Maths / English

## KS1

Curriculum



## Building solid foundations

## Year 1

Place Value within 10

+ \& - within 10
Shape (3D and 2D)
Place Value within 20
+ \& - within 20
Place Value within 50
Length and Height
Weight and Volume
Multiplication and Division (skip counting)
Fractions (finding $1 / 2$ )
Position \& Direction
Place Value to 100
Time


## Year 2

Place Value within 100

+ \& - within 100
Money
Multiplication and Division $(2,5,10)$
Statistics
Shape
Fractions $1 / 4,1 / 2,3 / 4$ )
Length and Height
Position and Direction
Time
Mass, capacity and temperature


## Proficiency in maths -

- Children require a lot of repetition to secure understanding.
- Children are given strategies to help them to be successful - oral chanting, concrete resources to see the maths, rolling numbers. These are all simple strategies.
- Mental calculations develop from this, they still need some thinking time but have a good strategy to think this through.
- Achieving fluency in maths - they just know the answer and can explain their strategy in answering.


## Representation and structure

- In maths lessons children will continue to use a range of strategies to secure their understanding and deepen their knowledge. Phases of this are CPA (Concrete, Pictoral and Abstract)


Representation and structure combines discussion and explanation. We give children stem sentence structures to support their understanding and make connections. For example " 7 is made of 4 and 3,3 and 4 make 7."
We encourage children to make connections through finding patterns and familiar structures.

If your child is mirroring their numbers, encourage your child to use a vertical line.
Numbers 1-7 should always be to the right of the line, using the line as a grounding point. 8 sits in the middle. 9 is the only number that faces left. Drawing your child's attention to this along with practise and correction will help to prevent mirrored numbers.

## The forgetting curve

- If we review something once a week the average person will remember $10-15 \%$ the following week when it is revisited.
- If we review something 3-4 times a week the average person remembers 80\%
- Home learning.
- Children will use Maths.co.uk as part of their home learning, teachers will supply all passwords. (reviewing learning from lessons)
- NumBots - to develop arithmetical proficiency in maths supporting the development of fluency of number.


## Opportunities to develop maths at home

- Talk
- Be active (explore, notice, bake together, shop together, DIY, handle money, talk about the time... a lot!
- Read stories with your child*
- Securing skills (through practice and games)
- School website to support practicing skills look at your child's year group for additional information


## And play ...

Puzzles
Lego
Blocks
Card games (matching, counting)
Connect 4
Shape games
Building / make / design / measure

Supporting logical thinking ...

## Time

Reading the time but also ...


Days of the week (what came before, what's coming next)
Months of the year (what came before, what's coming next)
Points during the day: day time, night time, dawn, morning, noon, afternoon, evening.
Turns (rotation), clock wise / anti clockwise
A quarter turn, a half turn, three quarter turn, whole turn.
Counting in 5 s (rolling numbers)

## NumBots

By the end of Year 2 children need to be fluent with their number facts to 20.
NumBots is an online game, playing little and often will significantly develop children's recall and understanding of number bonds and addition and subtraction facts.
They are critical foundations in maths.

## Game Types

1. Story Mode - the emphasis is on learning the ideas and concepts behind addition and subtraction so it features more diagrams, shapes and question styles.
2. Challenge Mode - the emphasis is more on speed of recall of key facts, like number bonds to 10, doubling small numbers or adding \& taking away in your head.

## White Rose Maths

- Free app
- Focus on subitising, addition and subtraction.
- (Multiplication and division Spring onwards in Y2)



## Everyone can be a mathematician!



## Stories with mathematical links

- Traditional stories with contexts for calculating
- Red Riding Hood's Math Adventure by Lalie Harcourt
- A Fair Bear Share by Stuart J Murphy
- The Doorbell Rang by Pat Hutchins
- How Many Legs by Kes Gray
- The Very Hungry Caterpillar by Eric Carle,
- One is a Snail, Ten is a Crab by April Pulley Sayre,
- More or Less? By Stuart J Murphy,
- Equal Scmequal by Virginia Kroll
- Jim and The Beanstalk by Raymond Briggs
- Goldilocks and the Three Bears
- We are going on a bear hunt by Michael Rosen
- Rosie's Walk by Pat Hutchins
- Marvin Weighs In by Dave Browning
- The Time it Took Tom by Stephen Tucker
- What's The Time Mr Wolf? By Debi Gliori
- Cluck O' Clock by Kes Grayliens
- Dinosaurs Love Underpants by Claire Freedman
- Day and Night (Patterns in Nature) by Margaret C Hall
- Captain Invincible and The Space Shapes by Stuart J Murphy
- The Shape of My Heart by Mark Spee
- The shape game by Anthony Browne
- Dice Games - are fun, easy to play and a great way of practicing maths skills. For a compreshensive list of traditional dice games have a look at
https://en.Wikipedia.org/wiki/List of dice games
- Playing Card Games - games with playing cards can be a great way to help your child develop a wide range of maths skills from number recognition to decision making. Playing games like Snap or Pairs can be a great way to engage younger children, whereas Uno or Top Trumps might appeal to slightly older children. For a list of card games for you to try, take a look at www.primarygames.com/puzzles/card games.php
- Puzzles and problems - Spot the difference, Dot-to-Dot, painting by numbers, Sudoku and crossword puzzles can also be great ways to develop your child's number awareness and problem solving skills.
- Construction games / board games / making your own board game / maths songs and rhymes / maths story books / online maths games

At Whitehouse we are passionate about creating a wellrounded curriculum for your child. By the time they leave KS2, the subjects of English and Maths are closely linked. This question, while not for KS1, is an indication of how Maths becomes very language focused as they go up through the school.
"The best readers are often the best mathematicians"

## Reading

Q3 Bags of parsnips weigh 3.45 kg each.
A restaurant orders 4 of these bags and then the chef uses 2.35 kg of the parsnips on the day they are ordered.

