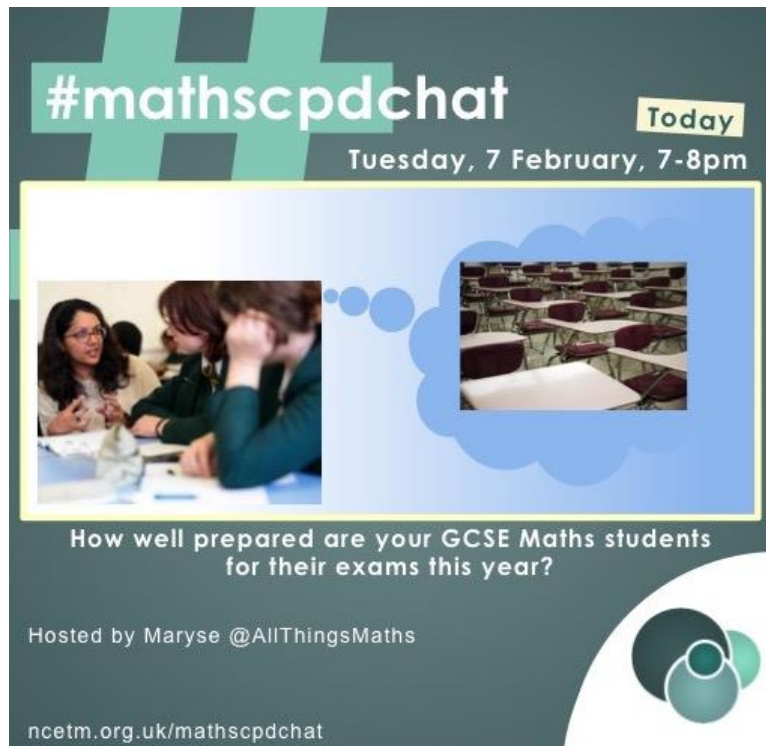


#mathscpdchat 7 February 2023

How well prepared are your GCSE Maths students for their exams this year?

Hosted by [Maryse](#)

*This is a summary of the discussion – to see all the tweets, follow the hashtag **#mathscpdchat** in Twitter*



The graphic features a large green hashtag #mathscpdchat at the top left. To its right, a yellow box says 'Today' above the text 'Tuesday, 7 February, 7-8pm'. Below this is a blue thought bubble containing two images: on the left, a group of people in a meeting; on the right, a classroom with rows of desks and chairs. At the bottom of the graphic, the text reads: 'How well prepared are your GCSE Maths students for their exams this year? Hosted by Maryse @AllThingsMaths ncetm.org.uk/mathscpdchat'. The NCETM logo is in the bottom right corner.

The links shared during this discussion were:

[Diagnostic Exam Questions](#) which are past exam questions from the AQA, OCR and Pearson exam boards collected by [Colleen Young](#). They are intended for students to try to answer in order to assess their knowledge and understanding. It was shared by [Maryse](#)

[Interwoven Revision Questions to Project](#) which is a collection by [Nathan Day](#) of mixed interwoven questions devised by [Nathan Day](#), aimed primarily at Y11 revision. They are ready to show on screen, and answers are provided. It was shared by [Maryse](#)

[Corbettmaths: 5-a-day](#) which are GCSE maths exam-practice 'questions' provided for every day. Separate collections of items are designed/provided for students aiming for particular ranges of GCSE grades: 'Numeracy' for grades 1, 2 and 3, 'Foundation' for grades 3 and 4, 'Foundation Plus' for grades 4, 5 and 6, 'Higher' for grades 6 and 7, and 'Higher Plus' for grades 8 and 9. It was shared by [Maryse](#)

[GCSE Maths Questions](#) which are exam-style 'practice questions'. It was shared by [Maryse](#) and [Chris Blackie](#)

[GCSE Countdown Timer](#) which shows the number of days, hours, minutes and seconds that are still to pass until the start-time of each of this year's three GCSE Maths exam papers. It was shared by [Colleen Young](#).

[Examinations 2023: Formula sheets 2023](#) which are exam-practice-questions designed/selected in order for students to practise using the formula sheets provided by the exam boards this year. They have been collected by [Colleen Young](#) on her website. It was shared by [Colleen Young](#).

[Lessons from GCSE Maths Exams in Summer 2022](#) which is an NCETM podcast episode in which representatives from the awarding bodies, Mark Heslop from Pearson/Edexcel, Neil Ogden from OCR and Andrew Taylor from AQA, give feedback from the hundreds of thousands of papers that were marked. It was shared by [Mary Pardoe](#)

[GCSE revision ideas for the final few lessons](#) which is an NCETM article which contains suggestions of some ways in which teachers can help students remain calm, focused and able to access what they know. It was shared by [Mary Pardoe](#)

[Why study maths?](#) which are resources from the Advanced Mathematics Support Programme (AMSP) that teachers can use to promote the Level 3 maths qualifications that their school offers. It was shared by [Mary Pardoe](#)

An illustrated summary of the discussions in this #mathsCPDchat follows.

