



The Kibworth School

Maths Department Home study Guidance

Last updated **10.6.20** by Mrs H Stockwell (**updates in red**)

Maths twitter account @TKS_Maths



Overview spreadsheet

The link will take you to a spreadsheet with has an outline of the main topics each class was studying this year. This is a live document that teachers will update weekly. The main references will be to Hegarty maths and Corbett maths. It will enable you to see which topics teachers have been setting work for (whether that be revision of earlier work or new content). Teachers will include a deadline date on topics they have set work for that matches student folder. **Instructions will continue to be sent through student folder.** As mentioned earlier, the most important aspect is that students feel secure in the topics covered in school during the autumn and spring term. That will reduce the amount of recapping we will need to do in school going forward.

[Year 7.xlsx](#)

[Year 8.xlsx](#)

[Year 9.xlsx](#)

[Year 10.xlsx](#)

Important and useful websites:

<https://hegartymaths.com/>

<https://corbettmaths.com/5-a-day/gcse/> (videos, worksheets, exam questions, 5 a day, free)

<http://www.mathsbox.org.uk/homeskills.html> (weekly skills we do in class home study version, answers included, updated for the week every Monday).

<https://www.mathsgenie.co.uk/gcse.html> (GCSE exam questions organised by topic, free)

<https://mathskitchen.com/home> (find gaps in knowledge and target them, free & premium version available)

<https://www.onmaths.com/> (mini exam papers, tracks progress, free)

<https://studymaths.co.uk/> (lots of topic based online, self-marking questions, free)

<https://www.maths4everyone.com/>

<https://www.drfrostmaths.com/index.php> (videos, questions, PowerPoints our teachers often use as part of their lesson, free)

<https://mathsbot.com/> (create worksheets and revision grids, gives answers too, free)

GCSE maths specifications and past papers

<https://www.aqa.org.uk/subjects/mathematics/gcse/mathematics-8300>

<https://www.aqa.org.uk/subjects/mathematics/gcse/statistics-8382>

<https://www.aqa.org.uk/subjects/mathematics/aqa-certificate/further-mathematics-8365>

How to use this document

- Teachers will provide specific instructions on student folder, but students are also encouraged to be independent. We value the importance of recall to secure knowledge in the long-term memory. So, if students decide to attempt Hegarty maths they have already completed to try and improve them. Or they choose topics to study they have less confidence in then we support that choice.
- Please do not worry about learning “new maths skills” if you don’t understand a video. If you ensure you completely know how to do the topics you have studied this year that will reduce the time we spend re-visiting them next year. This will then give us more time to teach “new maths skills” next year. It will work itself out.
- Of course you can try new skills, don’t let us put you off, we just don’t want you to worry about it.
- Links to puzzles and investigations are also included at the end of the document. We just want you doing some kind of maths. Logic puzzles are good study too. Or write a message or letter to friends and family in a secret code. Just take a photo of your message and send digitally to those you want to speak to.
- The maths twitter account will tweet information, puzzles, quizzes. Anything that catches the maths department’s eye.
- Teachers can be contacted through email for support. They will also be monitoring Hegarty maths and contacting students who haven’t accessed the work to check everything is ok.

Maths teacher emails:

- hstockwell@the kibworthschool.org
- rtaylor@the kibworthschool.org
- sholligan@the kibworthschool.org
- wiliffe@the kibworthschool.org
- fkokoi@the kibworthschool.org
- nhanson@the kibworthschool.org
- rstockwell@the kibworthschool.org

What maths work to complete all year groups

Recall and Do now activities

Please complete the weekly maths quiz that your maths teacher will have sent you a link to on student folder.

Please use the corbettmaths 5 a day questions for your Do Now activity. Your teacher will inform you of the difficulty level you need to complete on student folder. You will need somewhere to write your answers, or you can print out the sheet. The answers are online too, so you will be able to mark your work as you would in class once it is complete. www.corbettmaths.com/5-a-day/gcse/

Please use maths box weekly skills once a week. These are the same format of questions we use in class once a week. However, there are 20 questions to complete rather than 10. Like with corbettmaths you will need somewhere to write your answers or you can print out the sheet. The answers are online too, so you will be able to mark your work once complete. Also included are support videos which link to youtube to explain questions you are unsure of. www.mathsbox.org.uk/homeskills.html

Main Tasks

Hegarty www.hegartymaths.com

Teachers will set tasks on Hegarty maths in accordance to the topics that would be studied in class. Please watch the video and then attempt the tasks. Remember to have a pen and some paper. The tasks are not designed to be completed in your head. Details will be written on student folder if more instructions are needed. Your teacher will be online during the day, so if you have questions you can send a message through the Hegarty maths system, be sure to select your teacher if you send a message. in the past.

