



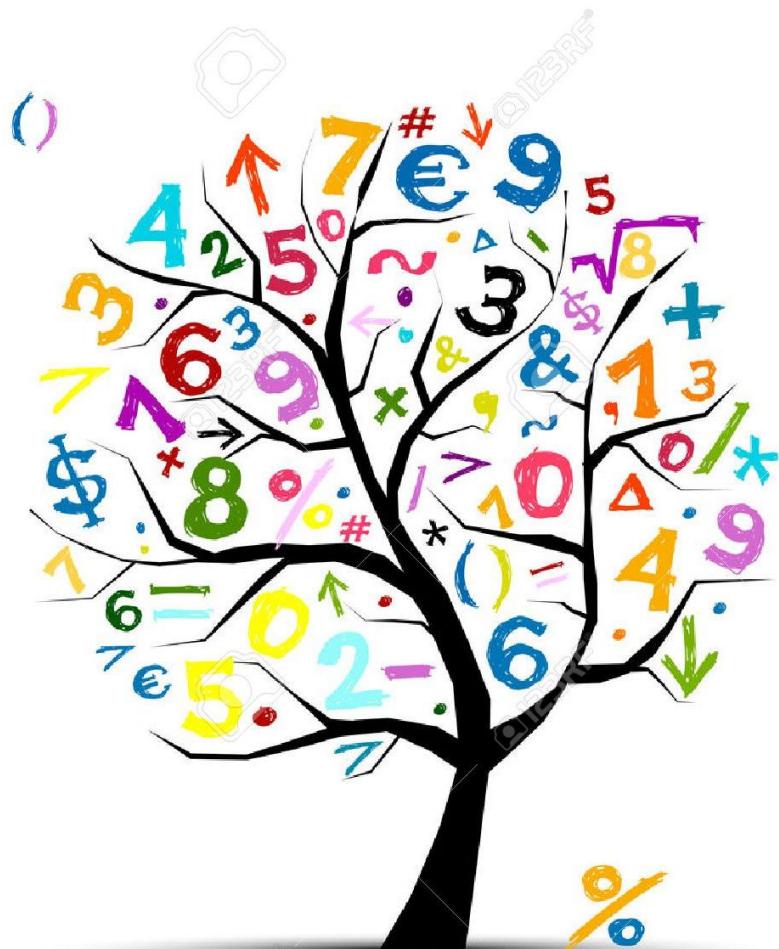
Year 1



to Year 6

Aims

- Talk about the curriculum and aims for your pupils in school.
- Demonstrate how learning progresses across KS1-KS2.
- Give tips and aims to help your children at home.



Maths

The Maths Curriculum

Fluency

pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

Reasoning

finding relationships and generalisations, and developing an argument, justification or proof using mathematical language

Problem Solving

applying their mathematics and breaking down problems into a series of simpler steps and persevering in seeking solutions.