Before the chat there had been a reply to one of the announcements of this #mathsCPDchat, to which, at the start of the chat, the host, Maryse, replied:




mathscpdchat @mathscpdchat · Feb 6

...



How are this year's GCSE Maths students 'getting on' in relation to their approaching exams?

Join #mathscpdchat TOMORROW at 7-8 pm to share experiences.

Discuss with host @AllThingsMaths & others what your GCSE students will be doing in maths lessons between now & their exams!



#mathscpdchat Tomorrow
Tuesday, 7 February, 7-8pm

How well prepared are your GCSE Maths students for their exams this year?

Hosted by Maryse @AllThingsMaths

ncetm.org.uk/mathscpdchat



Tessmaths @tessmaths · Feb 7

...

Replying to @mathscpdchat @ballyzero and @AllThingsMaths
100 days to go...that's a great focus point

mathsbot.com/gcse/countdown



Maryse @AllThingsMaths · 19h

...

100 days to go! Thank you for the reminder of the countdown!
twitter.com/tessmaths/stat..

#MathsCPDChat

The host's welcome tweet ...



Maryse @AllThingsMaths · 12h

...

Welcome to [#MathsCPDChat](#) this evening where we're discussing what we're doing in the run up to the exams for Year 11.

... prompted a short conversation:



BeckyGeorge @1982beckyboo · 12h

...

Replying to @AllThingsMaths and @PardoeMary

Tearing my hair out!



Maryse @AllThingsMaths · 8h

...

Replying to @1982beckyboo

I'm so sorry. I've only just picked this notification up.

Anything we can help with?



BeckyGeorge @1982beckyboo · 8h

...

Replying to @AllThingsMaths

I'm OK, it is just one of those groups. Half of them no matter how hard they try or what I do they just can't get off a U or a 1 and the other half who could come out with sommat decent just don't give two hoots about anything let alone doing any maths. Tough group.

The host's first question ...



Maryse @AllThingsMaths · 13h

...

First question of this evening...

How are you all doing, and how are your students?

Are you feeling prepared for the exams?

[#MathsCPDChat](#)

... generated the following discussion ...



Simon Ball @ballyzero · 13h

...

Replying to @AllThingsMaths

Plenty of my students don't realise how close the exams are and aren't working as hard as they could be - I'd say a slight majority? I know how close things are and am a touch more worried. But I found out today that we still have formula sheets, which is good. [#mathscpdchat](#)



Maryse @AllThingsMaths · 12h

...

Replying to @ballyzero

I'm with you on that. There's still a few gaps to be filled and the exam is getting closer. And thank goodness for the formulae so we can focus on using and applying them.

#MathsCPDChat



Colleen Young @ColleenYoung · 17h

...

Replying to @ballyzero and @AllThingsMaths

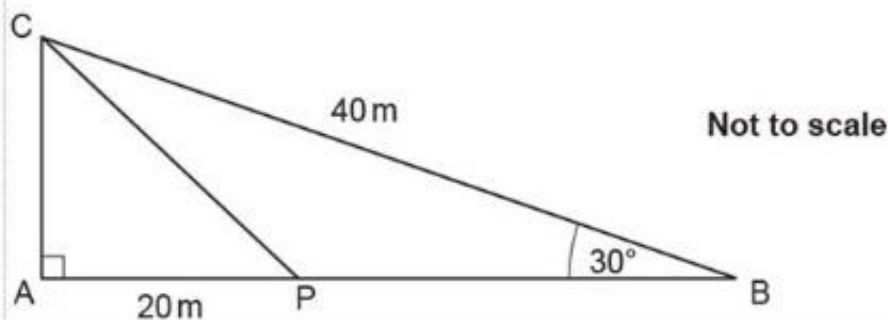
That's useful, I have links to all the formula sheets here in case it's useful, and note OCR's formula sheet tests. colleenyoung.org/im-looking-for..

#mathscpdchat

In the diagram, ABC is a right-angled triangle.

P is a point on AB.

BC = 40 m, AP = 20 m and angle ABC = 30°.



Show that AC = 20 m.

colleenyoung.org

Examinations 2023

Formulae sheets 2023 AQA OCR Pearson / Edexcel Eduqas

Foundation & Higher OCR formulae test OCR additionally have ...



Maryse @AllThingsMaths · 17h

...

Replying to @ColleenYoung and @ballyzero

I think this is where I got the info from first about the formula sheets!



Colleen Young @ColleenYoung · 19h

...

Replying to @ColleenYoung @ballyzero and @AllThingsMaths

I have used @Corbettmaths 5-a-day for many years, nearer the exams we'd sometimes make it 10-a-day! #mathscpdchat



Maryse @AllThingsMaths · 19h

...

Replying to @ColleenYoung @ballyzero and @Corbettmaths

I use it with my daughter at home too (Y5) and email it to parents. The "little and often" works well for the students and the parents!

[#MathsCPDChat](#)



Maryse @AllThingsMaths · 12h

...

Replying to @AllThingsMaths and @ballyzero

Have you used any strategies for motivation or engagement? E.g. I'm screenshotting the homework on Method Maths and emailing them home.

