**M**istakes
**A**llow
**T**hinking to
**H**appen

# Celebrating Maths

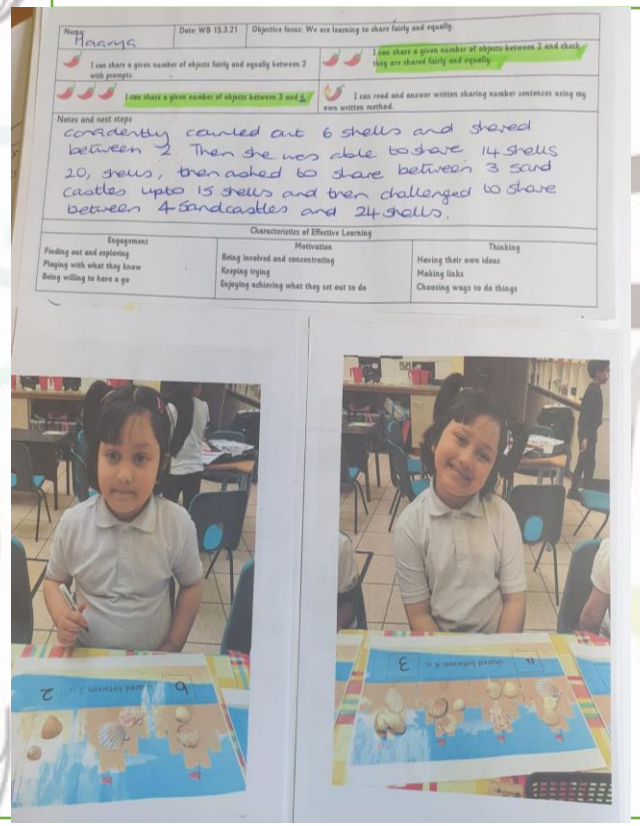
**MATHEMATICS**
is not about
numbers, equations,
computations, or
algorithms:
it is about
**UNDERSTANDING.**

*William Paul Thurston*

The only way to
learn mathematics
is to
do mathematics!

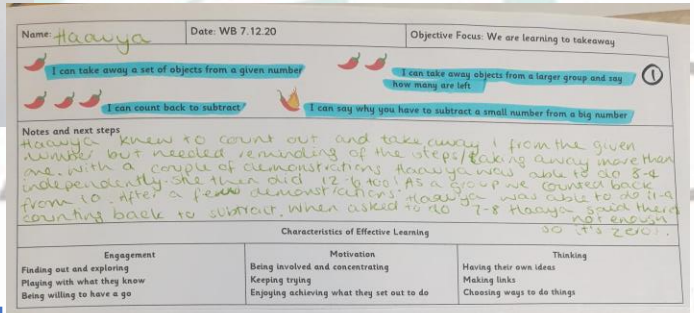
ABBEY MEAD
PRIMARY ACADEMY

# EYFS





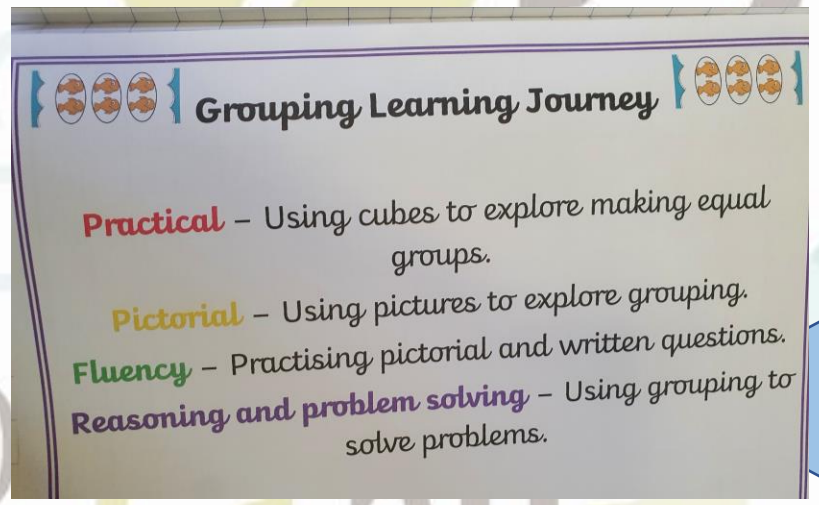
Pupils are exposed to a variety of Maths resources/activities during free time



