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

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

Long term planning

Autumn

Number
Place Value (within 10)
Week 1-5

Number
Addition & Subtraction (within 10)
Week 6-10

Geometry
Shape
Week 11

Consolidation Week 12

Spring

Number
Place Value (within 20)
Week 1-3

Number
Addition & Subtraction (within 20)
Week 4-6

Number
Place Value (within 50)
Week 7-8

Measurement
Length & height
Week 9-10

Measurement
Mass and volume
Week 11-12

Summer

Number
Multiplication & divison
Week 1-3

Number
Fractions
Week 4-5

Number
Place Value (within 100)
Week 6-7

Measurement
Money
Week 8

Measurement
Time
Week 9-10

Geometry
Position & direction
Week 11

Consolidation Week 12

Year 2

Long term planning

CLAYCOTS SCHOOL

Autumn

Number
Place Value
Week 1-3

Number
Addition & Subtraction
Week 4-8

Measurement
Money
Week 9-10

Number
Multiplication & divison
Week 11

Consolidation
Week 12

Spring

Number
Multiplication & divison
Week 1-4

Statistics
Statistics
Week 5-6

Geometry
Properties of shape
Week 7-9

Number
Fractions
Week 10-12

Summer

Measurement
Length & height
Week 1-2

Geometry
Position & direction
Week 3-4

Consolidation & problem solving
Week 5-6

Measurement
Time
Week 7-8

Measurement
Mass, capacity & temperature
Week 9-11

Consolidation
Week 12

Year 3

Long term planning

CLAYCOTS SCHOOL

Number

Place Value

Week 1-3

Autumn

Number

Addition & Subtraction

Week 4-8

Number

Multiplication & divison

Week 9-12

Number

Multiplication & divison

Week 1-3

Spring

Measurement

Length & perimeter

Week 4-6

Number

Fractions

Week 7-9

Measurement

Mass & capacity

Week 10-12

Number

Fractions

Week 1-2

Summer

Measurement

Money

Week 3-4

Measurement

Time

Week 5-7

Geometry

Shape

Week 8-9

Statistics

Statistics

Week 11

Consolidation Week 12

Year 4

Long term planning

Autumn

Number
Place Value
Week 1-4

Number
Addition & Subtraction