[#MathsCPDChat](#)



Excelwriters2021 @excelwriters21 · 17h

...

Replying to @AllThingsMaths and @ballyzero

Hello,
Can I help you handle the assignments? DM we discuss it further



Mary Pardoe @PardoeMary · 12h

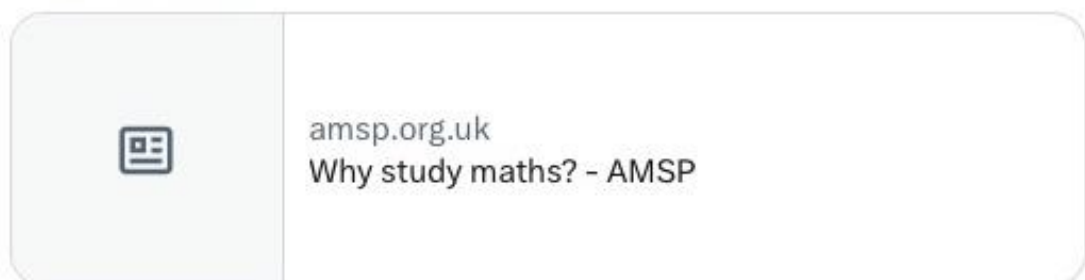
...

Replying to @AllThingsMaths and @ballyzero

For motivation these 'postcards' from the AMSP showing 'where maths meets the world of work' may be useful!

amsp.org.uk/teachers/11-16..

[#mathscpdchat](#)



Maryse @AllThingsMaths · 12h

...

Replying to @PardoeMary and @ballyzero

I shared these with the dept this week! We've also been focusing on why we're doing this in context of "getting a grade". Different students are responding to different motivations.

[#MathsCPDChat](#)

... and the following short interchange ...



Maryse @AllThingsMaths · 17h

...

Replying to @AllThingsMaths

I felt a little nervous when I realised it's 100 days to go!

[#MathsCPDChat](#)



Colleen Young @ColleenYoung · 17h

...

Replying to @AllThingsMaths

mathsbot.com/gcse/countdown [#mathscpdchat](#)

(The link Colleen shared in the tweet shown above is to a website page that shows, on whatever date you look at it, the number of days before the various external maths exams. The link is provided at the top of this summary.)



Maryse @AllThingsMaths · 17h

...

Replying to @ColleenYoung

Thanks Colleen - I've scheduled it to come out in a mo! It scared me a wee bit when I clicked on it today!

[#MathsCPDChat](#)

... and these comments and 'reports':



Joanne Green @MsJoanneGreen · 18h

...

[@AllThingsMaths](#) [#mathscpdchat](#) Not the maths class I had today. They'd been doing recurring decimals. Over half the class need practice. Teacher left that, with calculator too. For 0.5 recurring they'd written 11/20. I tried to explain. But a pupil wouldn't let me, they slated me.



Maryse @AllThingsMaths · 18h

...

Replying to @MsJoanneGreen

It's very hard when you get lessons like that. Really difficult.



Joanne Green @MsJoanneGreen · 18h

...

[@AllThingsMaths](#) [#mathscpdchat](#) How am I? The person newly employed to do my job, shadowed me. He's about 6 foot very broad shoulders. He ran out of the class when a pupil was showing off and being confrontational. How will school cope with a runner cover supervisor? I'm stunned!



Joanne Green @MsJoanneGreen · 18h

...

[@AllThingsMaths](#) [#mathscpdchat](#) I just couldn't believe that he'd left me there!

I'm a pro so I continued with the lesson. School mgt are fab and came straight up. I explained what the class didn't know and how I was rectifying that by going back to basics and a calculator.



Maryse @AllThingsMaths · 18h

...

Replying to @MsJoanneGreen

Cover supervisor is definitely a difficult job. I don't envy you.



Joanne Green @MsJoanneGreen · 18h

...

@AllThingsMaths #mathscpdchat It is a difficult job. Some pupils see 'walk over' when they meet you and are very rude. You need to learn the IT system within seconds and resources too. You don't know who's SEN. You need to model resource answers.

Maryse's second main question ...



Maryse @AllThingsMaths · 17h

...

What resources are folks using to revise for GCSE Maths revision?

Don't forget to use the #MathsCPDChat so we can follow the conversations and magpie the super resources too.

... received only the following five suggestions (although many more resources were mentioned in response to her later questions, as shown later in this summary):



Maryse @AllThingsMaths · 18h

...

Replying to @AllThingsMaths

I'll make a start. I love using the 5 a day for a quick start to the lessons.

@Corbettmaths website can be found here: corbettmaths.com/5-a-day/

5-a-day Primary

5-a-day Further Maths

5-a-day Core 1

corbettmaths.com

5-a-day

The Corbettmaths 5-a-day for GCSE, Primary, Further Maths and more



Miss Watson @Miss__Watson · 14h

...

Replying to @AllThingsMaths

@goteachmaths Mark maximisers

@mathsjem revision mats

@onmathsuk online mini mocks



MrHawesMaths @HawesMaths · 14h

...