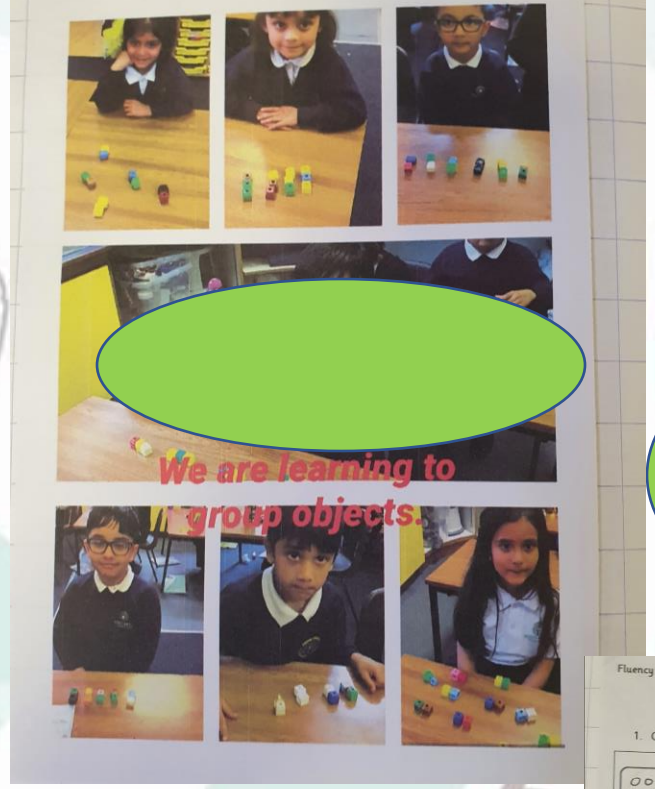

Teacher's challenge pupils in each lesson and ask them to explain their reasoning.

Foundation books showcase both group work and 'free work' which children select and work independently.

# Year 1



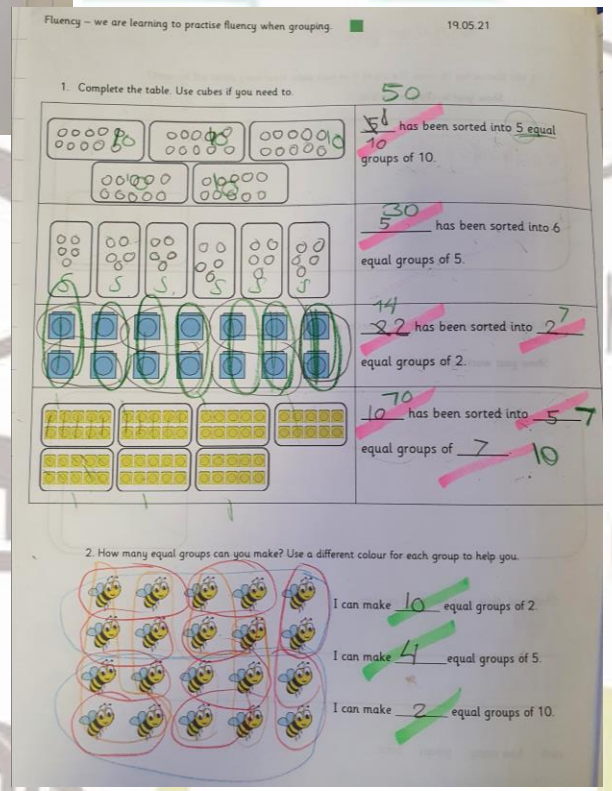

Learning journeys incorporate the practical, pictorial, fluency and reasoning element




Children are learning to group objects into equal groups using cubes.

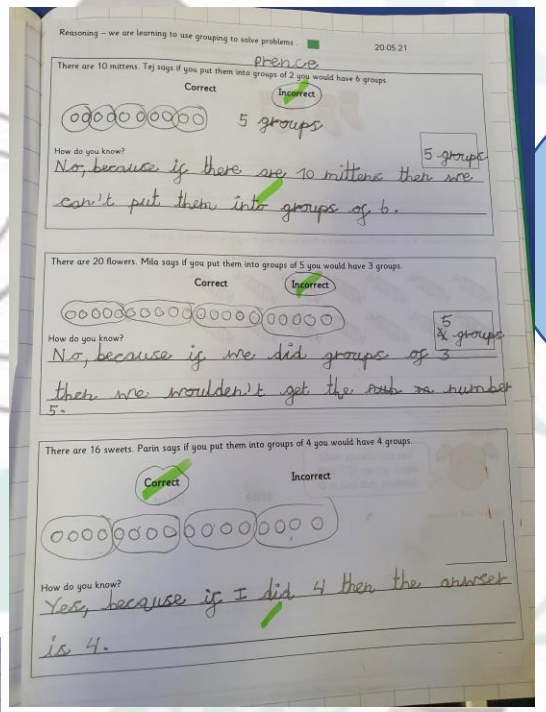
Books in year 1 showcase how practical resources and pictorial representations are used to reinforce learning and ensure that the children have a good conceptual understanding.

Errors or misconceptions are quickly picked up and addressed to ensure children are secure with their learning.

