

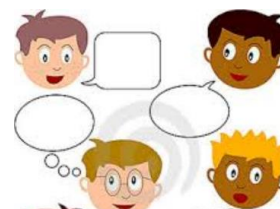


How we teach Mathematics at Herrick

The emphasis is on developing pupils' **mathematic skills** and master them alongside ensuring they are **fluent** in their knowledge of times tables and the four mathematical operations: addition, subtraction, multiplication and division. Various methods and strategies are introduced as they progress throughout the school and a greater emphasis is placed on children's reasoning skills once the basics are embedded.

We have four non-negotiables for every lesson.

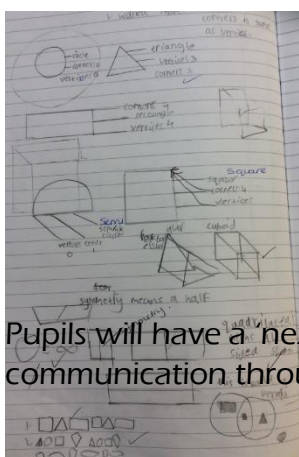
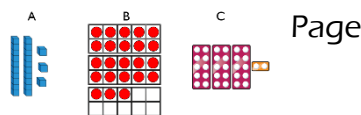
- All sessions to use concrete material
- All children to speak in full sentences using mathematical vocabulary
- All children are encouraged to use images, doodles and pictorials to represent their understanding
- In all sessions, children will be asked to reason and justify their thoughts and answers in order to promote a deeper level of learning



What does a unit for work look like?

Pupils will typically begin a unit with a Problem

One of these images **does not** show 23
Can you explain the mistake?



They are encouraged to record what they have understood through a **WDIKA Page** (**W**hat **D**o I **K**now **A**lready) which is used by teachers to check and assess understanding.

Pupils will have a **next steps'** document in the front of both Maths books to allow clear and precise communication throughout any member of staff as well as support from outside of school

-Years 2-6 have been provided with login details for Times Tables Rockstars.

Each week pupils will sit a Times Tables test.



What is being taught each week?

<https://whiterosemaths.com/> Click on **Resources** and select **Age Group** and then click on **Schemes of Learning** which will take you to the overviews for each year group.

Year 3 | Spring Term | Week 10 to 11 - Number: Fractions

Making the Whole

Notes and Guidance
Children look at three shapes and quarters and see that when a fraction is equivalent to a whole, the numerator and denominator are the same.
Building on using part-whole model with whole numbers, children use the models to partition the whole into fractional parts.

Mathematical Talk

Is a fraction always less than one?
When the fraction is equivalent to one, what do you notice about the numerator and denominator?
In the counter activity, what's the same about the part-whole models? What's different?
What's the same about the fractions? What's different?
Can you draw a unit fraction and a non-unit fraction with the same

Varied Fluency

Complete the missing denominators:
1 whole is the same as $\frac{10}{10}$
Complete the sentences to describe the apples:
of the apples are red. of the apples are green.
of the apples are red. of the apples are green.
Use 8 double-sided counters.
Drop the counters on to the table, what fraction of the counters are red? What fraction of the counters are green? What fraction represents the whole group of counters?
Complete part-whole models to show your findings.

What's the same about the fractions? What's different?
An equal fraction has a numerator that is _____ times _____ times as big as the denominator.
An equal fraction has a numerator that is _____ times _____ times as big as the denominator.

Schemes of Learning

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)		Number: Addition and Subtraction (within 10)				Geometry: Shape		Number: Place Value (within 20)			
Spring	Consolidation	Number: Addition and Subtraction (within 20)		Number: Place Value (within 50)		Measurement: Length and Height		Measurement: Weight and Volume		Consolidation		
Summer	Consolidation	Number: Multiplication and Division		Number: Fractions		Geometry: Position and Direction		Number: Place Value (within 100)		Measurement: Money		Measurement: Time