Replying to @AllThingsMaths

@Corbettmaths @mathsgenie @mathsbox1 @draustinmaths are all great for topic based worksheets. @DrFrostMaths is great for past papers and consequently creating bespoke shadow papers too. Love it.

#mathscpdchat



Maryse @AllThingsMaths · 19h

...

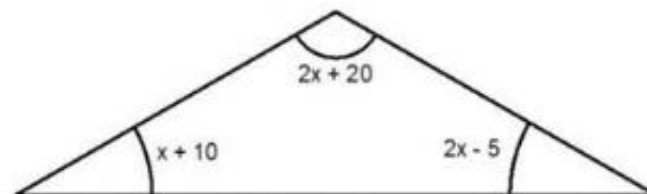
Another go-to for revision activities is @ColleenYoung
colleenyoung.org/revision-activ...

Lots of links to different resources. Are you using these in lessons?

#MathsCPDChat

“Show that” questions to practice

1) Here is a triangle:



Show that $5x + 25 = 180$

2) A square has side length $x - 1$ and an area of 20 cm^2 . Show that $x^2 - 2x = 19$

colleenyoung.org

Revision

The pages in the series: Highlighting is a Waste of Time UK A Level (16-18) Exam Questions & Solutions Worked Examples – A Level Dr ...



Maryse @AllThingsMaths · 19h

...

I use Maths Genie a lot too. This helps me to meet the needs of a range of students with them assessing independently using the worked solutions.

mathsgenie.co.uk

[#MathsCPDChat](#)

The host's next (third) main question ...



Maryse @AllThingsMaths · 19h

...

How are you choosing which topics to go over in class for Y11? What strategies do you use?

[#MathsCPDChat](#)

... generated more discussion than any other of her main questions. There was this conversation:



Matt Man @mr_man_maths · 19h

...

Replying to [@AllThingsMaths](#)

I use QLAs from the mock papers designed by [@Just_Maths](#). I share two groups with a colleague and we plan together in working through the Amber and Red topics



Maryse @AllThingsMaths · 19h

...

Replying to [@mr_man_maths](#) and [@Just_Maths](#)

Love these! Great to see joint planning too. Lighten the load where can.

[#mathscpdchat](#)



Matt Man @mr_man_maths · 19h

...

Replying to [@mr_man_maths](#), [@AllThingsMaths](#) and [@Just_Maths](#)

Starters by [@mathsbox1](#) allows to pick say 5 topics (there is a list where you can select weaker topics) are lovely in closing the gaps

[#mathscpdchat](#)



Matt Man @mr_man_maths · 19h

...

Replying to [@mr_man_maths](#), [@AllThingsMaths](#) and 2 others

And the Take 5 resources from [@Just_Maths](#) which I helped with the Higher whilst Mel did the Foundation for the exams last year. Even with no advance information, they are still brilliant for revision. [#mathscpdchat](#)



Maryse @AllThingsMaths · 19h

...

Replying to @mr_man_maths @Just_Maths and @mathsbox1

Yes! Another super reminder of a resource I need to tap into post half term.

[#mathscpdchat](#)



Matt Man @mr_man_maths · 19h

...

Replying to @mr_man_maths @AllThingsMaths and 2 others

Not forgetting @Just_Maths Bread and Butters which work wonders with the Crossover groups [#mathscpdchat](#)



Maryse @AllThingsMaths · 19h

...

Replying to @mr_man_maths @Just_Maths and @mathsbox1

I had completely forgotten this. I have book marked to share with colleagues after this.

[#mathscpdchat](#)

(Maryse replied to the tweet above with a personal message to Matt.)

The following long discussion was started by a reply to her own question from the host herself

...



Maryse @AllThingsMaths · 20h

...

Replying to @AllThingsMaths

I'm mixing it up a bit. Past papers, Method Maths show me the gaps. We're also doing one page of "1 mark questions" each lesson.

[#MathsCPDChat](#)



Colleen Young @ColleenYoung · 20h

...

Replying to @AllThingsMaths

I think the one mark questions are really useful, as are resources wh8ch allo you to customise questions by selecting the topics you want.



Maryse @AllThingsMaths · 20h

...

Replying to @ColleenYoung

Do you use any particular resource for customising questions? I know you've a few links on the website.

