



What does 'Maths' look like at Adswood Primary?



1. Curriculum mapping

Our curriculum has been created for our learners. We use a Concrete, Pictorial and Abstract (CPA) approach in maths. Learning follows a clear sequence in each year group and throughout school. White Rose Maths Scheme is used to support teaching and learning. We have 'mapped out' coverage across the school to ensure objectives are revisited often and learning is consolidated.

Whole School Curriculum 2019-2020

Year	Autumn	Spring	Summer
Year 1	Place value within 100, Addition and subtraction within 100, Geometry: shape.	Place value within 100, Addition and subtraction within 100, Length and height, Mass and volume.	Measurements: money, Multiplication and division, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.
Year 2	Place value, Addition and subtraction, Geometry: shape.	Measurements: money, Multiplication and division, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.	Multiplication and division, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.
Year 3	Place value, Addition and subtraction, Multiplication and division A.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.
Year 4	Place value, Addition and subtraction, Measurement: area, Multiplication n A.	Multiplication B, Fractions B, Decimals and percentages, Perimeter and area, Statistics.	Multiplication B, Fractions B, Decimals and percentages, Perimeter and area, Statistics.

Whole School Curriculum 2019-2020

Year	Autumn	Spring	Summer
Year 5	Place value, Addition and subtraction, Multiplication and division A.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.
Year 6	Place value, Addition and subtraction, Multiplication and division A.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.	Multiplication and division B, Measurement: length and perimeter, Fractions: A, Measurement: mass and capacity.

Quality First Teaching in all year groups, a range of questioning strategies, 5 mastery big ideas and the use of weekly SODA, enhance opportunities to develop maths problem solving and reasoning

Making 100

Each jar needs to contain 100 objects.

How many more will you need to add to each container?

Autumn Progression

Number and Place Value	Numbers to 5	One, two, three, Four, Five
Addition and Subtraction	Sorting	Sorting into groups
Number and Place Value	Comparing groups	Comparing quantities of identical objects, Comparing quantities of non-identical objects
Addition and Subtraction	Change within 5	One more, One less
Measurement	Time	My day

We have adapted the White Rose Calculation policy to ensure that the progression of maths is clear throughout the year and key stages and learners previous knowledge is built on.

Maths yearly overview

Autumn Term	EYFS	Year 1	Year 2	Year 3	Year 4
<ul style="list-style-type: none"> Getting to know you Just like me It's me 123 Light and dark. 	<ul style="list-style-type: none"> Place value within 20 Addition and subtraction within 10 Geometry: shape. 	<ul style="list-style-type: none"> Place value Addition and subtraction Geometry: shape. 	<ul style="list-style-type: none"> Place value Addition and subtraction Measurement: money Multiplication and division 	<ul style="list-style-type: none"> Place value Addition and subtraction Multiplication and division A 	<ul style="list-style-type: none"> Place value Addition and subtraction Measurement: area Multiplication n A.
<ul style="list-style-type: none"> Alive in 5! Growing in 6,7,8 Building 9&10 	<ul style="list-style-type: none"> Place value within 20 Addition and subtraction within 10 Place value within 50 Length and height Mass and volume. 	<ul style="list-style-type: none"> Measurements: money Multiplication and division Measurement: length and height Measurement: mass and capacity Measurement: temperature 	<ul style="list-style-type: none"> Multiplication and division B Measurement: length and perimeter Fractions: A Measurement: mass and capacity. 	<ul style="list-style-type: none"> Multiplication and division B Measurement: length and perimeter Fractions: A Measurement: mass and capacity. 	<ul style="list-style-type: none"> Multiplication B Fractions B Decimals and percentages Perimeter and area Statistics.

Year 1 - 6

Calculation Policy

Addition and Subtraction

#MathsEveryoneCan

Our maths lessons are planned from our yearly overviews which allow us to revisit each topic at least once. For instance, as shown in the year 4 curriculum overview they revisit place value 3 times throughout the year. Our learners need to consolidate learning to ensure knowledge is retained.