Using Hegarty to maximise your learning.

- Complete the Hegarty tasks your teachers are setting, these will be a mixture of revision work and new work. Remember to watch the videos if it is new work.
- Complete MemRi tasks. These are bespoke tasks Hegarty makes for you based on previous tasks you have completed.
- Complete Fix it 5 tasks. These are 5 questions based on mistakes you have made on other Hegarty tasks. Again this is bespoke to you as an individual.

Essential Skills www.the kibworthschool.org/Welcome/KO-Maths/

Please complete one essential skills sheet a week as you would do at school. These are now all on the school website in the maths knowledge organiser section. Instructions to access these are at the end of this document.

Knowledge organisers www.the kibworthschool.org/Welcome/KO-Maths/

Knowledge organisers you need for the current term will be on your student folder account. All maths knowledge organisers will be on the school website.

Using your exam analysis: Building independence

Following your maths exams you have completed a detailed exam analysis that links the questions you answered incorrectly to tasks on Hegarty maths. Use your exam analysis to choose tasks that your teacher has not set you as part of the main lesson (see picture below). This will give you personalised tasks that will support you in improving your working level. Remember to watch the video first and then attempt the questions as you would normally ensuring you have a pen and some paper to hand for working out. You will be able to message your teacher over these tasks too, not just the ones they have set. It is important to highlight that the analysis will include questions that you will not have studied yet, so I would always suggest focusing on the earlier questions on the paper, particularly for students in years 7 and 8. As with all tasks completed on Hegarty maths, the maths staff will issue students with merits.

If you have saved your analysis at school, there are instructions at the end of this document telling you how to access them.

Mathematics Assessment Feedback				
Paper	Nov 2017 - Paper 1F			
Name	Helen			
Teacher	Mrs Stockwell			
Questions	Question Title	Score	Clip Number	
1	Converting fractions to decimals	1 / 1	73	
2	Converting units	0 / 1	692	
3	Symmetry of 2D shapes	1 / 1	827	
4	Comparing negative numbers	1 / 1	37	
5a	Solving one-step linear equations	1 / 1	178	
5b	Solving one-step linear equations	0 / 1	178	
5c	Solving one-step linear equations	1 / 1	178	
6a	Division without a calculator/long and short division	1 / 2	22, 145	
6b	Adding fractions, mixed numbers	2 / 3	66, 63	
7a	Finding the mode from a vertical line chart	0 / 1	425	
7b	Interpreting vertical line charts	1 / 3	425	
8	Money	3 / 3	744, 745	
9a	Probability of a single event	0 / 1	351	

Rewards for independent learning

Please write a merit on your card for every Hegarty maths task you complete independently and achieve an orange score. If you achieve green (100%) on a task, please write two merits on your card.

All year groups: Bored of questions and fancy a change

Maths puzzle websites and creative activities

Puzzles are a good way of keeping your mathematical mind busy and help develop problem solving strategies.

<https://wild.maths.org/>

<https://www.artfulmaths.com/#>

<https://www.transum.org/Software/Puzzles/>

<http://www.mrbartonmaths.com/puzzles/>

<https://nrich.maths.org/2197> (a beginners guide to different secret codes)

https://www.simonsingh.net/The_Black_Chamber/chamberguide.html (website dedicated to code breaking, a fun way to communicate with people now we can't meet in person).

Also good to do:

- Soduko puzzles
- Chess
- Writing and reading secret codes. Use things like a Caesar Cipher, frequency analysis, pigpen cipher

Puzzle booklets that are printable

Booklet 1 <https://dcbeagle.com/Maths%20Puzzle%20book%20Vol%201.pdf>

Booklet 2 <https://dcbeagle.com/Maths%20Puzzle%20book%20Vol%202.pdf>

Booklet 3 <https://dcbeagle.com/Maths%20Puzzle%20book%20Vol%203.pdf>

Booklet 4 <https://dcbeagle.com/Maths%20Puzzle%20book%20Vol%204.pdf>

Maths videos

This table contains a list of programs to widen your understanding of maths linking it to the world around us.