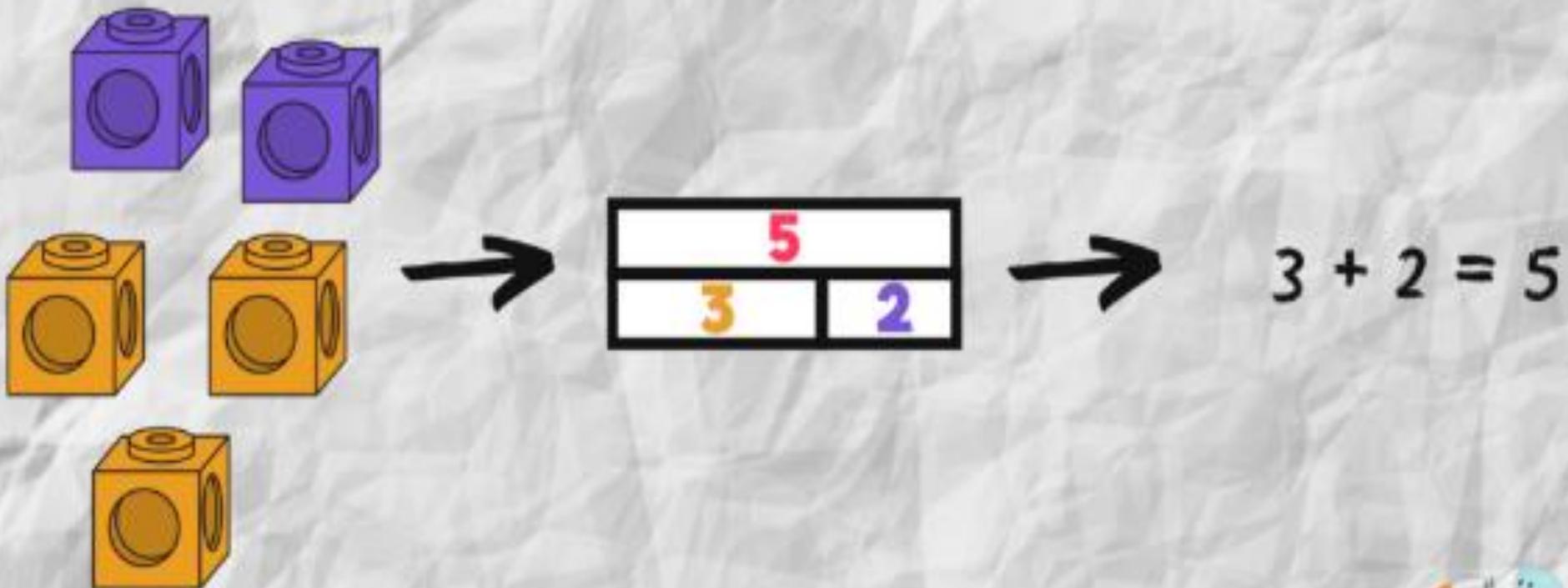


Has maths changed?

- A short ‘how to’ guide providing information on how you can help your child
- <https://whiterosemaths.com/mathsWithMichael#watch>

To develop number sense we explore maths using concrete resources following to pictorial representations leading to abstract.

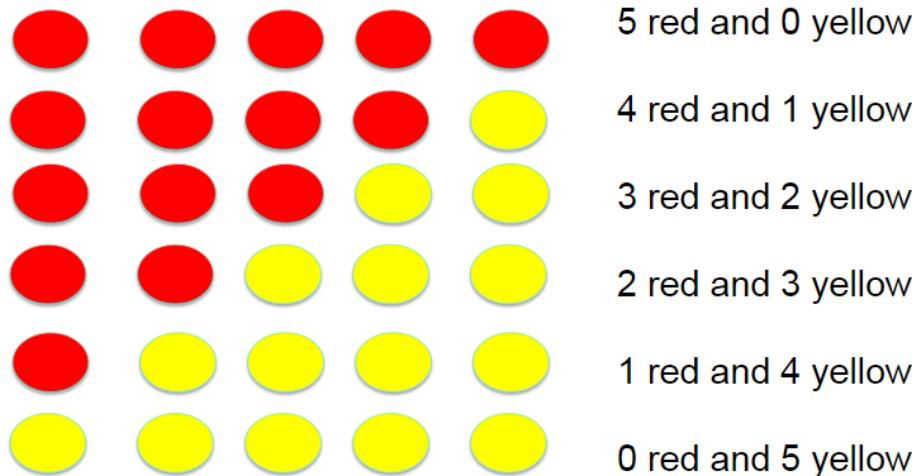
Concrete Pictorial Abstract



Fluency

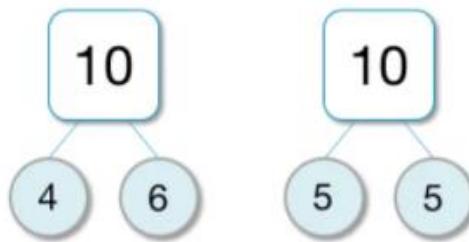
- It is important that children recognise number bonds, different pairs of numbers with the same total and that they are fluent in this.

How many ways to make 5?