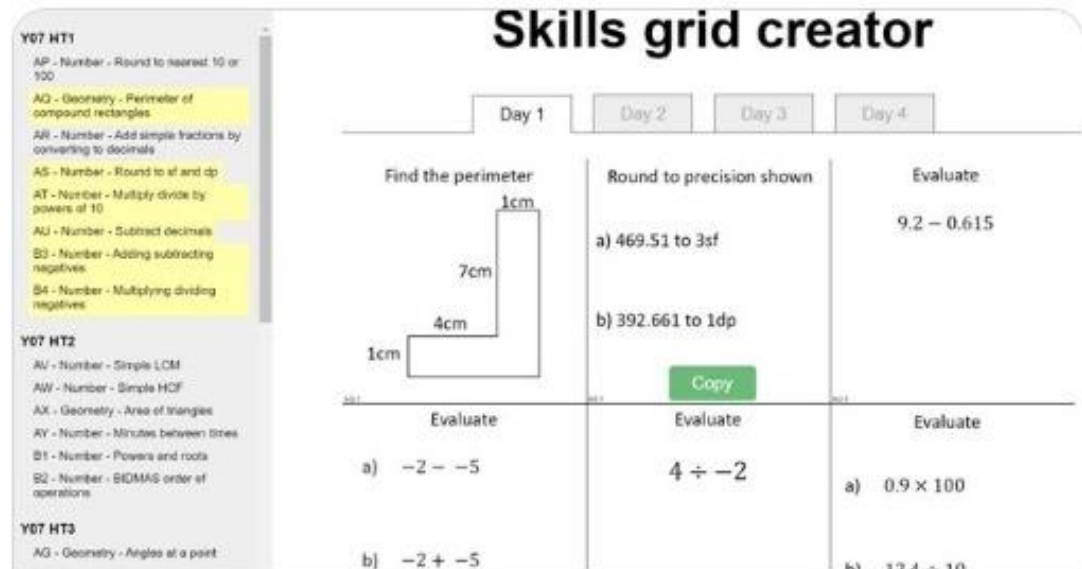
[#MathsCPDChat](#)



Colleen Young @ColleenYoung · 20h

Replying to @AllThingsMaths

A favourite for many years I have used with all ages is @Transum
Refreshing revision, others too, all here colleenyoung.org/2022/02/19/cus
... #mathscpdchat



The screenshot shows the 'Skills grid creator' interface. On the left is a sidebar with a list of skills categorized by year level (Y07 HT1, Y07 HT2, Y07 HT3) and topic (e.g., AP - Number - Round to nearest 10 or 100, AQ - Geometry - Perimeter of compound rectangles). The main area is a grid with columns for 'Day 1', 'Day 2', 'Day 3', and 'Day 4'. Each cell contains a task description and a 'Copy' button. For example, Day 1 includes 'Find the perimeter' with a diagram of a stepped shape and 'Evaluate' tasks like $-2 - -5$ and $-2 + -5$. Day 2 includes 'Round to precision shown' with tasks like 'a) 469.51 to 3sf' and 'b) 392.661 to 1dp'. Day 3 includes 'Evaluate' tasks like $9.2 - 0.615$ and $4 \div -2$. Day 4 includes 'Evaluate' tasks like 0.9×100 and 3.24×10 .

colleenyoung.org
Custom Maths Revision Starters
Custom Starters - pick the mathematics skills you want to review.
Thank you @StudyMaths and @Transum. Also, Further Updates to ...



Maryse @AllThingsMaths · 20h

Replying to @ColleenYoung and @Transum

I love Transum! I haven't used it in ages. A fabulous reminder.



Colleen Young @ColleenYoung · Feb 7

Replying to @AllThingsMaths and @Transum

It is so good. Note all the mapping documents, it is a really well structured site. #mathscpdchat



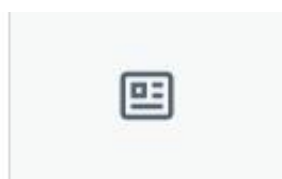
Mary Pardoe @PardoeMary · 20h

Replying to @AllThingsMaths @ColleenYoung and @Transum

Last year the NCETM also gave some suggestions about revision for GCSE Maths exams, here ...

ncetm.org.uk/features/gcse-...

#mathscpdchat



ncetm.org.uk

GCSE revision ideas for the final few lessons
Seven suggested resources and activities to help you prepare your students for exams



Maryse @AllThingsMaths · 20h

...

Replying to @AllThingsMaths and @ColleenYoung

I was reading this earlier:
colleenyoung.org/revision-activ...
[#mathscpdchat](#)

The tangent to a curve at a point has equation $y = 3x + 2$

What is the rate of change at that point?

A	B	C	D
$-\frac{1}{3}$	$-\frac{1}{2}$	2	3

$x_{n+1} = \frac{1}{2 - x_n^2}$


Start with $x_1 = 0.5$

Which of these is x_3 to 6 significant figures?

A	B	C	D
0.533333	0.541038	0.54104	0.541039

OCR

Which trigonometric rule should be used to find 'x' in the following question?



<input checked="" type="radio"/> A	Size Rule	<input type="radio"/> B	Cosine Rule
------------------------------------	-----------	-------------------------	-------------

edexcel

Which of the following is the correct error interval for 3cm rounded to the nearest cm?

<input checked="" type="radio"/> A	$2.5 < x < 3.5$	<input type="radio"/> B	$2.5 \leq x \leq 3.4$
------------------------------------	-----------------	-------------------------	-----------------------

colleenyoung.org
Diagnostic Exam Questions
To use the links in this post you will need to be logged in to the brilliant Diagnostic Questions site. Diagnostic Questions provide a ...



Maryse @AllThingsMaths · 19h

...

We're still using Teams too. Each student has their own private channel to ask individual questions and we can put hints and tips to help them get to the next step.

[#MathsCPDChat](#)



Maryse @AllThingsMaths · 19h

...

And we've used the excellent resource that someone created (can anyone help with a link or the author) with the frequency of the topics on each paper.

