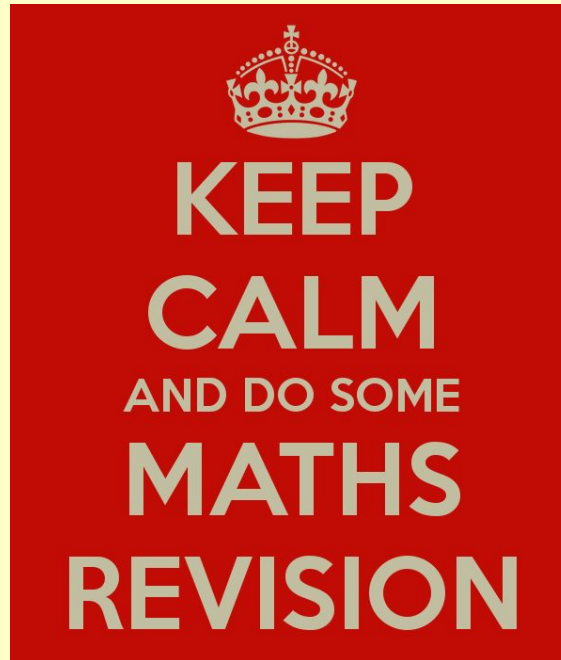


How to Revise Maths

What can you do to help your child with Maths revision?



Mr Whittaker

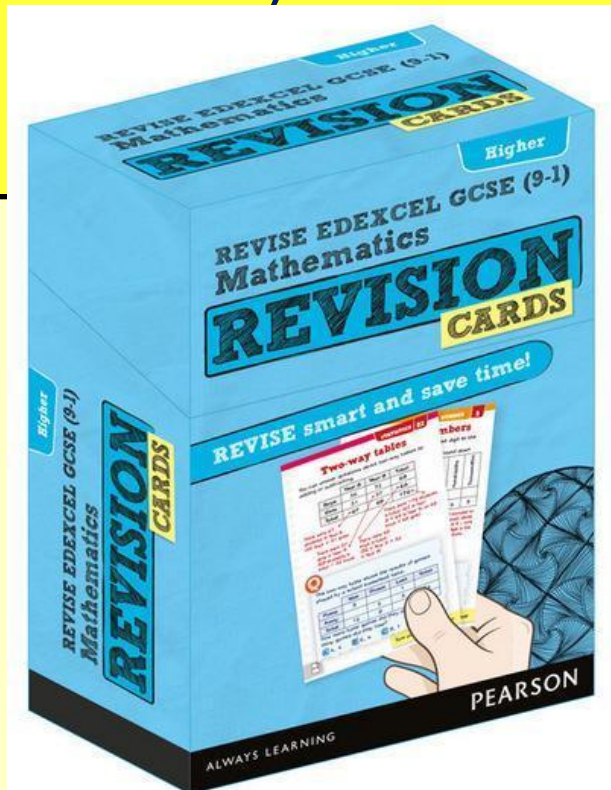
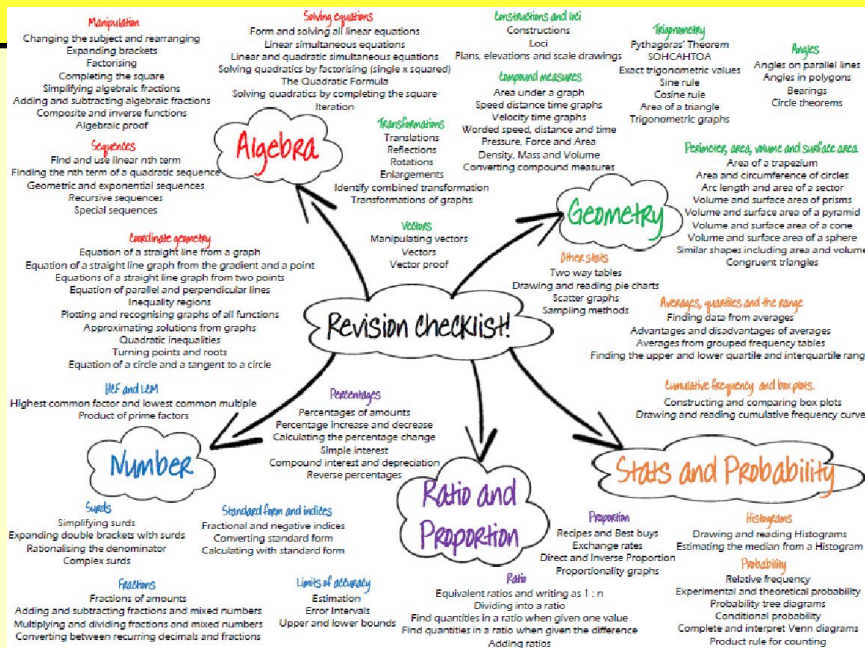
Teacher of Mathematics