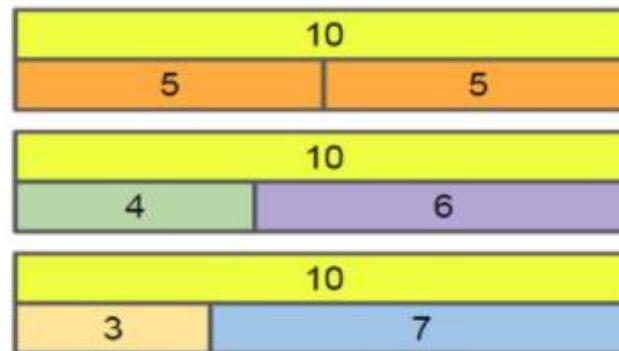
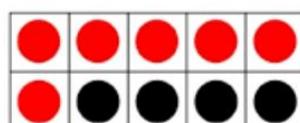
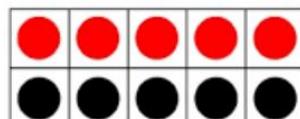
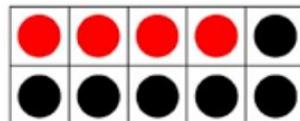


- Children should be secure on bonds to 10 by the end of Year 1 and bonds to 20 by the end of year 2.

Bonds to 10 & 20



We use these different ways to represent number facts.

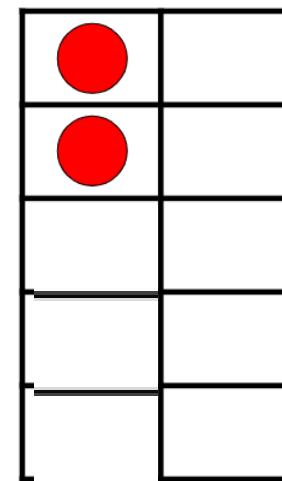
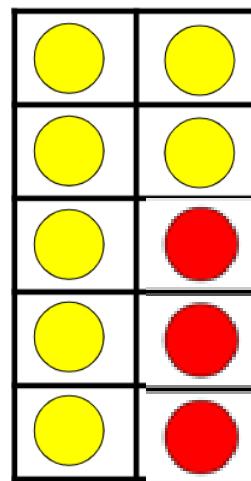


- Once children are secure on number bonds they are then able to apply this to derive number facts.

Using known facts.

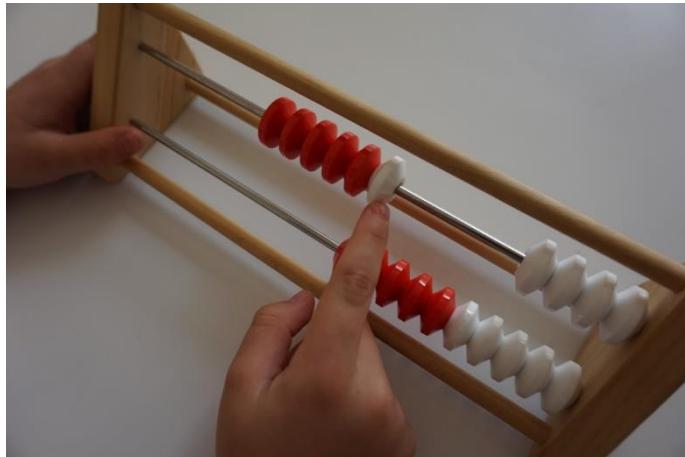


What facts do you need to solve $7 + 5$?



EYFS and Year 1 and 2 are involved in the Mastering Number Project. The aim of the project is to develop fluency and number sense.

The teachers will deliver a daily session of 10-15 minutes in addition to their maths lesson. The rekenrek, shown below, is a visual resource that will be used to deliver the sessions.



The following link shows how the rekenrek is used.

<https://vimeo.com/551982402>

In year 2, children will become more familiar with the 100 square and use it to answer questions such as:

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

- What is 1 more than/ 1 less than 26
- 10 more than/10 less than 32
- Find a number greater than 48
- Find a number less than 62
- Is 53 odd or even?