Maths yearly overview

Summer Term	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> To 20 and beyond Fast, then, now. Find my path, On the move. 	<ul style="list-style-type: none"> Multiplication and division Fractions, Statistics. Geometry: position and direction. Place value within 100. Measurement: money, Time. 	<ul style="list-style-type: none"> Fractions, Measurement: money, Statistics. Geometry: position and direction. 	<ul style="list-style-type: none"> Fractions B, Measurement: money, Measurement: length and height, Statistics. 	<ul style="list-style-type: none"> Decimals B, Measurement: money, Measurement: length and height, Geometry: shape, Statistics. 	<ul style="list-style-type: none"> Measurement: area, Statistics, Multiplication and division. 	<ul style="list-style-type: none"> Geometry: shape, Geometry: position and direction, Decimals, Negative numbers, geometry: consolidation and problem solving. Measurement: volume. 	<ul style="list-style-type: none"> Geometry: shape, Geometry: position and direction, Fractions, Consolidation and problem solving.

2. Learner voice

Pupil Voice of Mathematics

Name: Lola Allen

Year Group: Y5

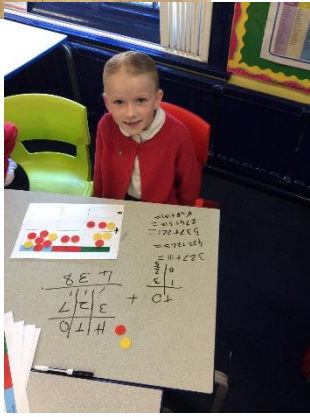
1) I enjoy mathematics lessons	😊	😊😊	😊😊😊
2) I use mathematics outside of school	✓	✓	✓
3) I want to do well in mathematics	✓	✓	✓
4) I know how to improve my mathematical understanding	✓	✓	✓
5) I go outside to do maths	✓	✓	✓
6) My mathematics teacher explains things clearly in lessons	✓	✓	✓
7) I use the maths display in my classroom to help me	✓	✓	✓
8) I use the mathematics resources in my classroom to help me	✓	✓	✓
9) I am proud of the mathematics work that I produce in lessons	✓	✓	✓
Extra comments:	No.		

We discuss with learners what maths learning looks like in their classroom. We want all our learners to have a voice and to be heard. We use learner voice to impact on the way we teach maths in our school. For those learners who struggle with maths, we want to find out how they would like us to help them to make progress and enjoy their learning.

Learners voice informs staff that learners are enjoying their maths lessons and are engaged.



3. Adaptive Teaching



At Adswood Primary the teaching of **Maths** is **inclusive** through **quality first teaching** and adaptive teaching. We are following the mastery approach. Provision for learners is **age appropriate** and follows the CPA (concrete, pictorial, abstract) approach. **We use the NASENCO handbook to assist learning** while our SEN Support plans outline specific targets for our learners with additional needs. All learners at Adswood complete a **'One Page Profile'** to let their staff teams know how they learn best and what support they might need.

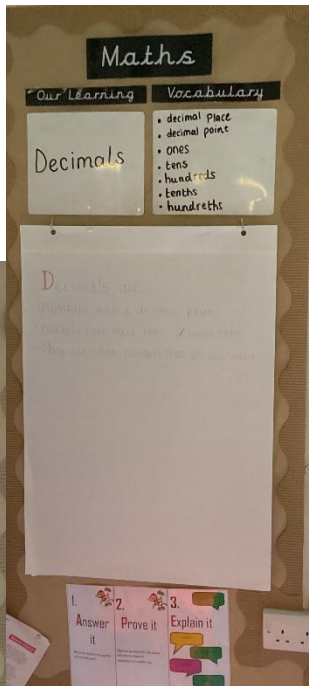
In addition we offer support through:
 Multisensory approaches to learning
 Use of iPads (videoed)
 Friday consolidation/pre-teaching for the following week.
 Friday group with learners still unsure on their learning from that week.
 Speech and language (SALT)
 Learning Support Service (LSS)
 Word Aware (Vocabulary)