What mass of parsnips is left?

This is an incredibly famous book, known and loved by many. Did you know the Author was actually a professor of Maths at Oxford University?


## Reading at School

## Phonics BeadWitierne

Learning sounds - decoding and encoding
https://home.oxfordowl.co.uk/ reading/phonics/

Assessed every half term

## Reading at School

Phonics Read Writorna<br>Phonics

## Learning sounds - decoding and encoding

Assessed every half term

Reading skills lessons


## Reading at School

## Reading skills lessons

- Exposure to a range of different authors and text types
- High quality texts- 'The five plagues'
- Discussion based


Retrieval
Prediction
Inference
Authorial intent
Word meanings


## Doug Lemov's Reading Reconsidered 5 Plagues of the developing reader

## Misleading/Narratively Complex

Books are sometimes narrated by an unreliable narrator e.g. the horse that tells the story in Black Beauty. Some books have multiple intertwined and apparently (for a time) unrelated plot lines. These are harder to read than books with a single plot line.

Figurative/Symbolic e.g. The Lion, the Witch, and the Wardrobe. These texts happen on a symbolic level and offer complexity.

## Resistant Text



These are texts written to deliberately resist easy meaning-making by readers. It requires the reader to assemble meaning around nuances, hints, uncertainties and clues.

## Archaic Language

The vocabulary, usage, syntax and context for cultural reference of texts over 50 or 100 years old are vastly different and typically more complex than texts written today. Students need to be exposed to and develop proficiency with antiquated forms of expression.

## Non-Linear Time Sequences



Books where aspects of the narration are nuanced to create an exact image, time moves in fits and start. It often doubles back.


## READ 15!

## Reading challenge for ALL our learners at Whitehouse!

- Broaden our reading offer even further!
- Celebrate a wide range of genres and authors
- Encourage children to discover new interests/preferences
- Encourage children to identify with the books they read
- Learn to read for pleasure
- Read to learn
- Be inspired!


## Reading at Home

1) Phonetically decodable reading book Independent
2) 'Chatty book’

A book to share with a grown-up and talk about
3) Library book

A book to share with a grown-up and talk about

Reading at Home Try and read it aloud to yourself.
This is to give you a sense of the process your child is going through
now when decoding letters. Every
bit of help we can give, at home
Phonics and at school, is so important.

## "Ti saw on derbhguoroht. Tub ti dah kcuts ot sti tsop - ekilnu eht rehto step. Yeht dah deraeppasid nehw eht elbuort nageb. Won yeht erew no eht tops. Yeht erew deppart"

## Home Learning

- Reading frequency: At least 3 days per week, with an adult
- Phonics book out on a Friday, back on a Thursday.


## Home Learning

## Spellings

Children will be taught phonetical spellings daily in RWInc lessons. Spelling Shed, another exciting online platform, will also be used to help the children to learn spelling patterns in a more engaging way. Every week, they will learn new spelling rules and words, building on their prior knowledge. They are then expected to practise these spellings via their assignment on the Spelling Shed app or website, ready for their weekly check where they will get the chance to test their knowledge. This practice should be 5-10 minutes, 3-4 times a week. Year 1 children will also be given a keyword book with activities to support
both their reading and spelling at home.

## Home Learning

## Handwriting

At Whitehouse Primary, we teach cursive handwriting using the Letterjoin script. Handwriting is regularly practised throughout the week in dedicated lessons, so the children are familiar with the correct letter formation. Any writing at home should follow the same handwriting style and parents can log onto the Letterjoin site to access resources and guidance using the following login details:

## Other ways to support...

- RWI tutorials
- Suggested question stems
- Free ebooks
- Spelling Shed
- Audiobooks online

Supporting Your Child with Reading in KS1 /IV house Sugqested Questions

## Prediction

What do you think will happen next?
What do you think this book/chapter will be about? How do you think this will end?
Can you think of any other stories that start this way?
How do they end? Do you think this wil end the same way?

## Relrieval

How did the story end?
Who is/are the main characters in the story?
Is there a good/oad character? Whe is it?
How can you tell?
13 What happened vihen...?

Exploring vacabulary
What aces this word/sentence tell you about $?$
Why did the author use the word... to describe...? How does this vord/description make you feel? can you think of another way of saying...?
can you give another sentence with the word... in it?
Can you find any adjectives used to describe...?

U3 What do you think...is think/feeing at this point in the story?

$$
\begin{aligned}
& \text { Why do you think this? } \\
& \text { How did you feel when. }
\end{aligned}
$$

How did you feel when...?
What kind of choracter is...
What can we guess obout vihere/when this is taking place? What do you think the word ... means?

# Aspire, Believe, Achieve... Together 

Thank you for your support! Maths