Number Line

$48 + 36 = 84$



Partitioning

$$\begin{array}{r} 47 = 40 + 7 \\ +76 \quad 70 + 6 \\ \hline 110 + 13 = 123 \end{array}$$

Column Method 258
H T U $+ 87$
Adding the tens first. 345
Adding the ones first. 11

100 Square

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

The Grid

$$38 \times 7 = (30 \times 7) + (8 \times 7) = 210 + 56 = 266$$

x	7
30	210
8	56
	266

Short Multiplication

$$\begin{array}{r} 38 \\ \times 7 \\ \hline 266 \end{array} \qquad \begin{array}{r} 38 \\ \times 7 \\ \hline 210 \end{array}$$

3 x 2

$$\begin{array}{r} 56 \\ \times 27 \\ \hline 1120 \quad 56 \times 20 \\ 392 \quad 56 \times 7 \\ \hline 1512 \end{array} \qquad \begin{array}{r} x \quad 20 \quad 9 \\ \hline 200 \quad 4000 \quad 1800 \\ 80 \quad 1600 \quad 720 \\ 6 \quad 120 \quad 54 \end{array}$$

Methods for 2-digit by 2-digit products

$$\begin{aligned} 43 \times 6 &= (40 + 3) \times 6 \\ &= (40 \times 6) + (3 \times 6) = 240 + 18 = 258 \end{aligned}$$

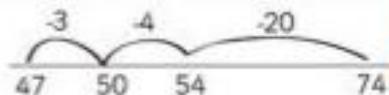


Partitioning

$$87 \div 3 = (60 + 27) \div 3$$

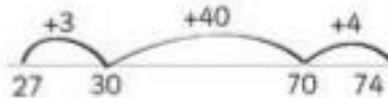
Number Line

$$74 - 27 = 47$$



Counting up

$$74 - 27 = 47$$



Partitioning

$$74 - 27 = 74 - 20 - 7 = 54 - 7 = 47$$

$$74 - 27 = 70 + 4 - 20 - 7 = 60 + 14 - 20 - 7 = 40 + 7$$

Expanded Method

$$\begin{array}{r} 500 + 60 + 3 \\ - 200 + 40 + 1 \\ \hline 300 + 20 + 2 \end{array} \qquad \begin{array}{r} 563 \\ - 241 \\ \hline 322 \end{array}$$

Chunking

$$\begin{array}{r} 72 \div 3 \\ 24 \text{ lots of } 3 \end{array}$$



Short Division

$$\begin{array}{r} 20 + 7 \\ 3 \overline{) 60 + 21} \end{array} \qquad \begin{array}{r} 27 \\ 3 \overline{) 81} \end{array}$$

Long Division

$$\begin{array}{r} 23 \\ 24 \overline{) 560} \\ - 480 \\ \hline 80 \\ - 72 \\ \hline 8 \end{array} \qquad 23 \text{ R } 8$$

Partitioning

$$\begin{aligned} 87 \div 3 &= (60 + 27) \div 3 \\ &= (60 \div 3) + (27 \div 3) \\ &= 20 + 9 = 29 \end{aligned}$$



We use the Power Maths scheme.

Power Maths is a growth mindset approach to **maths** and focuses on helping all children to build a deep understanding of **maths** concepts.



For the four operations, addition, subtraction, multiplication and division, we follow the Power Maths calculation policy.