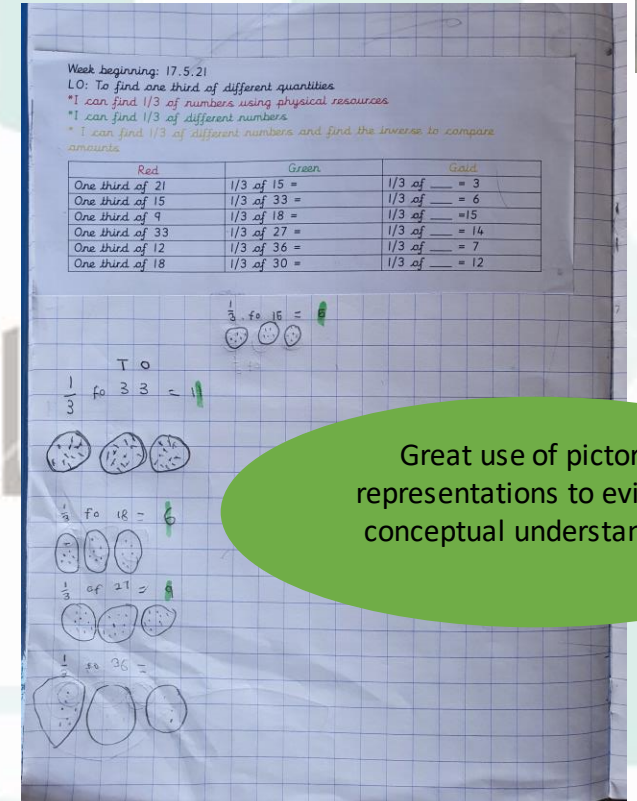


# Year 2

Books in year 2 show learning is adapted to the needs of children. All pupils have different starting points based on their understanding/ assessment and teacher assessment.

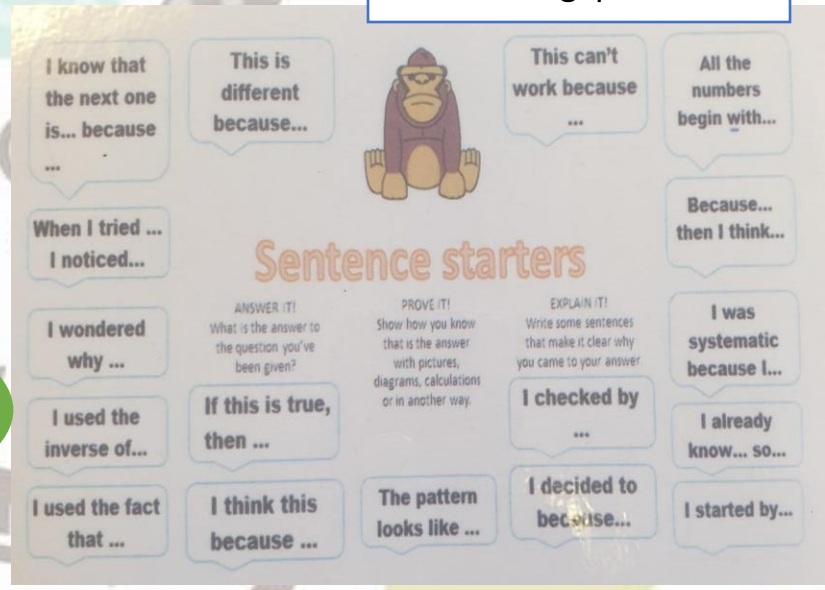



This is a great example of the reasoning questions which children are exposed to and also how they are using pictorial representations to help them answer them



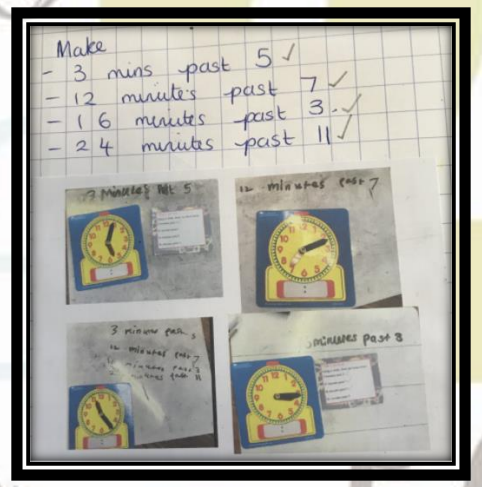

Great use of pictorial representations to evidence conceptual understanding.

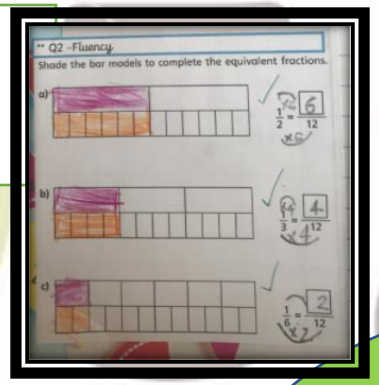
All year 2 pupils are given sentence starters to help them support them when answering reasoning questions