[#MathsCPDChat](#)



Matt Man @mr_man_maths · 19h

...

Replying to @AllThingsMaths

If you ask @Just_Maths, there is a wealth of information there.
[#mathscpdchat](#)



Maryse @AllThingsMaths · 19h

...

I'm a bit uncomfortable sharing the file without referencing the source but it's not to hand at the moment. Can anyone shed light on where I downloaded this?

[#mathscpdchat](#)

Edexcel Foundation GCSE June 17/18/19 Nov 17/18/19/20/21		
Number		
N1/N2 Place Value	N3 Ordering Decimals	N4 Reading Scale
June 17 P3 Q3	Mock 3 P1 Q1b	
June 18 P2 Q4	Mock 4 P1 Q1	
June 18 P3 Q5	June 18 P1 Q2b	
Nov 18 P2 Q1	Nov 18 P1 Q1	
June 19 P2 Q5	Nov 20 P1 Q1	
Nov 19 P1 Q1	Nov 21 P2 Q3	
Nov 20 P1 Q5		



Blackie @Chris_blackie · 17h

...

Replying to @AllThingsMaths

[Gcsemathquestions.co.uk](#) @gcse_math



Maryse @AllThingsMaths · 16h

...

Replying to @Chris_blackie and @gcse_math

Super! Thank you so much



[gcsemathquestions.co.uk](#)
Home | Gcsemathquestions

 **Mr Neill MATHS GCSE Exam Questions By Topic** @gcse_math · 14h ...
Replying to @AllThingsMaths and @Chris_blackie

I am glad you are finding it so useful. Make sure to go into the questions too to see the style they are asking.


 **Igreenwv** @ljgwolves · 16h ...
Replying to @AllThingsMaths

Is there an ocr version please

 **Maryse** @AllThingsMaths · 16h ...
Replying to @ljgwolves

gcsemathsquestions.co.uk

Have a look here

	gcsemathsquestions.co.uk Home Gcsemathsquestions
---	---

To the host's third main question (about which topics it might be sensible to focus attention on) there was also this single reply:

 **Mary Pardoe** @PardoeMary · 20h ...
Replying to @AllThingsMaths

These messages from the exam boards about what students couldn't do in last Summer's exams might be helpful ...

ncetm.org.uk/podcasts/lesso...

[#mathscpdchat](#)

	ncetm.org.uk Lessons from GCSE maths exams in summer 2022 The three main exam boards in England give feedback on where students did well, and not so ...
---	--

The host's, Maryse's, fourth main question ...



Maryse @AllThingsMaths · Feb 7

...

Are there any particular areas of maths that are causing a particular problem in the run up to the exams?

[#MathsCPDChat](#)

... raised the often-mentioned and concerning issue of the lack of ability of many students to solve unfamiliar problems (those maths problems that aren't of the same form as those that they have practised 'doing' many times before), in this short conversation ...



Maryse @AllThingsMaths · Feb 7

...

Replying to @AllThingsMaths

For me it's the old chestnut... problem solving. The students can do the nuts and bolts of the maths but can't always figure out what they need to do!

[#MathsCPDChat](#)



Colleen Young @ColleenYoung · Feb 7

...

Replying to @AllThingsMaths

I think the gold/silver/bronze questions can help there, with varying amounts of scaffolding. [#mathscpdchat](#)



Mary Pardoe @PardoeMary · Feb 7

...

Replying to @AllThingsMaths

The main purpose of learning maths is to enable one to become more easily able to solve problems... (?) [#mathscpdchat](#)



Maryse @AllThingsMaths · Feb 7

...

Replying to @PardoeMary

Definitely. I fear some of our students have lost out more than others with the breaks in learning they've had :(

[#mathscpdchat](#)

...and in this interchange:



Alex Hart @hartmaths · Feb 7

...

Replying to @AllThingsMaths

For my class, it's the questions right at the end of practice papers that are tricky to predict. They're usually quite 'niche' questions and you either spot the maths you need to do, or you don't... [#mathscpdchat](#)



Maryse @AllThingsMaths · Feb 7

...

Replying to @hartmaths

We worked our way through some of the tricky ratio questions (Foundation) this week. Eek.

[#mathsCPDChat](#)

Maryse shared a resource that she has found to be very useful, in a tweet which was not a reply to any main question, or part of any particular conversation ...



Maryse @AllThingsMaths · Feb 7

...

I've just clicked on the tab I opened earlier... this is great by @nathanday314, shared by @mathsjem

interwovenmaths.com/interwoven-rev...