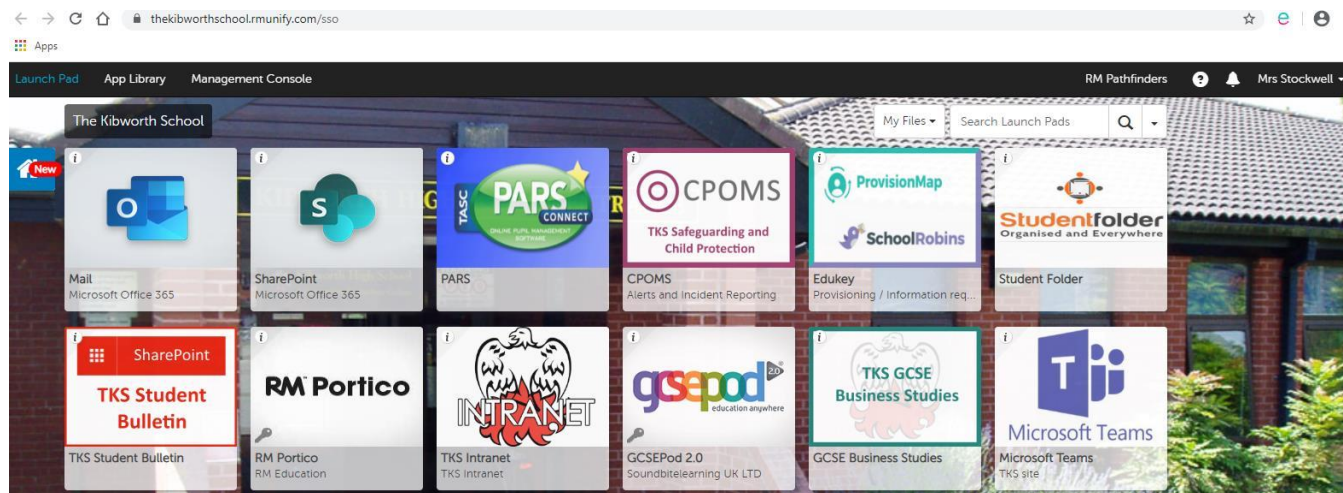
Name	Length	Link
Gapminder Don't Panic, end poverty	59:18	https://www.gapminder.org/videos/dont-panic-end-poverty/
Gapminder Don't panic, the facts about population	58:50	https://www.gapminder.org/videos/dont-panic-the-facts-about-population/

Gapminder How not to be ignorant about the world	19:05	https://www.gapminder.org/videos/how-not-to-be-ignorant-about-the-world/
Gapminder The Joy of Stats	59:13	https://www.gapminder.org/videos/the-joy-of-stats/
Gapminder Population growth explained with IKEA boxes	9:56	https://www.gapminder.org/videos/population-growth-explained-with-ikea-boxes/
BBC Tails you Win: The Science of Chance	59:04	https://www.youtube.com/watch?v=pldHp4qayrU
BBC The Story of Maths	57:55	https://www.youtube.com/watch?v=mJbChZrXDJE
BBC Magic Numbers Mysterious World of Maths - Hannah Fry	58:45 58:38 59:02	Part 1 https://www.youtube.com/watch?v=cyvDG8qjt-M Part 2 https://www.youtube.com/watch?v=R6Qty8tAnVI Part 3 https://www.youtube.com/watch?v=TKKUZOqSTxw
BBC Horizon: Fermat's Last Theorem	49:14	https://www.bbc.co.uk/iplayer/episode/b0074rxx/horizon-19951996-fermats-last-theorem
BBC The Secret Rules of Modern Living Algorithms	58:33	https://www.youtube.com/watch?v=kiFfp-HAu64&app=desktop
The Story of One by Terry Jones	54:35	https://www.youtube.com/watch?v=Z5dky0oEDo8
Numberphile	A collection of short videos	https://www.youtube.com/user/numberphile
Donald Duck, Mathmagic Land	27:34	https://www.youtube.com/watch?v=U_ZHsk0-eF0&app=desktop
PBS The Origami Revolution	53:31	https://www.youtube.com/watch?v=dH2bjZ6V_04&feature=youtu.be
Modelling Surveys introduced	23:44	https://www.youtube.com/watch?v=pldHp4qayrU