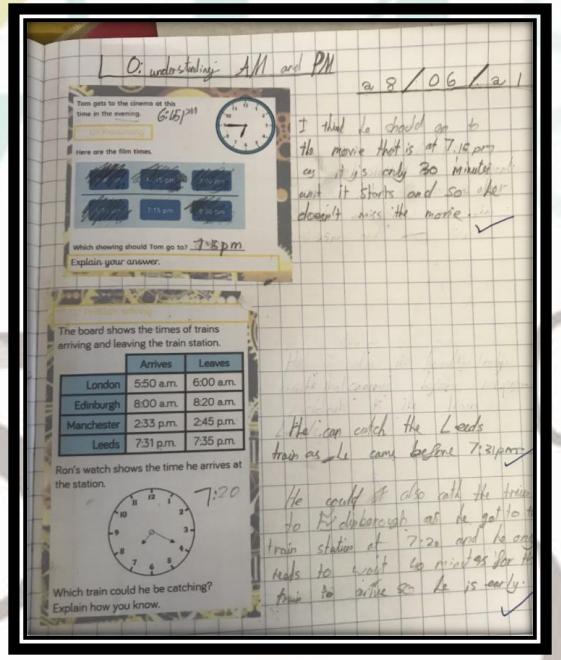
# Year 3

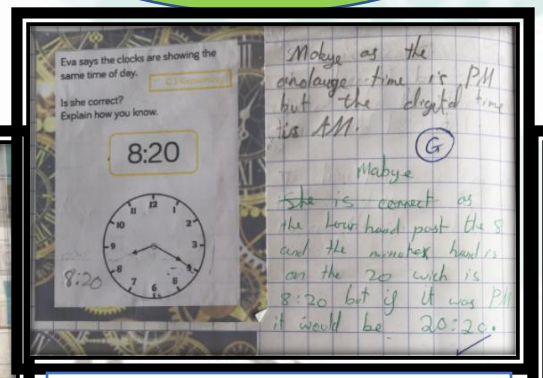
There are a fantastic range of reasoning and problem solving questions across all classes. This allows the children to apply the skills that they have learnt.



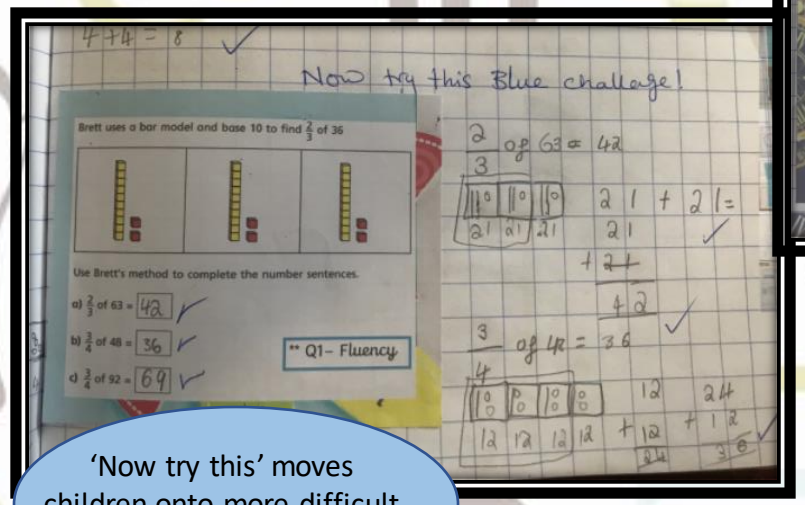




Pupils have the opportunity to use practical/visual resources to complete their work



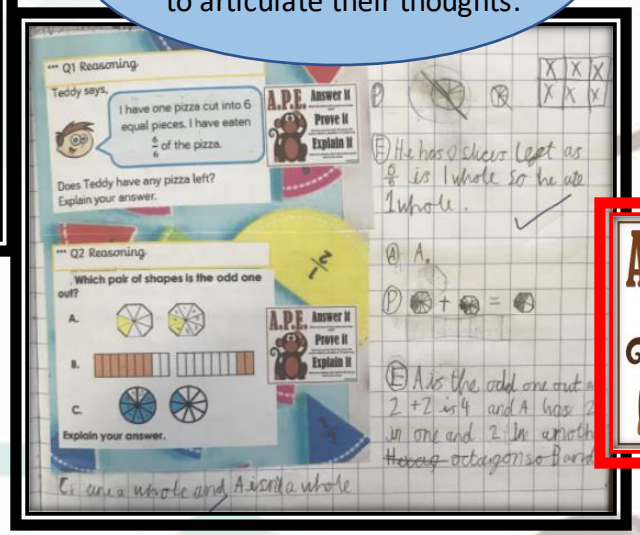



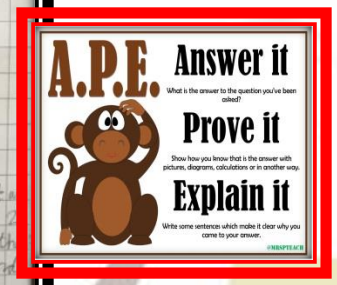

Evidence of APE (answer, prove and explain) has been used to encourage children to articulate their thoughts.



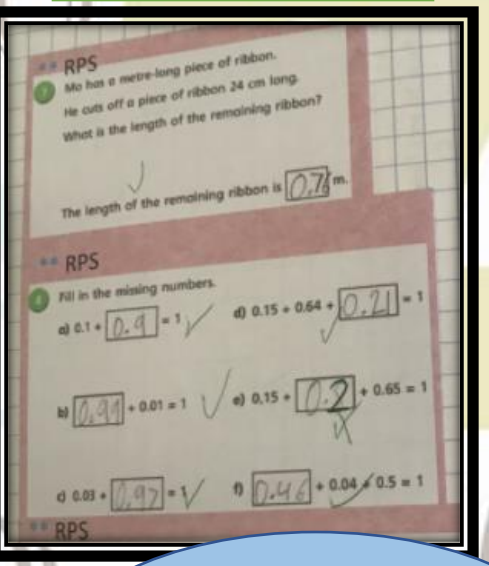

'Now try this' moves children onto more difficult problems!

Errors or misconceptions are addressed to ensure children are secure with their learning.