<https://www.pearsonschoolsandfcolleges.co.uk/Primary/Mathematics/Complete-Schemes/Power-Maths/power-maths-calculation-policy.aspx>

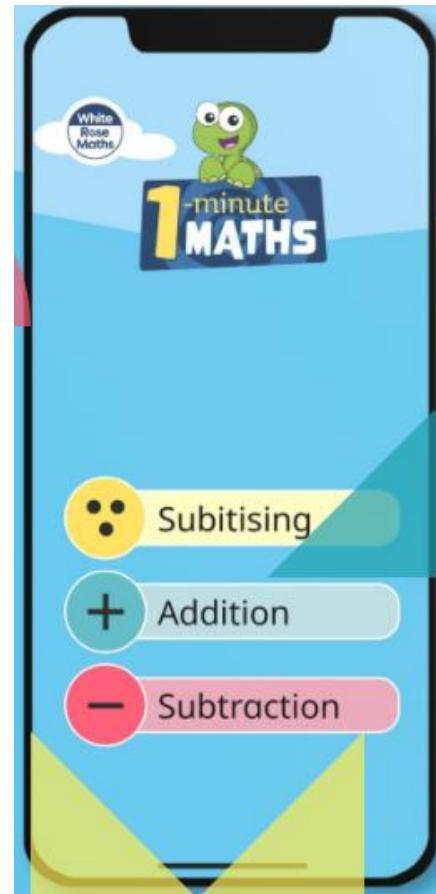
White Rose is a scheme that works well alongside Power Maths. These parent workbooks are an excellent resource to see how your child learns maths at school. You can access the resource by following the link below.



<https://whiterosemaths.com/for-parents/parent-workbooks/>

White Rose App

- It's 1-Minute Maths
- For use both in class and at home
- The first version of the app is aimed at FS & KS1
- Great for fluency





From year 2, children have a Times Table Rock Stars login.

The aim is for children to learn all the multiplication tables up to 12×12 by the end of year 4. The Multiplication Tables Check takes place in June for Year 4 pupils.

It is important for children to continue practising the times tables in year 5 and 6. It is a great way to keep those number facts sharp.



MyMaths.co.uk

MATHS HOMEWORK LOG ON SUPPORT!

We have invested in what we believe will be a valuable Maths resource, MyMaths.co.uk.

It is highly recommended by many local schools including 'Hastings High School'. All Maths homework at Hastings is set using this resource and it seems appropriate that we prepare our children as early as possible.

It allows children the chance to revisit through the weekly Maths topic before having a go at some questions based on it. It is tailored to meet the needs of all children ranging from Level 1 - 6. Your child's teacher will set work on MyMaths when it is appropriate to do so. If no specific task has been set then please have a go at the weekly focus or something that your child finds tricky. The teacher will also check the Level appropriateness of the particular topic and set your child's homework accordingly (sometimes this may be the Level above or below depending on the task).

We hope that the children will enjoy using this resource at home and that you enjoy working with your child on it too.

Thank you for your continued support at home.

J Tarrant
Maths Subject Leader

Below are some instructions on how to log in. Whilst it is flash based, and therefore will not work natively on Apple machines, we have found an app that is FREE to download called Puttin Academy that allows you to use it on iPads etc.



Go to <http://www.mymaths.co.uk> (please add to favourites).
There is a link on our website to this.
Username: sketchley
Password: sketchleyhill



This is now Sketchley's homepage.

Every child has an individual log on (so we can set & track work).
Username: 3 numbers
Password: 3 letters



If a task has been set, it will appear and children can revisit a 'teach' (optional) before answering the questions. You can have as many goes as you would like, however these goes are recorded and your teacher will get a list of results for their class.

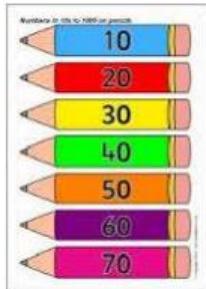


HAVE FUN !

Remember: If no task has been set then please use this as a resource to help with any topics that they struggle with, at their level!

Sometimes homework is set on the MyMaths website.

Ideas for home



Count up and down in tens, recognising house numbers, odd and even, counting coins will all help your child to have number sense.



<https://nrich.maths.org/8371>



Card Games

<https://www.teachingexpertise.com/classroom-ideas/math-card-games/>

Top tips for parents and families:

Be positive about maths. Don't say things like "I can't do maths" or "I hated maths at school"; your child might start to think like that themselves.

Point out the maths in everyday life. Include your child in activities involving maths such as using money, cooking and travelling.