4. Learning environment

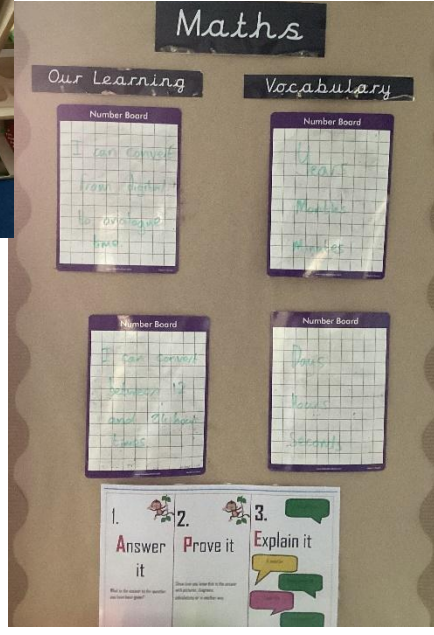
EYFS



KS2

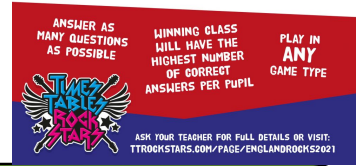


KS1/LKS2



5. Opportunities to celebrate Maths.

The school is proactive in attending competitions to promote maths. It starts in November with Maths week England. We take part in the competitions online - such a Mathletics. We also aim to explore Maths through stories this week. In February we take part in the NSPCC number day in which all classes are asked to choose one competition to enter online. Throughout the year we take part in Timestable Rockstar battles between classes and year groups .



Every year as a school we take part in National Number Day. This encourages learners to focus on Maths for a whole day exploring maths in all different lessons through various activities.

We are competing in the 'Times Table Rock Stars' competition against 2000 other schools. This means the learners need to answer as many as possible questions correctly within a week to score points!

6. Cross curricular Maths.

We have had exciting opportunities where maths learning out of school is enhanced. Examples include: Cook for life, Local Walks and theme weeks.



We also use maths throughout the curriculum we incorporate it into our Geography destinations, timelines, Science -statistics, P.E - measuring, counting. EFYS even display maths through snack time. We also aim to help with their use motor skills united within maths.





Colombia 🇨🇴

They speak Spanish 🦁

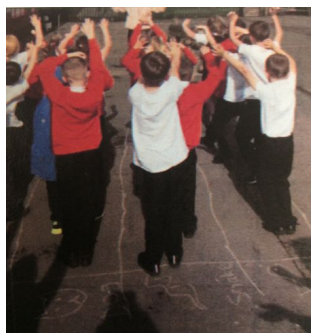
It takes 13hours and 30 minutes to go there!

This is their symbol!




7. Learning beyond the classroom

Where possible, we aim to lift Maths off the page and bring it to life for our learners. This begins in EYFS with maths outdoors, maths during snack time e.g. counting one more one less with their yogurts and in the willow garden.



We introduced the mastery CPA approach in order for learners to visually see maths. All learners are provided with maths challenges in their home learning to take home. Parents/Carers are encouraged to communicate with the staff team about how the learners are attempting their maths challenges.

8. Challenges to deepen learning

Our school vision, 'Enjoy. Believe. Achieve' is evident through our additional challenges for learners. Some set verbally as a result of daily formative assessment, others available through 'Challenge' areas within the classroom, we enjoy seeing our learners challenge themselves to achieve more. Each half term, learners are set 'Home Learning Challenges' aimed to deepen learning. These challenges may be completed independently or with support from someone outside of school.



