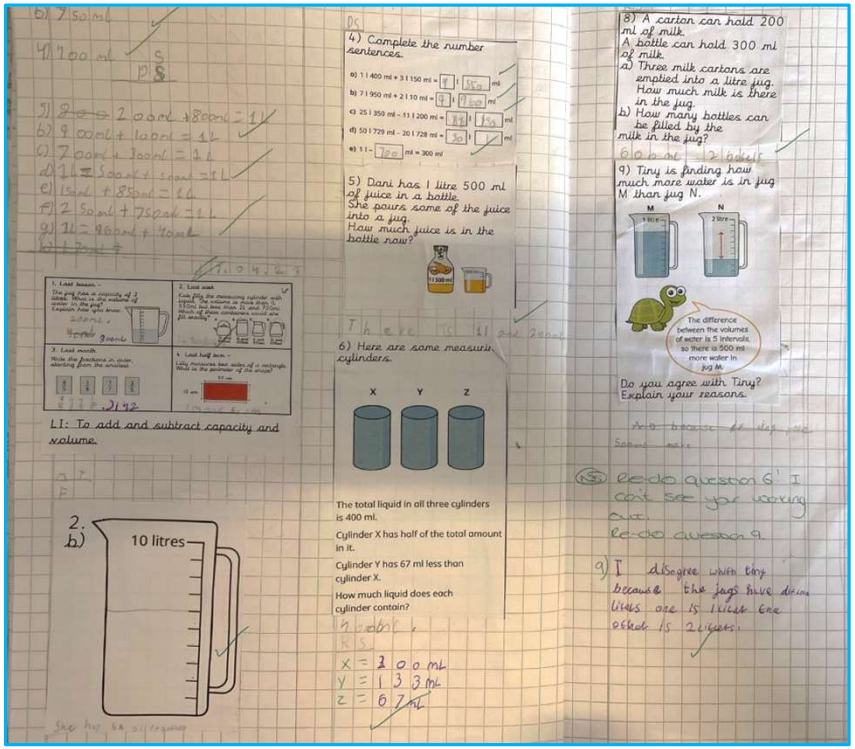


Year 2

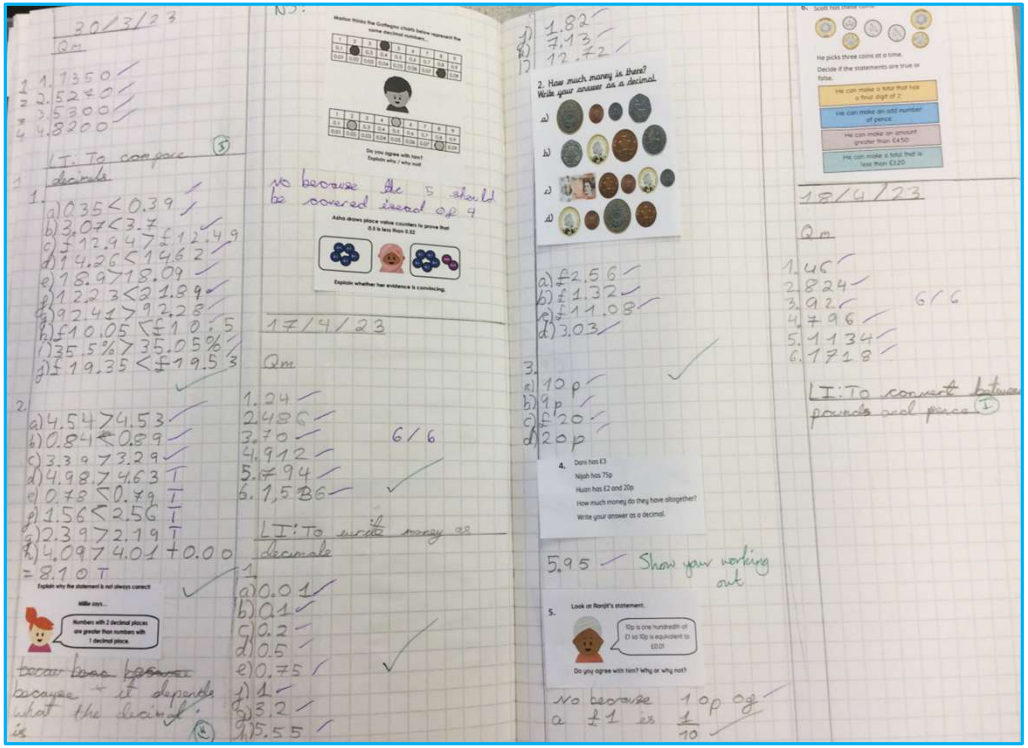


Examples of learning Lower KS2

Year 3

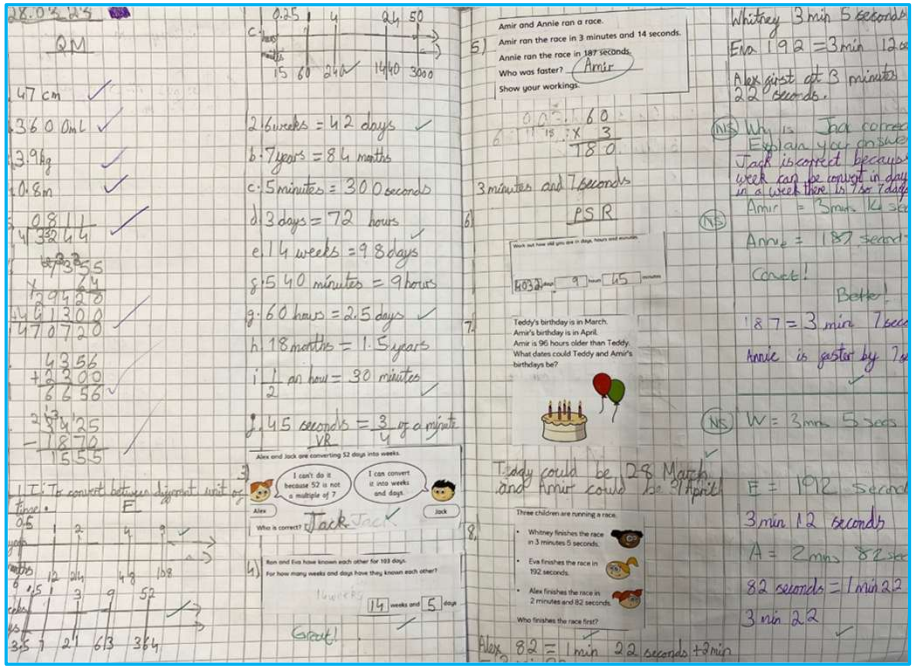


Year 4

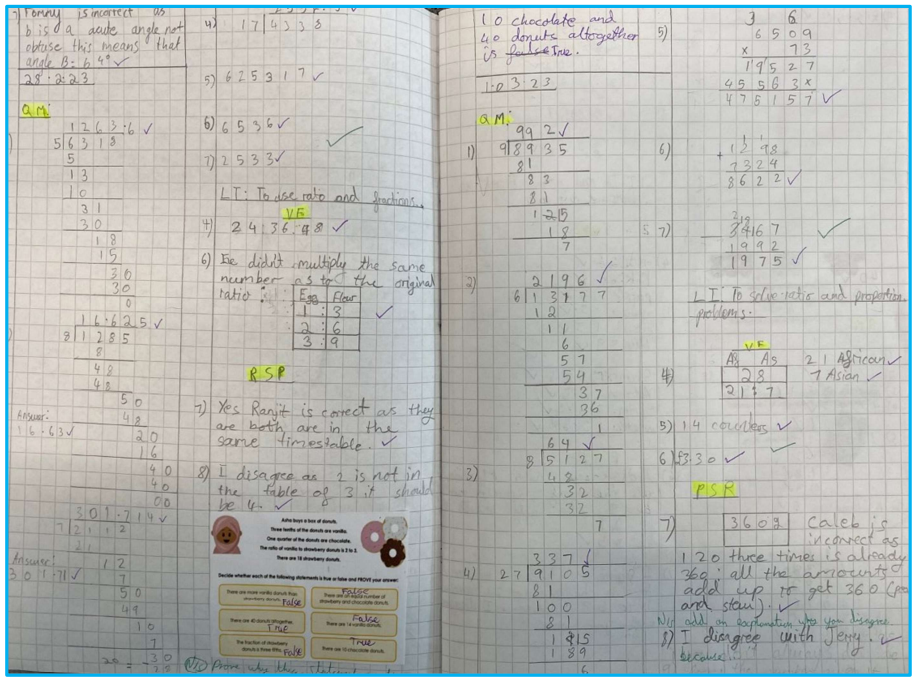


Examples of learning
Upper KS2

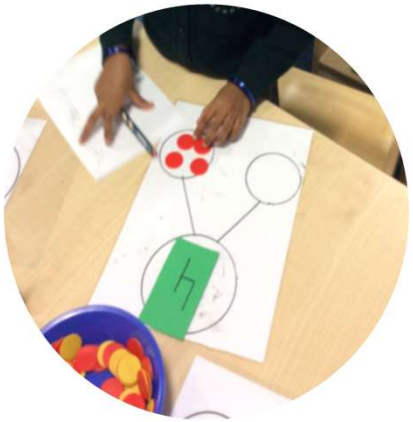
Year 5

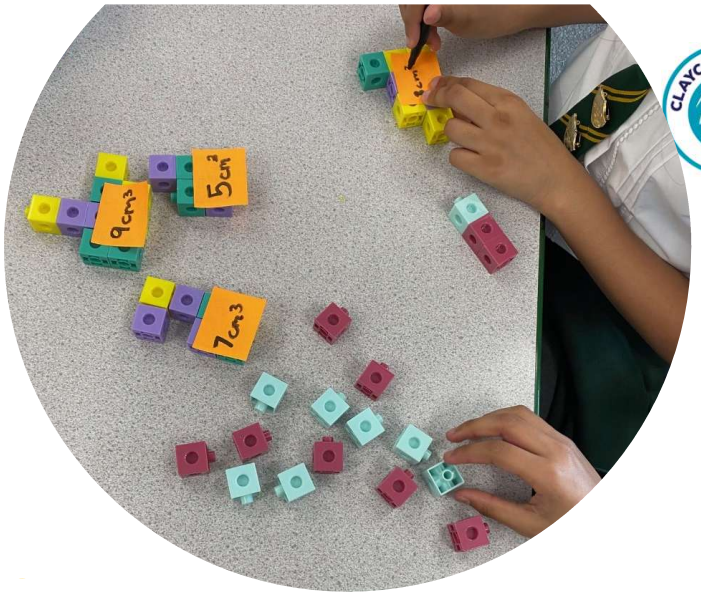


Year 6



Practical learning!





Pupil voice

I like adding. When questions get hard, I try to use a different method.
-Year 2, Britwell

I love using the numicon and cubes to help me count up to 50. It's so fun.
-Year 1, Town Hall

I work with my friends, and we help each other solve difficult problems.
-Year 4, Britwell

Maths in Year 5 is challenging, and it is very fun because we get to learn from our mistakes and use lots of different equipment.
-Year 5, Town Hall

Maths is really fun in Claycots because it's like a puzzle and we learn a lot about it in greater detail.
-Year 6, Town Hall

The teachers help us because they explain things very clearly.
-Year 3, Britwell