Praise your child for effort rather than talent - this shows them that by working hard they can always improve.

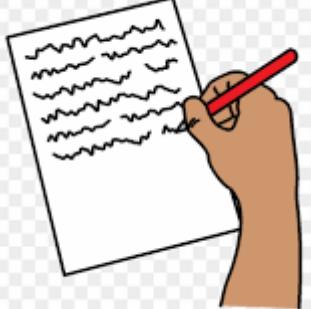
Useful websites to support your children:

- Third Space Learning Maths Hub (resources from maths tuition experts)
- BBC Bitesize – KS2 Maths (everything)
- Primary Games Arena (games)
- Hit the Button (times tables and number bonds)
- Math is Fun (worksheets)
- Maths Zone (portal to lots of maths games and quizzes)



Writing

- Children are taught handwriting alongside their phonics work in EYFS and Year 1. This handwriting and formation of letters progresses to words and spellings as they progress through the year.
- Expectations of writing simple sentences and creating narratives happens in Year 1.
- Children are taught how to use finger spaces, capital letters, full stops and exclamation marks.
- We also teach the children to link two sentences using ‘and’.



In Year 2

- Children are assessed in Year 2 in writing. They are expected to meet the required standards.
- Children in year 2 are required to write in a variety of ways for a variety of purposes.
- There is an increased expectation of grammar and spelling.
- Throughout their time in Year 2 children are assessed against the standards which are set out by the government and statutory.



Years 3, 4 and 5

- As children move through years 3,4 and 5 they are exposed to more varied styles of writing.
- They learn how to change the tense of the text, select vocabulary for formality as well as thinking about specific vocabulary choices.
- Handwriting should be fluent and joined.
- Children's control of their writing is essential at this time – showing that they understand purpose.

Year 6

- In Year 6, again the children have to be assessed in writing. They are given statutory criteria as in Year 2 and they have to meet the required standards.
- Teachers work to ensure pupils are given the opportunities to show their skills in a variety of ways and teach proof-reading and editing as a valuable skill.
- Children should continue to write in a joined and fluent style.



Spelling

- Each week your child will receive words that they should be learning as part of their weekly homework.
- Many of these words are derived from the common exception words which are required for your child at that stage in their learning.
- If your child is finding these difficult – try to find ways to support their practice, as if they fall behind they will be working below the level required for their year group.

Ways to help at home...

- Writing can be tricky at home because children often don't want to write in the home setting - therefore we do not ask you to do this for homework (please don't tell children not to write if they want to)
- If you are writing with your child please ensure you comment on incorrect spellings or punctuation.
- If they choose to write during play or free independent time – this is not needed to be corrected in any way.



Talk for learning

One of the simplest and most effective ways to help your child in writing is through talk.

- Talking about what you have read.
- Talking about a day out.
- Finding new words and talking about them.
- Talk about what's for dinner, do they like it?
Why?
- Talk about programmes and computer games that interest them
- TALK, TALK, TALK

Phonics

In Years 1 and 2 we are teaching phonics. We follow the Read, Write Inc. phonics scheme.

Read, Write Inc. phonics is the teaching of phonemes – single, initial sounds. We do this daily following a strict routine which allows children to work at their level – introducing new sounds when they are confident.



Read Write Inc.

Phonics

- Children are assessed every six weeks and should make progress through the stages.
- To support their learning in school, children have a reading book which is linked to their phonics knowledge.
- It is imperative that these books are read at least three times at home to support their learning.



Statutory Assessment

- Children will be assessed in Year 1 for their phonics awareness.
- The children are given a mixture of real and alien words to successfully read.
- There are 40 words in total.
- Children who pass the phonics screening check are deemed to have sufficient phonics awareness
- Passing the phonics screening check DOES NOT mean that your child will automatically be working at the national expectation for reading in Year 1.
- Pupils are given a second chance to sit the Phonics Screening Check in Year 2.