by Stewart Gartside		ch?v=dKA1VvFQ6Y0
RI Lectures 2019: How to get lucky - Hannah Fry	59:02	https://www.youtube.com/watch?v=g4DrUHKC0Q
RI Lectures 2019: How to bend the rules - Hannah Fry	59:15	https://www.youtube.com/watch?v=TtisQ9yZ2zo
RI Lectures 2019: How can we all win? - Hannah Fry	59:20	https://www.youtube.com/watch?v=u5mNa6KE0IA
What happens when Maths goes wrong? - Matt Parker	1:07:33	https://www.youtube.com/watch?v=6JwEYamjXpA
Four Dimensional Maths: Things to see and hear in the fourth dimension	1:01:40	https://www.youtube.com/watch?v=1wAal_6b9JE

How to access your exam analysis if you saved it on the school system and all essential skills worksheets.

Go to the school website and access the RM Unify page (as you would to access student folder). One of the apps will be “RM Portico”.



Click the RM portico app. You will see the message below. Do not worry, it is safe and password protected.



Your connection is not private

Attackers might be trying to steal your information from portico.thekibworthschool.org (for example, passwords, messages or credit cards). [Learn more](#)

NET::ERR_CERT_AUTHORITY_INVALID

Help improve Chrome security by sending URLs of some pages that you visit, limited system information and some page content to Google. [Privacy Policy](#)

Advanced

Back to safety

Click “Advanced” this will bring up the message below. You are still safe.



Your connection is not private

Attackers might be trying to steal your information from **portico.thekibworthschool.org** (for example, passwords, messages or credit cards). [Learn more](#)

NET::ERR_CERT_AUTHORITY_INVALID

Help improve Chrome security by sending [URLs of some pages that you visit, limited system information and some page content](#) to Google. [Privacy Policy](#)

Hide advanced

Back to safety

This server could not prove that it is **portico.thekibworthschool.org**; its security certificate is not trusted by your computer's operating system. This may be caused by a misconfiguration or an attacker intercepting your connection.

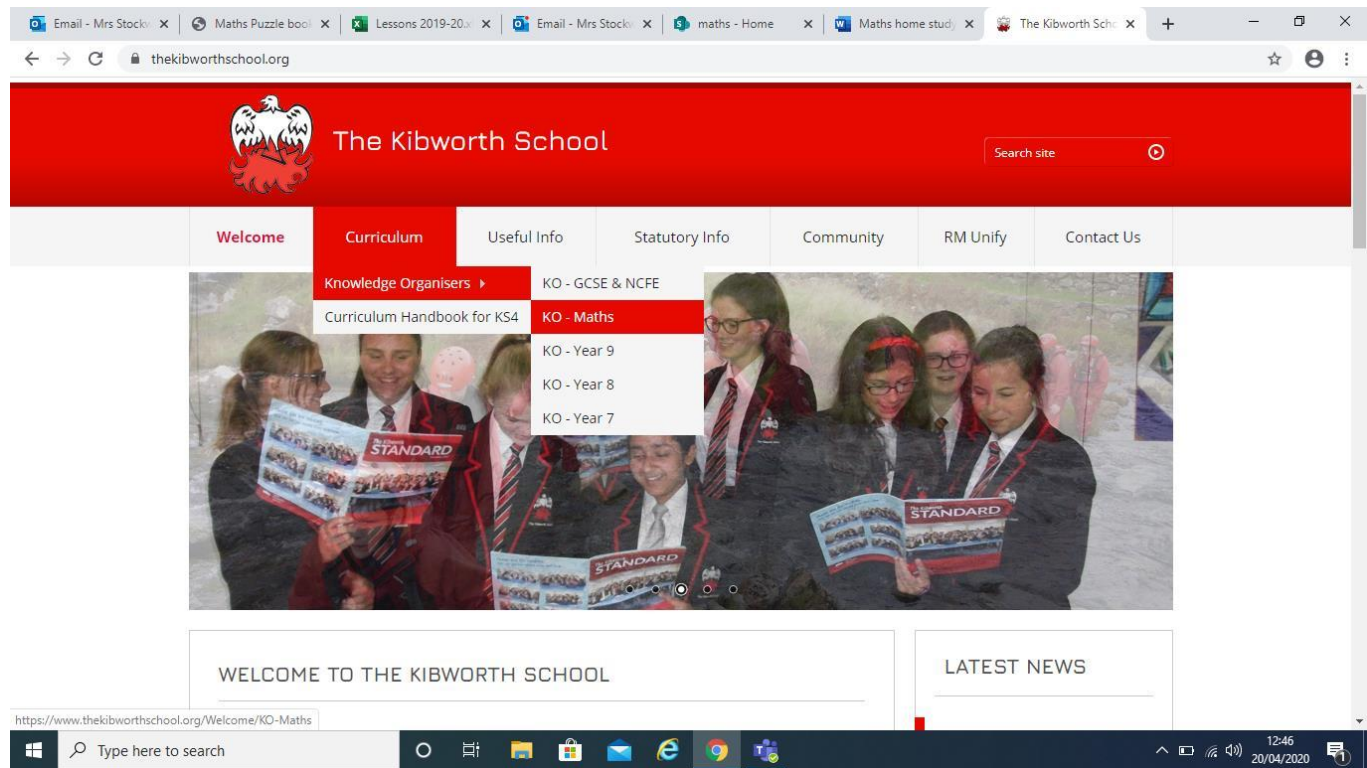
[Proceed to portico.thekibworthschool.org \(unsafe\)](#)

