



Maths at Haresfield Primary School



How is Maths taught at Haresfield?

At Haresfield we follow a mastery approach to Maths teaching based on the main aims of the national curriculum.

Fluency is the ability to learn and recall key mathematical skills and knowledge

The national curriculum for Maths has three main aims, which are:

- Fluency
- Reasoning
- Problem Solving

Reasoning is the skill to understand how and why the Maths works using Mathematical language to support their thinking and understanding.

Problem Solving is the ability to use learnt skills and knowledge and apply them in different contexts to solve problems.



What has changed?

Children are taught with the rest of their year group. Previously children were often taught based on ability groupings

Lessons are taught around small steps. Each lesson covers a key concept to be learnt during this lesson.

Work completed by children is more precise and focused. No more pages of calculations for them to complete.

Children need to explain their thinking and show understanding of their work. Before they would have been given bigger numbers.

Very clear and precise vocabulary is used to ensure children know exactly what they are learning about. For example what is the definition of a triangle?

Previously learning could be described as a mile wide and inch deep. Now we aim for inch wide and a mile deep.

What do Maths lessons look like?

All children in a year group work with their teacher looking at a topic exploring fluency, reasoning and problem solving questions together.

Children will then do independent work in their books. Based on what they have been doing.

Independent work is structured around fluency, reasoning and problem solving. This is known as do it, twist it and solve it.

Children will work through a cycle of using concrete, pictorial and abstract work throughout a topic.

Concrete is the use of practical equipment.
Pictorial is the use of images and pictures.

From the work done with their teacher children who may need extra help are identified supported with their work.

Regular setting of homework on My Maths to build on key skills and practise work done at school.

Abstract is the recording of calculations using mathematical symbols and language.

What does the independent work look like?

22/11/18

WALT understand and use money in context.



Do it

How many pounds and pence are in these amounts?

1. 234p
2. 755p
3. 1525p

What is the least amount of coins needed to pay for an item costing.

4. 77p
5. £1.89
6. 845p

Twist it

1. Would you rather have eight 20p coins or fifteen 10p coins? Explain why.
2. Which items will cost more? 15 books costing £4.20 each or 11 toys costing £5.10 each.

22/11/18

WALT understand and use money in context.



Solve it

1. Alvin has these digits 5 7 4 3. He makes a total that is more than four pounds, but less than seven pounds. How many prices can he make? Order the prices in ascending order and then descending order.
2. Class 3 has £100 pounds to spend on new books. Paperbacks cost £4 and hardback cost £8. How many books could they buy? What combinations of books is it possible to buy?

22/11/18

WALT divide with remainders as decimals



Do it

Work out these questions using decimals as remainders.

1. $1143 \div 4 =$
2. $1607 \div 5 =$
3. $959 \div 8 =$
4. $5398 \div 5 =$

Twist it

1. Two children work out the question $186 \div 4$. John works it out as $46r2$. Bill works it out as 46.2 . Which of them is correct and why?
2. I am thinking of a two digit number below 50. When divided by 5 the remainder is 2. When divided by 2 the remainder is 1. What could my numbers be? How many possibilities are there?

22/11/18

WALT divide with remainders as decimals



Solve it

1. A coach is travelling from High Wycombe to Rome. The distance is 1931km. The driver wants split the journey equally over 4 days. How far should he drive each day?
2. An item is bought from a shop costing £4917. A group of four friends buy it together. If they all paid an equal amount how much did each person spend?
- 3.

	0	3	5	4	5
6	2		2		0

How do we assess Maths?

Through the work the children do with their teacher and through the marking of books.

Using assessment tasks to check the children's understanding of the topic that has just been covered.

Termly tests following the structure of SATs test which are split into arithmetic and reasoning.

Through the setting and checking of homework on My Maths.

In KS2 regular arithmetic assessments as part of our work with the GLOW maths hub.

How else do we teach Mathematical fluency?

Fluency is a vital mathematical skill and covers a wide range of areas including times tables, number bonds and counting.

To achieve this goal we have introduced a slot every day where we do something called Yeti Maths.

It is called Yeti Maths because we believe in promoting a growth mindset at Haresfield Primary School.

A growth mindset is important as it shows that mistakes are an important part of learning which we can learn from. Some things take time to learn so instead of saying we can't do it we say we can't do it yet or yeti.

To achieve fluency it is important children practise these skills regularly. Not just during an individual topic.



What do we do in Yeti Maths?

Each class has a set of objectives to cover each term based on the age of the children.

Yeti Maths is designed to be a fun and interactive time to help develop children's fluency.

Children take part in different activities throughout the week. Some which you will be able to see in each classroom.

Each day has a different focus. For example times tables, counting, doubling and halving or number bonds.

Examples of different activities could be chanting or counting, maths games, practising methods of calculation and developing their understanding of the different skills.

Each class takes it in terms and a child who has been working really hard in Yeti Maths is chosen to adopt it for the week.