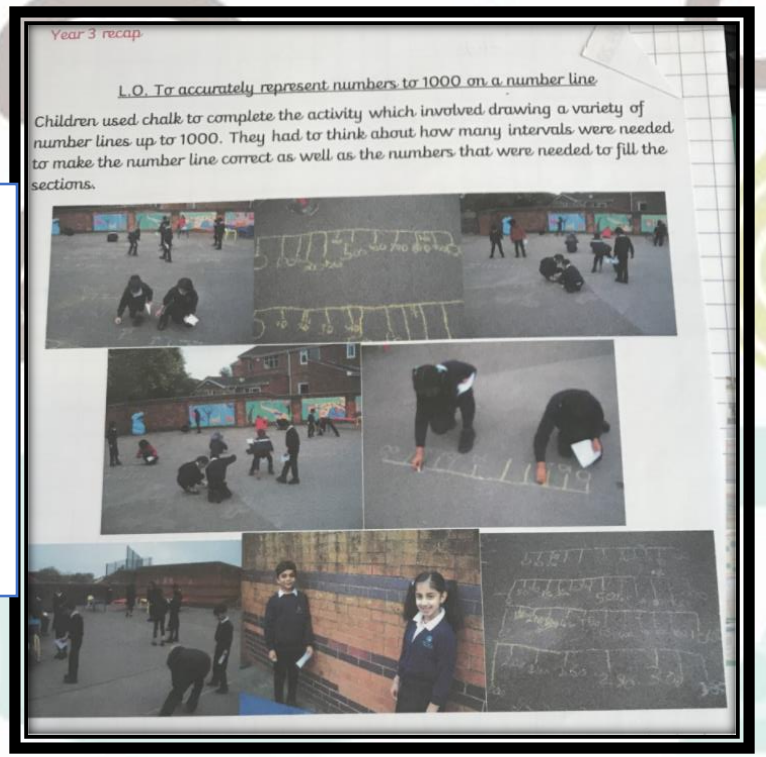



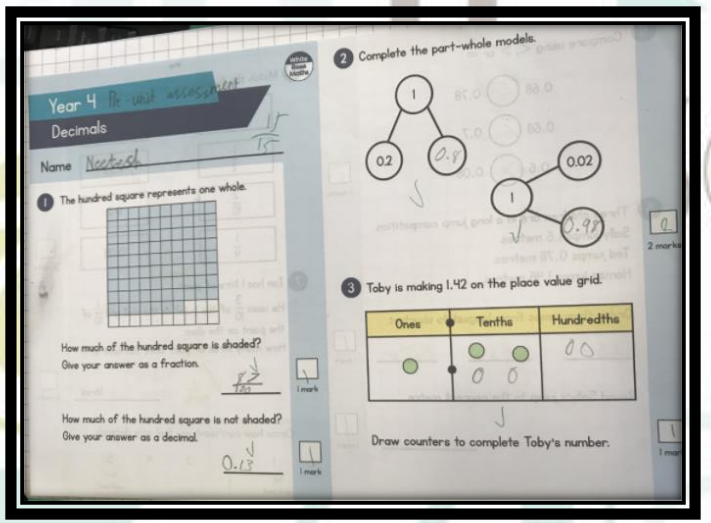
# Year 4



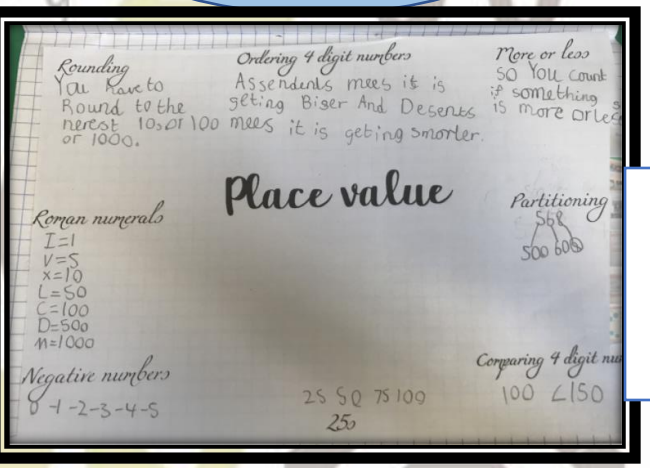

Great evidence of peer marking to allow children to check answers and discuss understanding therefore allowing them to move on.

Children have had the opportunity to take learning outside and practise fluency skills in a fun and practical manner.

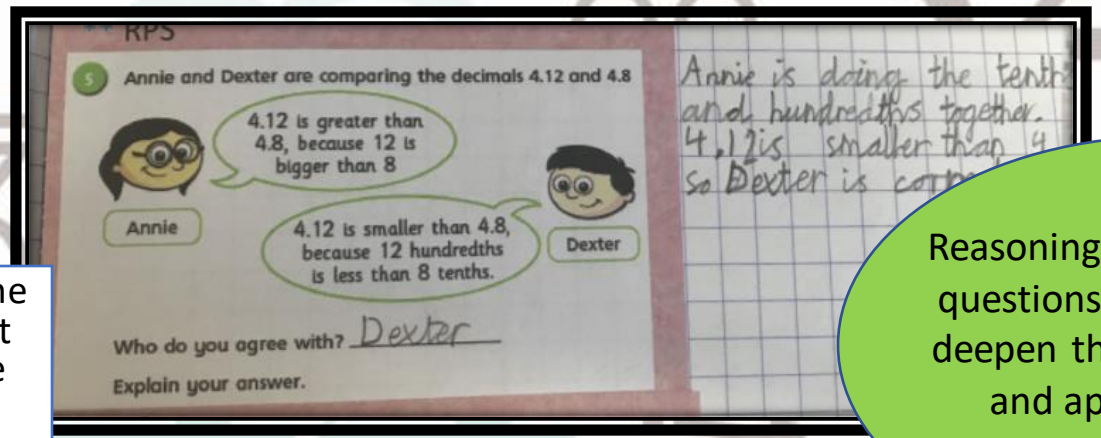



End of block assessments are used to monitor the progress children have made.