[#mathscpdchat](#)

<p>Find the mean, median, and range of: $3\frac{1}{3}$, $6\frac{1}{6}$, and $2\frac{1}{2}$</p>	<p>A rectangle has a width of 3 cm and a height of 2 cm. Draw a second rectangle so that the two rectangles have a mean area of 13 cm^2 and have perimeters with a range of 8 cm.</p>	<p>Find the median of the following: 3×10^{-4}, 4×10^{-3}, 5×10^{-6}, 6×10^{-5}.</p>	
Surds	Averages with...		Equations
<p>Zoe says: <i>'The mean of $\sqrt{12}$, $\sqrt{27}$, and $\sqrt{48}$ is $\sqrt{29}$.'</i> Explain and correct the mistake that Zoe has made.</p>	<p style="text-align: center;">Bounds</p> <p>Find the upper and lower bounds for the median of the following numbers: 3.5 (rounded to one decimal place), 27 (to two significant figures), 30 (to the nearest ten).</p>	<p>Find the upper bound for the median angle in a quadrilateral. Is it possible to actually draw a quadrilateral with that median angle?</p>	

interwovenmaths.com
(IW) Interwoven Revision Questions to Project - Interwoven Maths by Nathan Day (@nathanday314) I typically use a visualiser (specifically the Ipevo V4K). But sometimes its handy to project thin...

... and then asked her fourth main question ...



Maryse @AllThingsMaths · Feb 7

We've got some super revision resources shared this evening. What strategies are you using for revision? Do you do after school sessions? Tutor time sessions? What do you find most effective?

[#mathscpdchat](#)

... which prompted the following conversation about after-school revision lessons:



Matt Man @mr_man_maths · Feb 7

Replying to @AllThingsMaths

After school revision sessions - always popular! Three groups in operation. Tutor time we have a couple of groups running. And also PE intervention which I help in getting some of the borderline Higher pupils to score better marks on the top half. [#mathscpdchat](#)



Sir Raymond ❤️ @RMcstravick · Feb 7

Replying to @mr_man_maths and @AllThingsMaths

Reasons for after schools? In my experience the main two are not enough time given for the subject and students not applying themselves in class.



Matt Man @mr_man_maths · Feb 7

Replying to @RMcstravick and @AllThingsMaths

More of a top up to what they are already doing. Some probably don't need to attend, but they do as they invite friends who are perhaps behind so it reinforces the learning. [#mathscpdchat](#)



Maryse @AllThingsMaths · Feb 7

Replying to @mr_man_maths

That's great you've a good take up. I'm having difficulty getting the students in who most need it.

[#mathsCPDChat](#)



Matt Man @mr_man_maths · Feb 7

Replying to @AllThingsMaths

All about building relationships with the students and getting them to trust that what we are doing is right for them. [#mathscpdchat](#)




Joanne Green @MsJoanneGreen · 17h

@mr_man_maths @AllThingsMaths [#mathscpdchat](#) Yes, afterschool sessions are popular. Outstanding schools make those mandatory for Year 11, Good schools provide an option to attend. All pupils who attend do well 😊

Joanne Green also posted some comments during this [#mathsCPDchat](#) that were not replies to any of the questions from the host. This such comment prompted a short conversation ...

 **Joanne Green** @MsJoanneGreen · 18h ...
@Allthingsmaths #mathscpdchat The other lessons that need maths, such as chemistry are doing well. All the pupils I have come across seem to know their maths calculations very well. They've been working through the AQA textbooks questions.


 **Maryse** @AllThingsMaths · 18h ...
Replying to @MsJoanneGreen
The cross curricula maths skills is definitely a discussion for another day! The requirements for different subjects is interesting and sometimes surprising!

#MathsCPDChat

 **Matt Man** @mr_man_maths · 17h ...
Replying to @AllThingsMaths and @MsJoanneGreen
Definitely. @DagsMaths did a workshop for MathsConf on this before. #mathscpdchat

 **David F** @DagsMaths · 2h ...
Replying to @mr_man_maths @AllThingsMaths and @MsJoanneGreen
I am planning an update

 **Mary Pardoe** @PardoeMary · 17h ...
Replying to @MsJoanneGreen and @AllThingsMaths
As a supply teacher (am I right?) covering lessons on a variety of subjects, you are in a good position to chat to maths teachers about what you notice in lessons on other subjects! #mathscpdchat

 **Maryse** @AllThingsMaths · 18h ...
Replying to @MsJoanneGreen
The cross curricula maths skills is definitely a discussion for another day! The requirements for different subjects is interesting and sometimes surprising!


#MathsCPDChat

... and this one prompted a reply from the host ...

 **Joanne Green** @MsJoanneGreen · 17h ...
#mathscpdchat Today at school the pupils used corbettmaths.com/wp-content/upl.., corbettmaths.com/wp-content/upl.., corbettmaths.com/wp-content/upl..

 **Maryse** @AllThingsMaths · 17h ...
Replying to @MsJoanneGreen
I love @Corbettmaths! #MathsCPDChat

... as did this one:

 **Joanne Green** @MsJoanneGreen · 17h ...
#mathscpdchat @AllThingsMaths After these basics
corbettmaths.com/wp-content/upl. , corbettmaths.com/wp-content/upl.
reading the question is hard in the class for some. Should they be there now during the run up? Or should they be taken out and taught in smaller groups? I think the latter.

 **Maryse** @AllThingsMaths · Feb 7 ...
Replying to @MsJoanneGreen
If only we had unlimited resources to do that :(


The host's last main question ...


 **Maryse** @AllThingsMaths · Feb 7 ...
We're coming to the last 5 minutes of our #mathscpdchat tonight (although I'm sure more will be shared afterwards!)