Week 5-6

Number
Multiplication & divison
Week 7-9

Measurement
Length & perimeter
Week 10-11

Consolidation Week 12

Spring

Number
Multiplication & divison
Week 1-4

Measurement
Area
Week 5

Number
Fractions
Week 6-9

Number
Decimals
Week 10-11

Consolidation Week 12

Summer

Number
Decimals
Week 1-2

Measurement
Money
Week 3-4

Measurement
Time
Week 5-6

Consolidation Week 7

Geometry
Properties of shape
Week 8-9

Statistics
Statistics
Week 10

Geometry
Position & direction
Week 11-12

Year 5

Long term planning

Autumn

Number
Place Value
Week 1-3

Number
Addition & Subtraction
Week 4-5

Number
Multiplication & divison
Week 6-8

Measurement
Perimeter & Area
Week 9-10

Statistics
Statistics
Week 11-12

Spring

Number
Multiplication & divison Recap
Week 1

Number
Fractions
Week 2-6

Number
Decimals & percentages
Week 7-11

Consolidation Week 12

Summer

Consolidation Week 1

Geometry
Properties of shape
Week 2-4

Geometry
Position & direction
Week 5-6

Measurement
Coverting units
Week 7-8

Measurement
Volume
Week 9

Consolidation Week 10-12

Year 6

Long term planning

Autumn

Number
Place Value
Week 1-2

Number
Addition, subtraction, multiplication & divison
Week 3-6

Number
Fractions
Week 7-9

Measure
Converting Units
Week 10

Number
Ratio
Week 11-12

Spring

Geometry
Position & Direction
Week 1

Number
Algebra
Week 2-3

Number
Decimals
Week 4-6

Number
Fractions, decimals and percentages
Week 7-8

Measurement
Perimeter, area & volume
Week 9-10

Summer

Statistics
Statistics
Week 11-12

Geometry
Shape
Week 1-2

Consolidation and revision
Week 3-4

SATS

Consolidation, problem solving and themed projects
Week 7-12

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

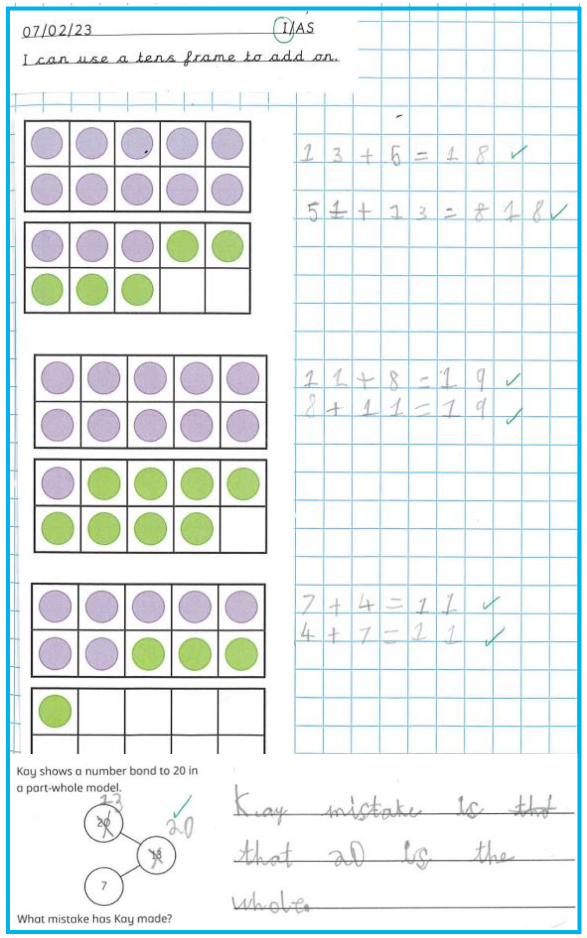
Educational Financial lessons
(EYFS, KS1 & KS2)

STEM
SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

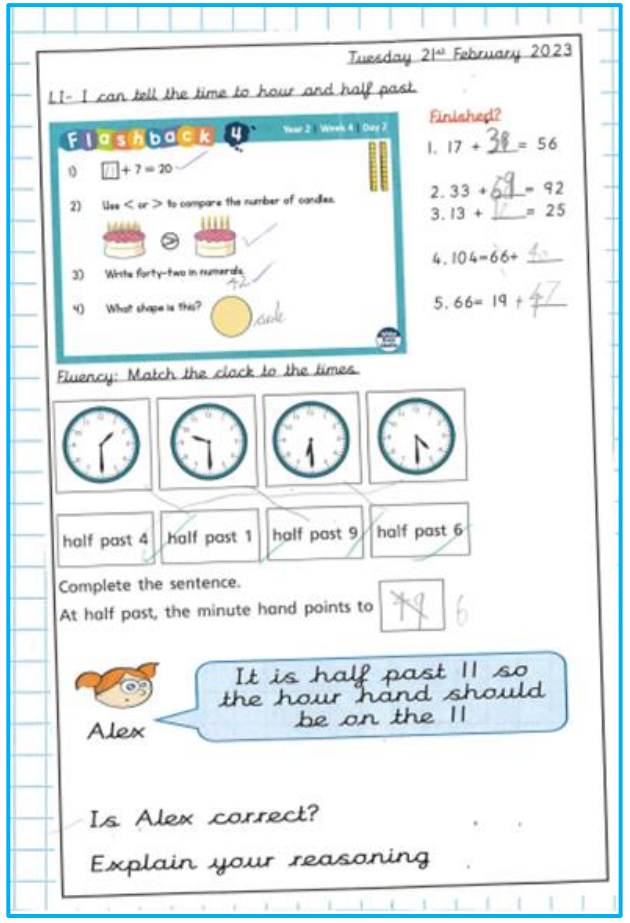
STEM Lego Workshop
(Key Stage 2)