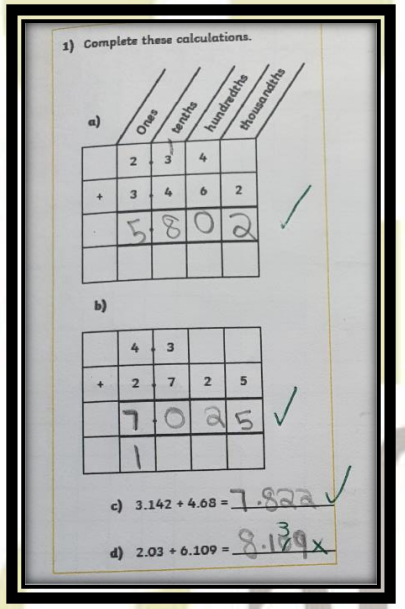



Mind maps are used at the end of each topic so that the pupils can showcase what they have learnt.



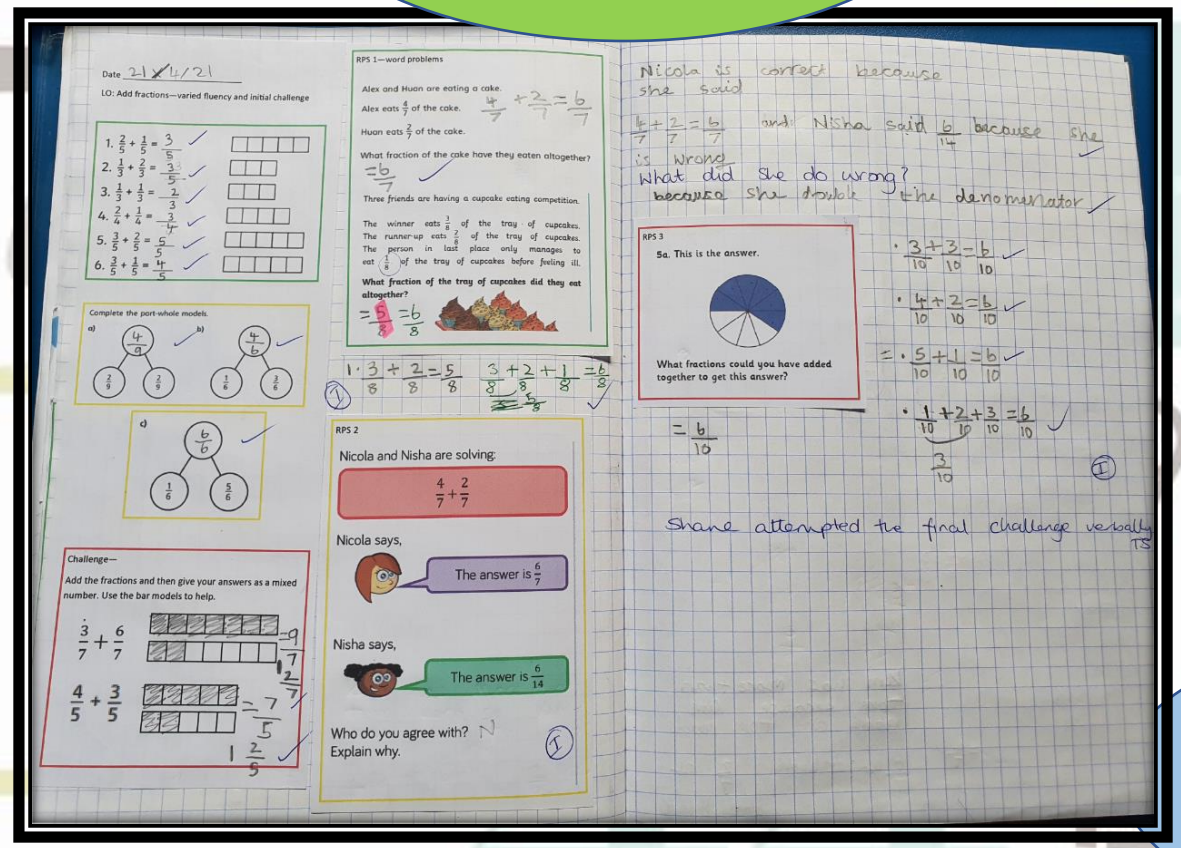

Reasoning / problem solving questions allow children to deepen their understanding and apply their skills.