Any other kernels of wisdom to be shared?

[#100DaysToGo](#)

... prompted a focus on those GCSE students who are hoping to continue with maths at A level, and possibly beyond that ...

 **Matt Man** @mr_man_maths · Feb 7 ...
Replying to @AllThingsMaths
Also relate preparing Year 11s for those interested in A Level Maths and encouraging them that a Grade 7 is good but the harder they work now, there is less of a gap between both GCSE and A Level when they start in September #mathscpdchat

 **Maryse** @AllThingsMaths · Feb 7 ...
Replying to @mr_man_maths
Yes... those "close the gap" booklets can be dug out now and push them towards a higher grade before the GCSE!



Matt Man @mr_man_maths · Jun 25, 2022

...

Quite a few people were asking about the "Crossover" between GCSE and A Level.

Here are the topics that I shared at both [#MathsConf28](#) and [#MathsConf29](#).


Can anyone else think of any topics that cross over between GCSE and A Level?

Topic No	Topic	A Level spec	GCSE spec
Year 12			
1	Proof (by deduction and counterexample)	A1	A6
2	Laws of indices	B1	N7
3	Simplifying surds	B2	N8
4	Surds (Four operations)	B2	N8
5	Rationalising the denominator	B2	N8
6	Factorising quadratics	B3	A4
7	Solving quadratic equations (Factorising)	B3	A4
8	Completing the square	B3	A4
9	Quadratic formula	B3	A4
10	Quadratic graphs	B3	A11
11	Simultaneous equations (linear)	B4	A19
12	Simultaneous equations (linear and quadratic)	B4	A19
13	Simultaneous equations (graphs)	B4	A19
14	Solving linear inequalities	B5	A22
15	Solving quadratic inequalities	B5	A22

Topic No	Topic	A Level spec	GCSE spec
Year 12			
16	Inequality regions	B5	A22
17	Expanding triple brackets	B6	A4
18	Sketching cubic graphs	B7	A12
19	Sketching reciprocal graphs	B7	A12
20	Transformations of graphs (Translation)	B9	A13
21	Transformations of graphs (Reflection)	B9	A13
22	Equation of a straight line	C1	A10
23	Parallel and perpendicular lines	C1	A9
24	Equation of a circle and equation of tangent to a circle at a given point	C2	A16
25	Sine rule	E1	G22
26	Cosine rule	E1	G22
27	Area of a triangle (non right angled)	E1	G23
28	Trigonometric graphs	E3	A12
29	Solving trigonometric equations using graphs	E7	A12
30	Sketching exponential graphs	F1	A12

Topic No	Topic	A Level spec	GCSE spec
Year 12			
31	Estimating gradient of graphs	G1	A15
32	Vector notation and arithmetic	J3	G25
33	Vector geometry proof	J5	G25
34	Sampling	K1	S1
35	Histograms	L1	S3
36	Scatter diagrams	L2	S6
37	Averages and range from list of data (Mean, median, mode, LQ, UQ, IQR)	L3	S4
38	Averages from tables	L3	S4
39	Cumulative frequency curves and box plots	L1	S4
40	Mutually exclusive and independent events	M1	P8
41	Venn diagrams	M2	P9
42	Tree diagrams	M2	P9
43	Kinematics formulae (link to rearranging formulae?)	Q3	R11
44	Displacement time graphs	Q2	A15
45	Velocity time graphs	Q2	A15

Topic No	Topic	A Level spec	GCSE spec
	Year 13		
46	Simplifying algebraic fractions	B6	A4
47	Algebraic fractions - four operations	B6	A4
48	Composite functions	B8	A7
49	Inverse functions	B8	A7
50	Nth term of arithmetic sequence	D4	A25
51	Locating roots of equations such as $f(x) = 0$	I1	A20
	Conditional probability (Two way tables, Venn, tree diagrams)	M2	P9

 **Matt Man** @mr_man_maths · Feb 7 ...
Replying to @mr_man_maths

These may be useful @AllThingsMaths for those considering A Level Maths as well as preparing students for GCSE? #mathscpdchat

 **Maryse** @AllThingsMaths · Feb 7 ...
Replying to @mr_man_maths

Definitely. I'm loving being able to link the GCSE to the A level this year.

... and this comment from the host:

 **Maryse** @AllThingsMaths · Feb 7 ...
Replying to @AllThingsMaths

My biggest takeaways from this evening are reminders of the amazing resources we've got to mix it up a bit and meet the specific needs of our students. I've about 20 tabs open ready to be explored after little one is asleep.

[#mathscpdchat](#)

These were the host's final tweets of this #mathsCPDchat:

 **Maryse** @AllThingsMaths · Feb 7 ...
And so we reach 8pm. A huge thank you to those who've contributed tonight but also to those who've taken time to prepare and/or collate resources for us to find them more easily.

[#mathscpdchat](#)

 **Maryse** @AllThingsMaths · Feb 7 ...
Replying to @AllThingsMaths
100 days to go.

Good luck for the run up to the exams to both your students and to you!

[#MathsCPDChat](#)