Examples of learning KS1

Year 1

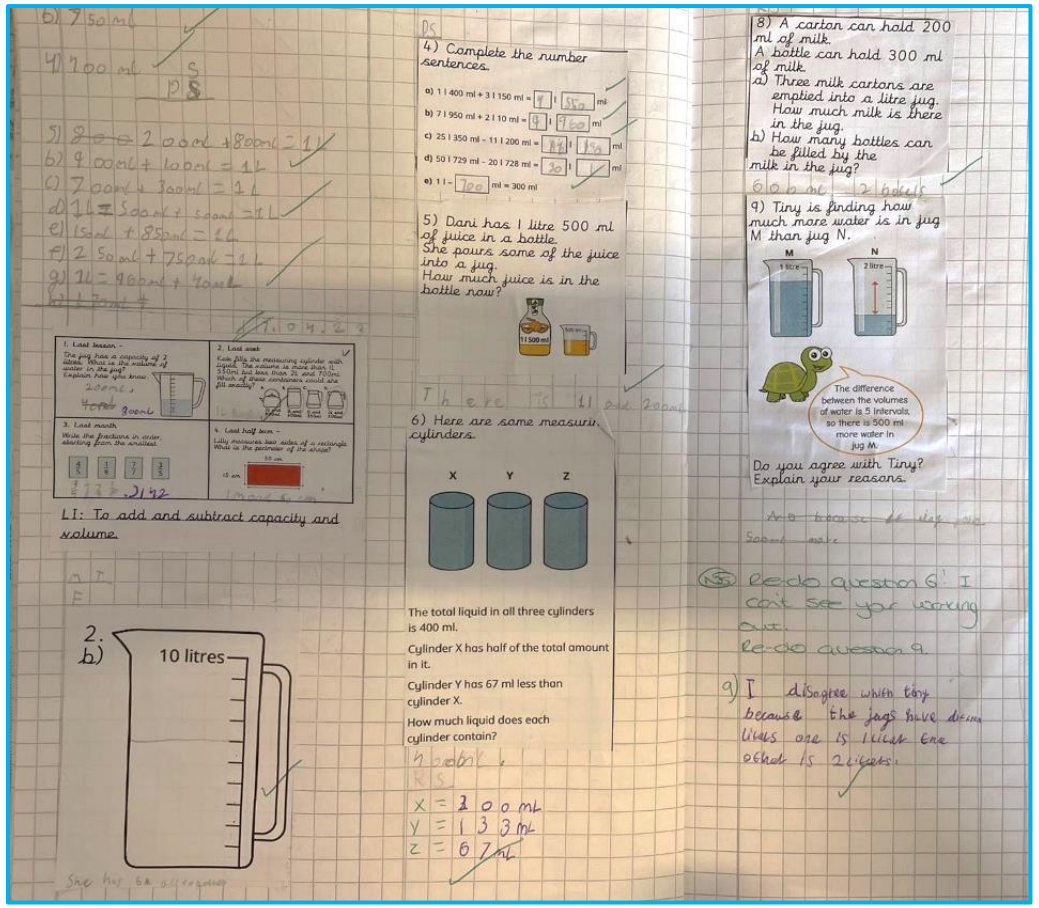


Year 2

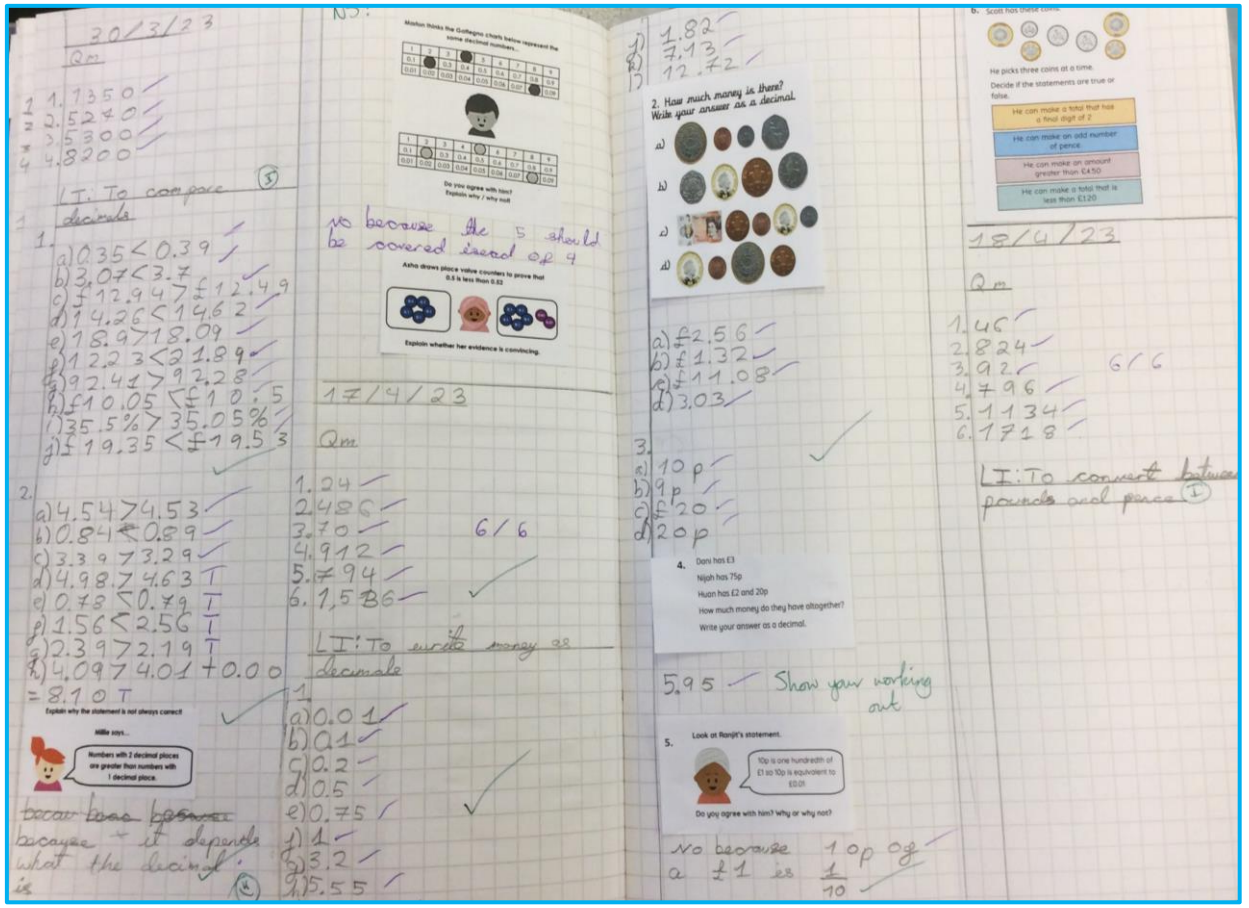