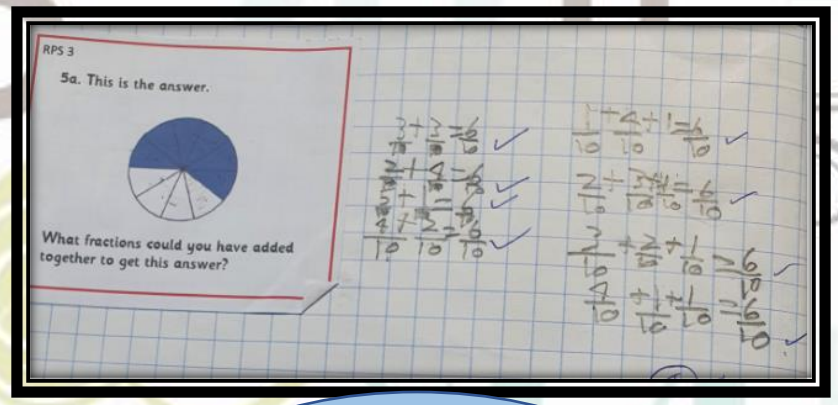
# Year 5




Children have opportunity to peer mark their work.

Children take pride in their books and ensure the presentation is of a high standard!

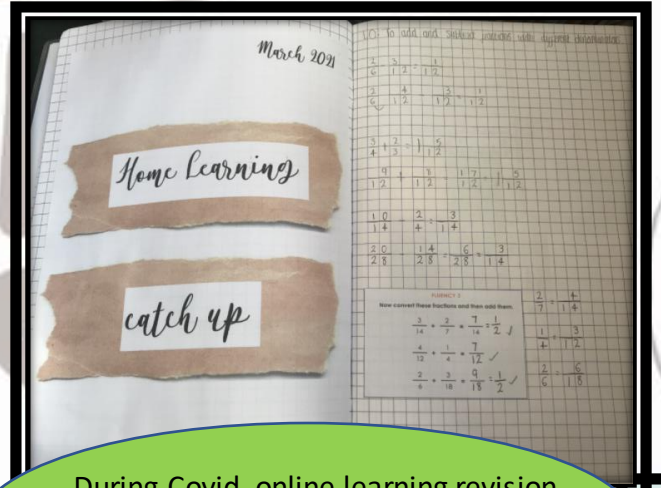



More examples of reasoning and problem solving questions to allow children to deepen their thinking.

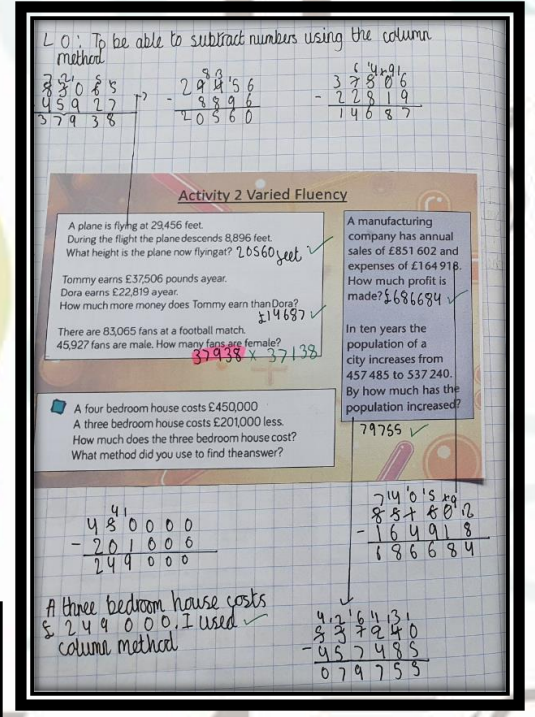
Children work their way through a variety of fluency, reasoning and problem solving questions at their own pace.

# Year 6

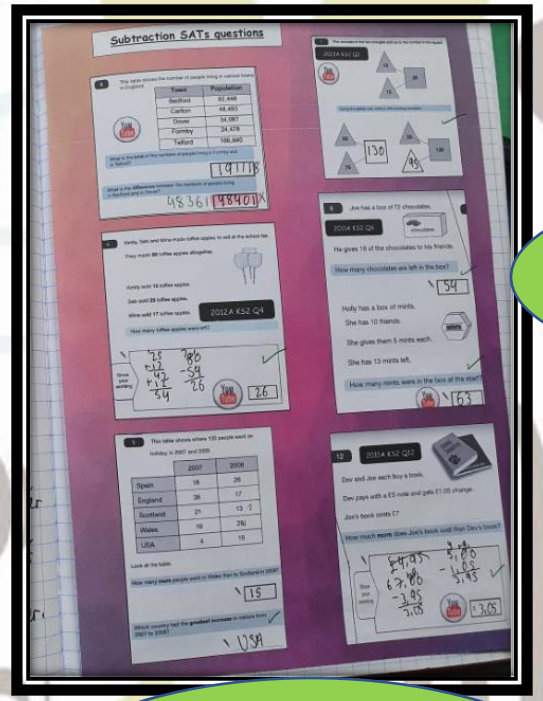



During Covid, online learning revision was carried out to minimise gaps in learning.

Evidence of varied fluency to allow children to practise a skill in different forms. This has been peer marked to allow collaborative working with peers.