READING IN SCHOOL AND AT HOME

Building Skills

Photo: © vRawPixel.com / Adobe Stock



Developing as a reader

To develop as a reader children need to develop fluency and comprehension through:

- opportunities to read words over and over so they become automatic and can be read at a good pace.
 - reading aloud to develop their expression and to ensure they are reading accurately
 - opportunities to discuss and question what they have read
 - monitoring their understanding
 - developing their vocabulary and knowledge of the world

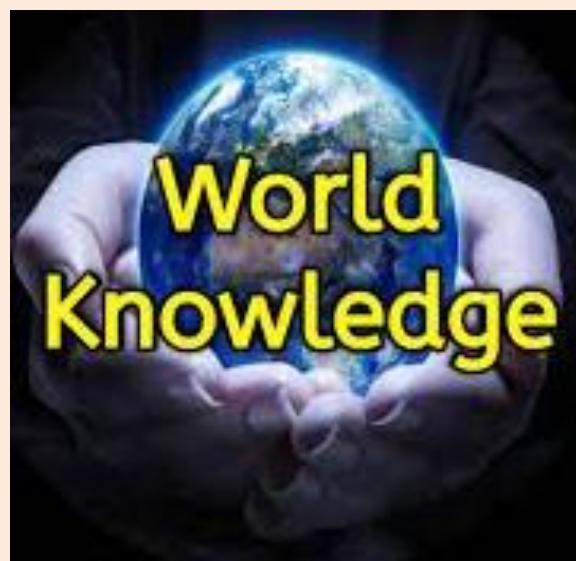
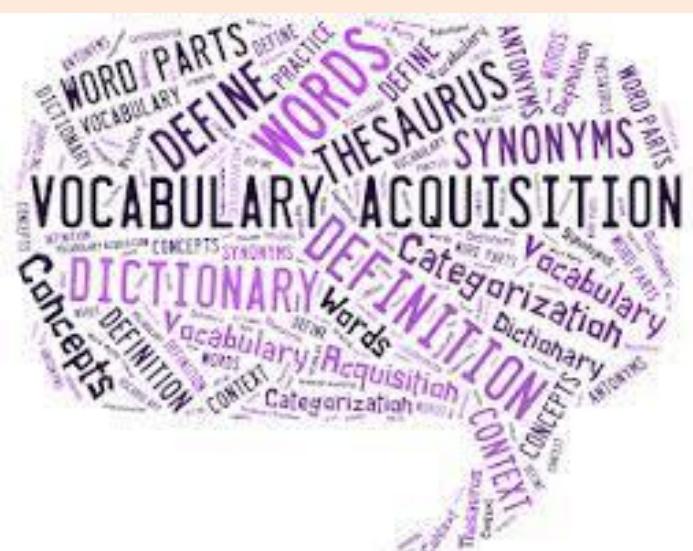
**This is just as important in
Year 6 as Year 1**



In school

All children listen to a shared read book for 20 minutes per day

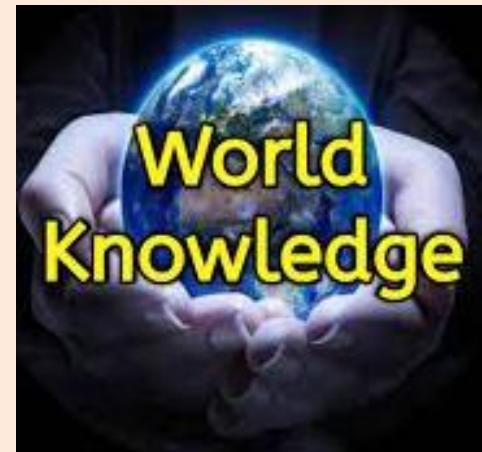
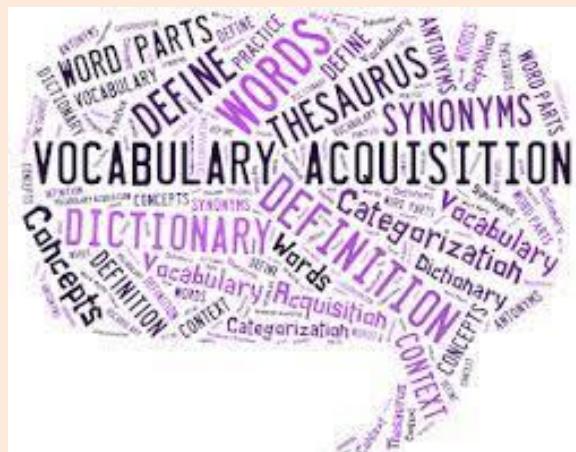
- for enjoyment
 - builds vocabulary and knowledge of the world;
 - develops listening comprehension;
 - models fluent reading (expression, good pace) and comprehension monitoring skills