Examples of learning Lower KS2

Year 3

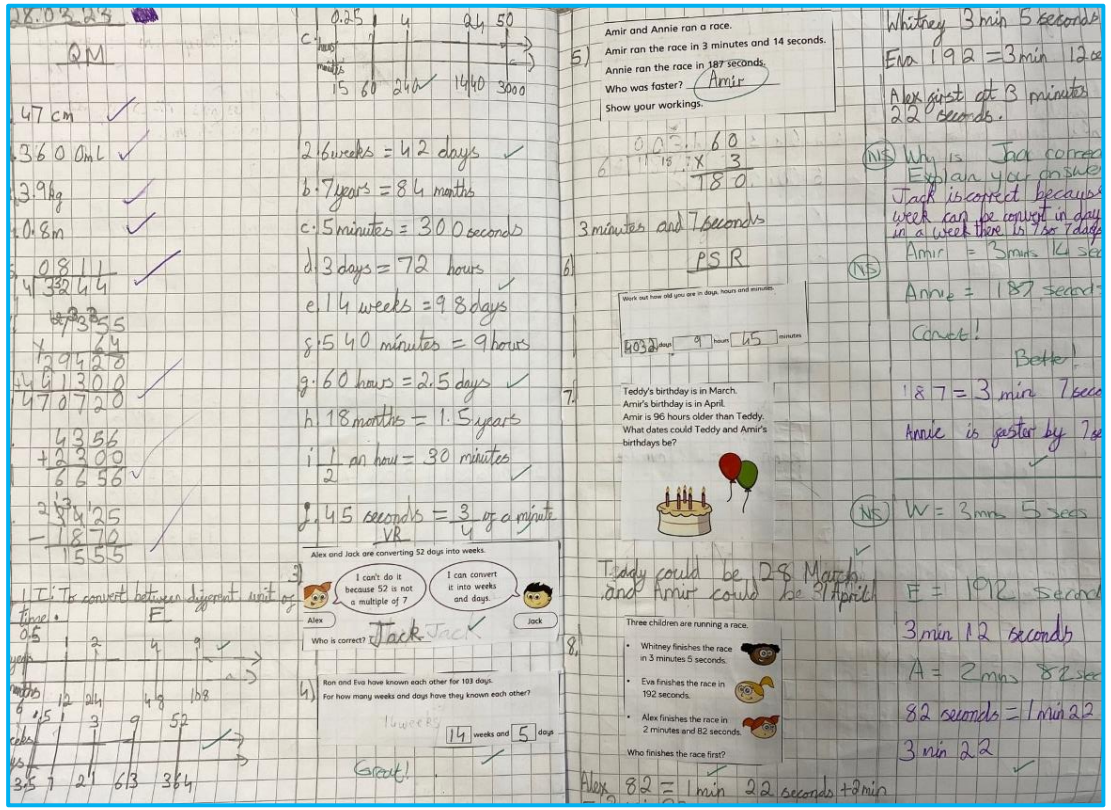


Year 4