Click “proceed to portico.thekibworthschool.org” You will then see a screen like the one below. These are all the normal folders you can access whilst at school. Yours will have your N drive with your name (not mine).

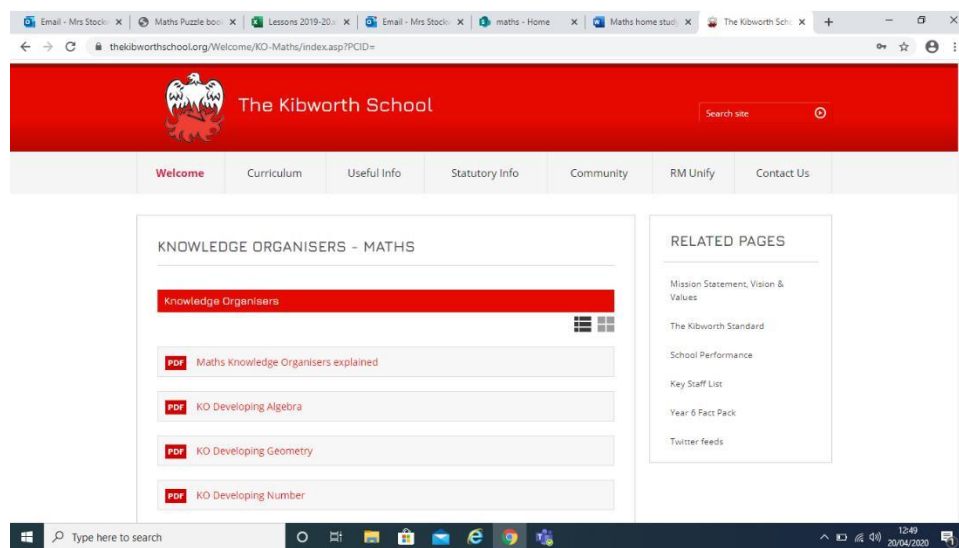
The screenshot shows a web-based file explorer interface. At the top right, there are two tabs: "STANDARD" (selected) and "TREE". Below the tabs is a list of folders: "N:hstockwellS", "T:RMStaff" (highlighted in light blue), and "W:RMShared Documents". Below the folder list are four buttons: "Hidden Drives", "Delete", "Copy / Move", and "Create Folder". At the bottom left is the "RM Education" logo. At the bottom center, there is a copyright notice: "©2019 RM Education Ltd. [Terms and Conditions](#) [Cookie Policy](#)".

How to access essential skills through the school website

Click “KO maths”. This will then ask you for the school password, which you should already have.



This then takes you to the maths knowledge organiser page.



Scroll down the page and you will get to the maths essential skills section which is organised by grade.

Browser tabs: Email - Mrs Stock, Maths Puzzle book, Lessons 2019-20, Email - Mrs Stock, maths - Home, Maths home stu, The Kibworth Sch

Address bar: thekibworthschool.org/Welcome/KO-Maths/index.asp?PCID=

Page content:

- Maths Essential Skills
- PDF GradeA
- PDF GradeAB
- PDF GradeAstar
- PDF GradeB
- PDF GradeBC
- PDF GradeC
- PDF GradeCD
- PDF GradeD
- PDF GradeDE

Taskbar: Type here to search, 12:50, 20/04/2020