

**A PARENTS'
GUIDE TO FREE
MATHS
RESOURCES
AVAILABLE
ONLINE**

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INTRODUCTION.

It's April fools Day. But the current situation is no joke. All over the world people are losing their lives, or risking them to prevent others from doing so. Does maths really matter that much?

On the face of it, no. Missing out on a few simultaneous equations will hardly seem like the top concern for most of us right now. But we do know that a lot of students are worried about keeping up their grades, and other are anxious about not falling behind.

This booklet, admittedly hastily put together, is an attempt to support you as parents during this unprecedented time. Many of you will be confident mathematicians, while many more will be less sure of themselves, or unaware of the appropriate curriculum.

What are schools doing?

The picture differs wildly across the country, and teachers I have been in touch with are all operating slightly different plans. It make sense therefore to follow schools' advice as far as possible. Most are offering some sort of online learning platform, while others are sending work home via their own website. Your children should wherever possible follow the plans set out for them.

What's the point of this booklet then?

Many children will either not feel able or motivated to access the work set, or will need something more challenging. Also, school mathematics curricula are often necessarily quite tightly focussed, and you may find something here that will spark an interest in the wider world of mathematics, either in you or the pupils with whom you are working.

How is the book set out?

I spent a long time thinking about what would be the most helpful yet simplest to navigate. In the end I have gone for just a primary and a secondary section - breaking down further felt a bit pointless given the different levels of attainment in any given age bracket.

- There are websites listed in each section and each is hyperlinked. The key thing is that they are all free to use; some for the moment in response to the crisis, others permanently so. Some resources are suitable for both primary and secondary so appear in both sections. Obviously, this is only a tiny sample of what is out there - there will always be more, so I certainly don't claim that this is in any way exhaustive!

That's all the blurb - let's get to it! Stay home, stay safe, be kinder than you feel like being, and PLEASE don't think your kids have to work five or six hours a day - they really don't. Honestly, a good hour or two per day (*not per subject, that's altogether!*) feels fine from my viewpoint. If I can help with anything maths-related, please drop me a message and I'll do my best.

Love and Prayers, Andrew Jeffrey

PRIMARY RESOURCES

Websites

N.B. These sites all work best on a computer or tablet rather than on a phone. I have managed to test them on Firefox, Chrome, Safari and Opera to ensure they are functioning, but of course, such information is only accurate at the time of publication (*in this case 1st April 2020*). Click the name of each site to go directly to it.

Name of Website (click for weblink)	Maths Covered/comments
NRICH Maths at home	Separate categories for 3-5s, 5-7s, 7-11s, and guidance for parents. A great place to start your quest.
BBC Bitesize KS1	Lots of activities for Year 1 and 2 children
BBC Bitesize KS2	As above but for Years 3-6
Digit Dog Challenges	Early Number skills for 3-5 year olds.
Go Teach Maths	Lots of presentations, worksheets & activities for KS2/3
Corbett Maths 5-a-day	5 daily questions with a choice of difficulties KS2
STEM Home Learning	KS1 and KS2 - the 'Challenges' book is excellent
TeacherLed	Big range of maths teaching tools and challenge games
Wessens Mathenaem FDP	Simple activities to help learn Fractions/Decimals/ Percentages.
Wild Maths	Exploratory and creative mathematics
White Rose Maths Home Learning	Early Years up to Y8
My Mini Maths	Lots of home learning resources for Years 3 to 6



Downloadable Resources

N.B. The following set of links contain things that you or your child can print out and do at home. They lean heavily towards problem-solving and puzzles. This is because logical thinking and Problem Solving are the very core of why we study mathematics.

“The true test of our intelligence is not what we know, but how we behave when we do not know”.

John Holt

Name of Website (click for weblink)	Downloadable Resources
Mathematics Mastery	Full lessons, from Early Years up to Key Stage 3
Maths Genie KS2 SATS Past Papers	Papers and Mark Schemes
Association of Teachers of Mathematics	Lots of problem solving and reasoning for all ages
The Mathematical Association Mathematical Pie	Excellent and fun puzzles for ages 9 to 90
Family Puzzle Book	A variety of puzzles to print out and share
First 4 Maths	A range of resources suitable for EYFS upwards
Oxford Owl Parents pages	A host of great ideas and links
Lego Maths	Some fun ideas (scroll down to get to the maths)
Mathsbot Question Generators	Customisable printable worksheets
Babcock Playing Card Games	Playing Card Maths Games
Erikson Institute	Early Years Maths resources
Busy Lizzie Maths	Lots of great maths ideas for primary children

Video Resources

N.B. These videos are mostly on YouTube. Be aware that I did not have time to watch them all the way through but to the best of my knowledge they are eminently suitable.

Provider name (click for weblink)	Comments
Gareth Metcalfe Lessons	National Curriculum Y3 and Y4
Gareth Metcalfe Lessons	National Curriculum Y5 and Y6
OU Teaching Mathematics course	24 hours of study for teaching 8-14 year olds.
Maths With Parents	Clue's in the name really.
Number Fun	Maths for the musically inclined!
<i>Finally, I hope you will forgive me for also including some of my own work:</i>	
Andrew Jeffrey's Key Stage 1 channel	12 fun maths videos for Y1/Y2
Andrew Jeffrey's Key Stage 2 channel	12 fun maths videos for Y3/4/5/6

SECONDARY RESOURCES

Websites

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Name of Website (click for weblink)	Maths Covered/comments
NRICH Maths at home	KS3, 4 and even A-Level resources found here.
BBC Bitesize KS3	Lots of activities for Years 7-9
BBC Bitesize GCSE	Years 9-11 resources
Corbett Maths 5-a-day GCSE	Daily Questions - just five, sorted by grade
Go Teach Maths	Lots of presentations, worksheets & activities for KS2/3
Mathigon	A Pot Pourri of Secondary (and beyond) maths
Wessens Mathenaeum FDP	Simple activities to help learn Fractions/Decimals/ Percentages.
Wild Maths	Exploratory and creative mathematics
White Rose Maths Home Learning	Early Years up to Y8
Parallel Maths Project	Great investigations for Years 7 to 10



Downloadable Resources

N.B. The following set of links contain things that you or your child can print out and do at home. They include past papers which children in Years 10-13 should be working on at the moment, to give themselves the best possible chance of a good grade.

Name of Website (click for weblink)	Downloadable Resources
Mathematics Mastery	Lessons from Y7 upwards (scroll down for KS3)
Revision Maths	GCSE A-level and GCSE Papers and Mark Schemes
Association of Teachers of Mathematics	Lots of problem solving and reasoning for all ages
The Mathematical Association Mathematical Pie	Excellent and fun puzzles for ages 9 to 90
NCETM advice and support	They promise it's coming soon!
STEM Home Learning	A range of KS3 resources
Mathsbox	Lots of free sample lessons and other resources
Mathsbot Question Generators	Customisable printable worksheets
Resourceaholic	A portal to all that is good in the world of maths!
Dr Frost Maths	Exam question bank, online learning platform
Go Teach Maths	Loads of printable lessons and PPTs
Autograph	Powerful maths software, free download

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Exam Solutions	Video solutions to all GCSE/A-level questions
OU Teaching Mathematics course	24 hours of study for teaching 8-14 year olds.
Maths With Parents	Clue's in the name really.
Think Maths Problems	Suitable for all secondary/A-level pupils
Chris Smith's Corona Conundra	Youtube video problems
Maths Genie	Past papers. Also with videos and model solutions
<i>Finally, please forgive me for also including some of my own work:</i>	
Andrew Jeffrey's Key Stage 3 channel	12 maths videos for Y7-Y9