In school

After completion of the phonics programme, we continue to build their reading skills through:

- Guided reading sessions focussing on fluency and understanding
 - Vocabulary instruction
 - Opportunities to read across the curriculum (for example, in history, science and maths)



Home reading

Your child will bring two books home:

- A **read to an adult**, fluency book (RWInc phonics or book band book)
 - They should be able to read >95% of the book without adult help
 - Make sure your child is reading aloud so you can correct any mispronunciations
 - Discuss the book with your child to check they are understanding what they have read
 - In KS1, repeated reading of the same short book is beneficial and will increase their fluency
- A **'read with me'** reading for pleasure book (may be a library book)

What is the order of the books?

Starting out:



Developing Skills:



Consolidating skills:

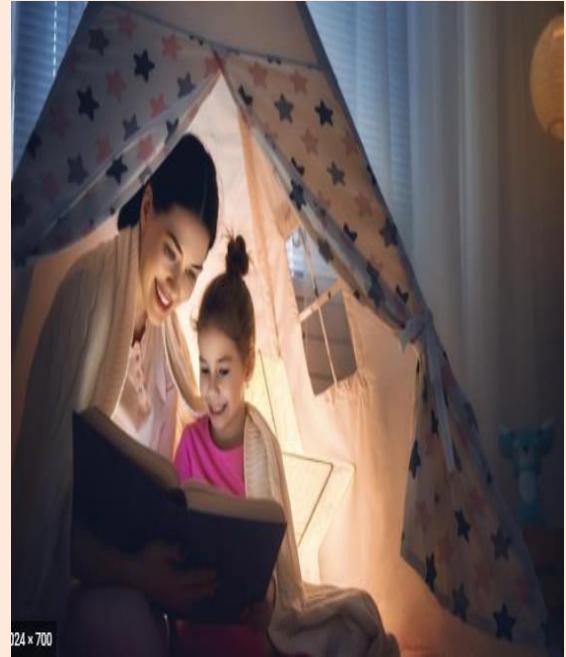


Currently called free-reader

Children are generally ready to move onto the next book band level when they can read with good fluency (expression, pace, automaticity) and understanding -this will be assessed by the class teacher or appropriate adult

Reading diet at home

- Listen to your child read their fluency book (RWIInc book or book band book) every day as part of their homework, ideally
- Share a book they couldn't read on their own (a 'read with me' reading for pleasure book) as often as possible
 - as a bedtime story is the ideal time
- Talk to your child as much as possible to build their vocabulary



Why read 20 minutes at home?

STUDENTS WHO READ:

 **20 minutes**

PER DAY

3,600 minutes per school year
1,800,000 words per year



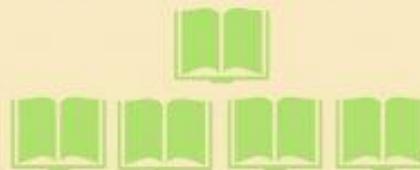
SCORE IN THE 90TH PERCENTILE ON STANDARDIZED TESTS

STUDENTS WHO READ:

 **5 minutes**

PER DAY

900 minutes per school year
282,000 words per year



SCORE IN THE 50TH PERCENTILE ON STANDARDIZED TESTS

STUDENTS WHO READ:

 **1 minute**

PER DAY

180 minutes per school year
8,000 words per year



SCORE IN THE 10TH PERCENTILE ON STANDARDIZED TESTS