Year 6 Home learning Challenges

Autumn 1

<p>Quiz Task:</p> <p>Produce a multiple choice quiz about the Amazon rainforest. Could be a board game, top trumps, Kahoot etc.</p> <p>Test your friends and teachers!</p> <p>10</p>	<p>Celebrity 'Come dine with me':</p> <p>If you could invite 10 famous/significant people (both past and present) to dinner party, who would you invite and why?</p> <p>10</p>	<p>Active Adswood Task:</p> <p>As part of 'Bike to school week' (23rd September), produce a poster/leaflet highlighting the physical benefits of riding a bike and how to keep safe when cycling.</p> <p>10</p>
<p>Apps in Stockport task:</p> <p>Summer frogs have led into Stockport. Have been asked to sign a frog to represent Adswood Primary school, what would you include?</p> <p>10</p>	<p>Life Cycle task:</p> <p>Choose a species of animal which can be found living in the Amazon rainforest. Produce a piece of work which illustrates its life cycle.</p> <p>10</p>	<p>Perfect Packed Lunch Task:</p> <p>Create a lunch box packed with nutritional food and drink. Attach a label to each item stating its nutritional benefits to the human body.</p> <p>10</p>



Within the EYFS classrooms we have 'Challenge areas' We enjoy seeing our learners challenge themselves. Challenge areas often link to maths in everyday life. We have introduced 'APE' KS1 and KS2 this is when children have to 'Answer it, Prove it and Explain it' to deepen their understanding of the question.

1. **Answer it**

What is the answer to the question you have been given?

2. **Prove it**

Show how you know this is the answer with pictures, diagrams, calculations or in another way.

3. **Explain it**

I noticed that...

It must be...

I already know that...

I used the...

I checked by...

9. Self- Assessment



Where possible, we aim to allow learners to self-assess their own work in order for them to see where they have made errors and self correct them. This is displayed in our marking and feedback policy and will be labelled in learners books as SA.

Staff will monitor self-assessment in books.

I	Independent learning
TS	Teacher supported learning
V	Verbal feedback
SA	Self-assessment
PA	Peer-assessment
∅	Zero Tolerance targets need to be checked
Green	Learning objective met/correct
Orange	Working towards meeting learning objective
Pink	Learning objective not met/incorrect



In the Maths area we have 'help yourself' baskets. These allow learners to take concrete resources to aid their learning. This teaches the children to understand what helps them learn.

10. Staff CPD

0 1 3 6	3 5 7 8
Total between 300 and 400	Total between 400 and 460
<input type="text"/> + <input type="text"/> 0 = <input type="text"/>	<input type="text"/> + <input type="text"/> 0 = <input type="text"/>
Difference between 100 and 150	Difference between 650 and 675
<input type="text"/> - <input type="text"/> 0 = <input type="text"/>	<input type="text"/> - <input type="text"/> 0 = <input type="text"/>
1 2 5 6	2 5 8 8
Total between 200 and 220	Total between 330 and 340
<input type="text"/> + <input type="text"/> 0 = <input type="text"/>	<input type="text"/> + <input type="text"/> 0 = <input type="text"/>
Difference between 150 and 175	Difference between 770 and 780
<input type="text"/> - <input type="text"/> 0 = <input type="text"/>	<input type="text"/> - <input type="text"/> 0 = <input type="text"/>

In order to provide staff with CPD we have joined the North West Maths Hub. This has given staff the opportunities to take part in CPD in different areas of Maths from Number work to pedagogy of Maths.

We invited a speech and language specialist to host a staff meeting to help us with learners vocab this is not only needed in English, but a necessity in maths. This is in its infancy. Following the visit we received resources we can adapt to suit our learners to aid their problem solving and reasoning skills and increase their understanding of maths vocabulary.

As a subject lead I attend courses led by the LA, cluster and externally. Feedback from courses is delivered to staff. An ongoing CPD programme for maths is in place,

A group of teaching assistants have taken part in the North West one Maths Hub TA Maths specialist course, this gave them strategies to use during interventions.

The calculation policy is a tool to reduce teachers workload, whilst using this we also invested in 'White Rose maths' online resources to reduce teacher workload, when planning the pictorial aspect of the calculation policy. As a subject lead I have drop in sessions in the school diary to answer any questions about maths that staff may have, all year round I have an open door policy.