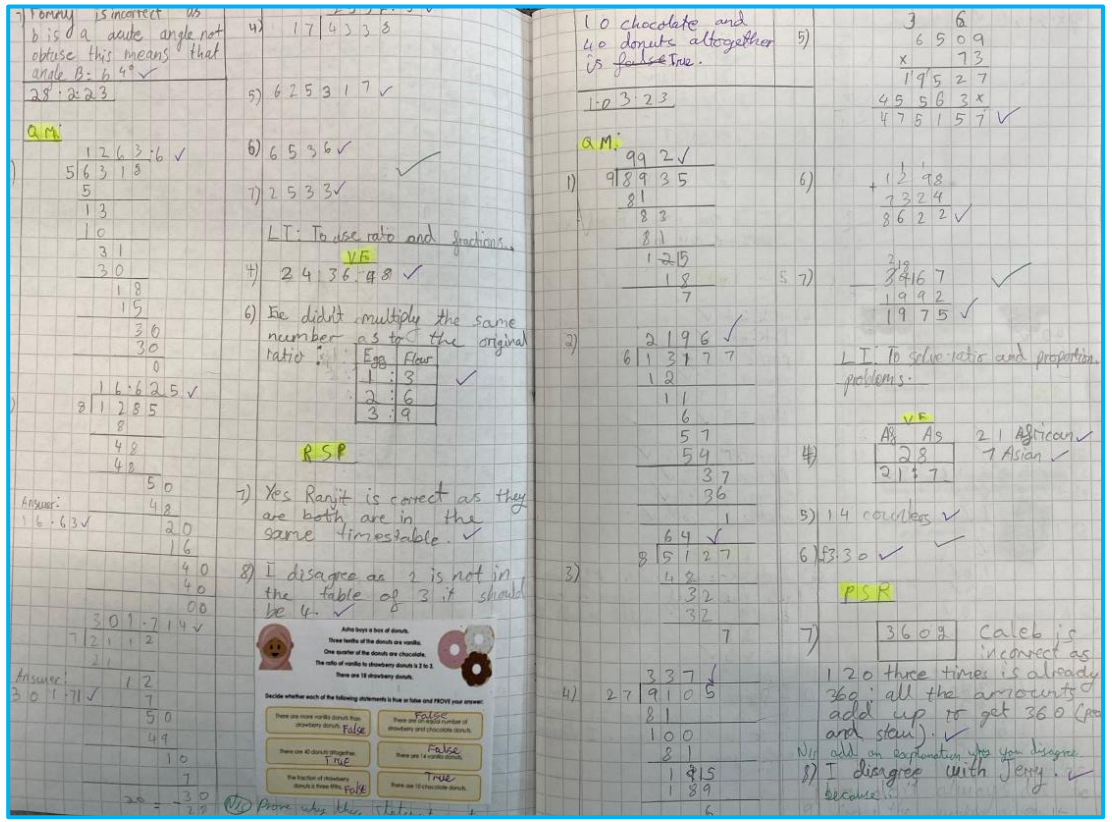


Examples of learning Upper KS2

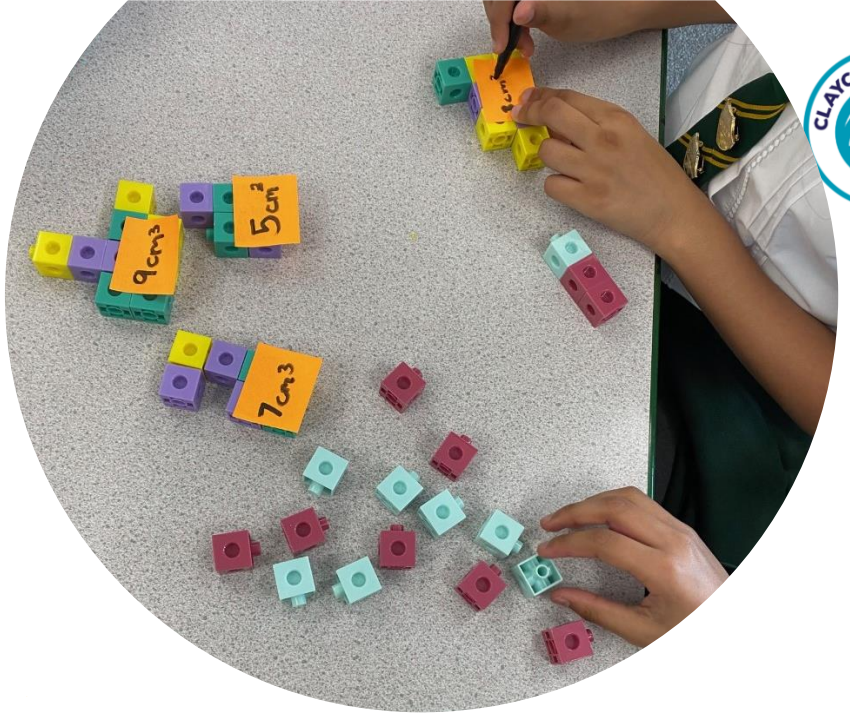