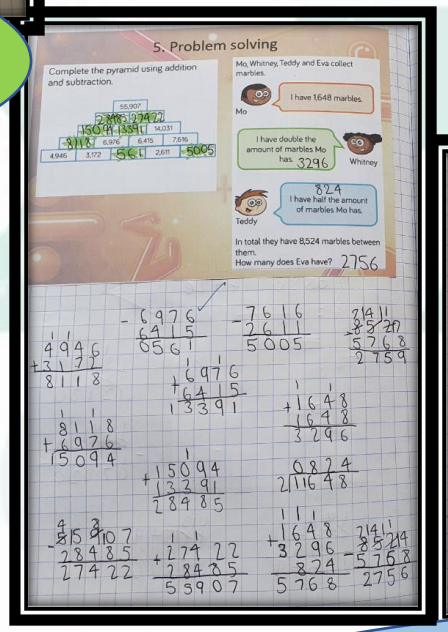


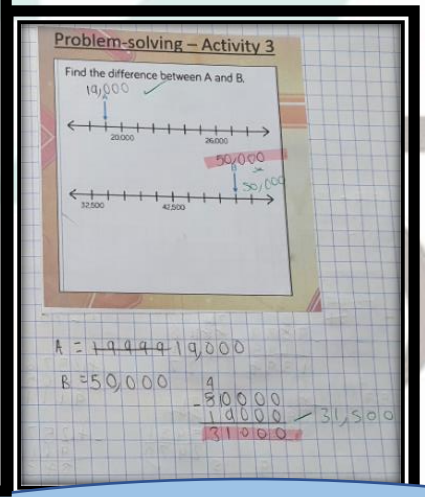

Pink is used to highlight errors/misconceptions which have then been corrected in green.

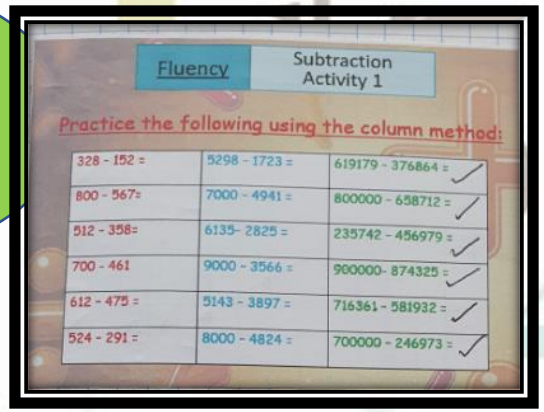



SATs revision has been documented in books to apply skills taught.

Children have the autonomy to choose their questions when they have built the independence to select appropriately. They challenge themselves as they have access to all the questions.



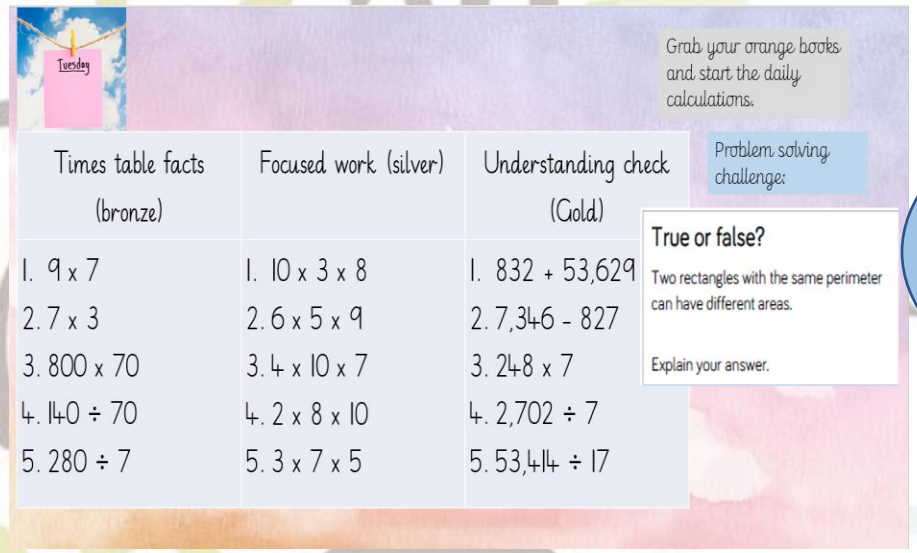

There are a range of investigation problem solving questions which allow pupils to systematically explore the problem and provide mathematical justifications. This allows them to build stronger conceptual understanding of connections between mathematical ideas.

# Daily calculations

'We go through the answers as a class and if I have anything wrong, my teacher shows us how to answer it.'

Daily calculations has many benefits for the children.

1. Ensures a smooth and 'ready for learning' attitude at the start of every day.
2. Children have the opportunity to practise their fluency skills. This can consolidate what they have learnt in class or allows fluency to be done earlier, so a maths lesson can focus on the reasoning and problem solving.


Answers are marked as a class. This allows opportunities to tackle errors, remodel methods and discuss effective methods to use.

Questions get progressively more difficult in order to challenge the pupils.

There is a problem at the end to allow the pupils to be able to articulate their learning and apply their fluency skills to a context.

# Times tables Rockstars

All Children across Abbey took part in a cross trust TT Rockstars competition. Teachers also encouraged the pupils to  set up some competitions within year group so they can get used to how the competitions work.

‘ It is fun because you can learn your timetable in a fun way and time yourself on how quick you can answer the tables.’