Year 5

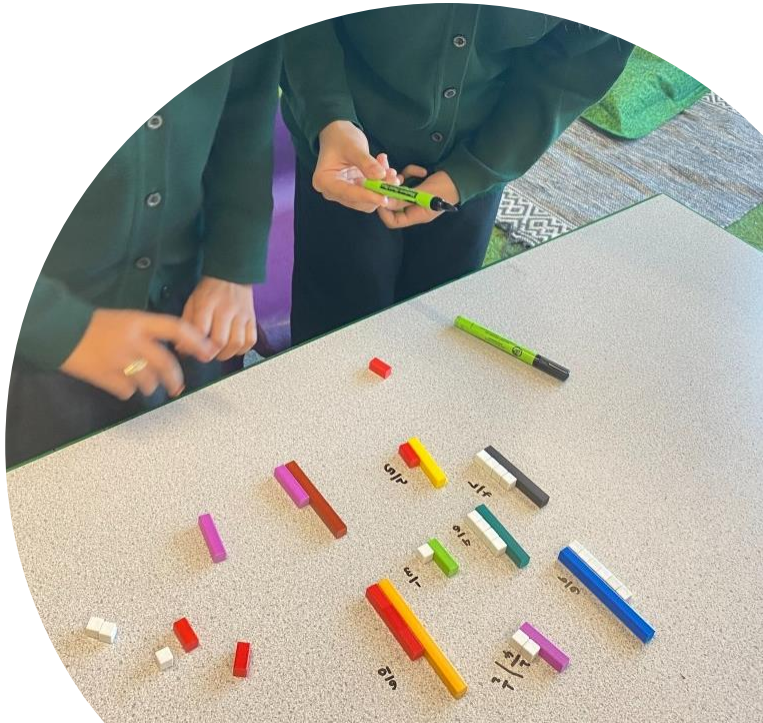


Year 6



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