Second in Charge of Maths (responsible for KS4)

Whittaker_T@bexleygs.co.uk

1. Make a list of topics to revise

- Revision cards
- Contents page of a revision guide
- Feedback from practice exam papers
- Scheme of work (link on Google Classroom)
- Revision checklist



BGS KS4 Maths Website
Link to here should be
on Google Classroom

Link to
resources

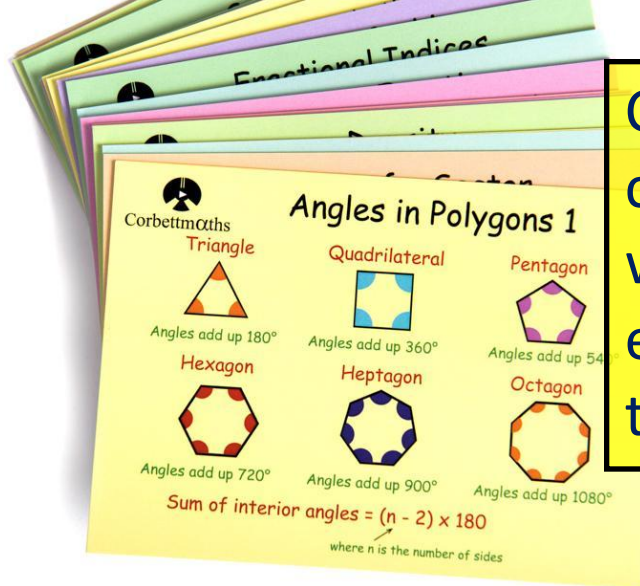
Sets 1-3 SOW

Page numbers refer to CGP Complete
Revision and Practice book

Year 9 Autumn Term			Year 9 Spring Term			Year 9 Summer Term		
Unit 1: Solving Equations Page 32-33	4 Lessons		Unit 8 Representing and Analysing Data 1	8 lessons		Unit 13: Sets and Probability 1 Pages 161-162 and 169-170	9 Lessons	
Unit 2: Decimals Pages 9-10	4 Lessons		Unit 9: Area and Volume 2	5 lessons		Unit 14: Transformations Pages 123-124	4 Lessons	
Unit 3: Trigonometry in 2D Pages 145-149 and 153-154 (excluding sine and cosine)	5 Lessons		Unit 10: Congruence and Similarity Pages 121-123	6 Lessons		Unit 15: Expanding, Factorising and solving quadratic Equations Pages 38-41	9 Lessons	
Unit 4: Linear Graphs Page 64-70	9 Lessons		Unit 11: Formulae Page 34-35	6 Lessons		Unit 16: Constructions and Loc P136-138	6 Lessons	
Unit 5: Area and Volume 1 P127-131	4 Lessons		Unit 12 Trigonometry in 3D	5 Lessons		Unit 17: Compound Measures Page 104-106	4 Lessons	
Unit 6: Standard Form Pages 19-20	5 Lessons					Unit 18: Surds Page 30-31	6 Lessons	
Unit 7: Indices Page 25-26	8 Lessons							

Year 10 Autumn Term			Year 10 Spring Term			Year 10 Summer Term		
Unit 19: Graphs Pages 72-78	10 Lessons		Unit 24: Trigonometry 2 Pages 148-152	10 Lessons		Unit 28: Inequalities Pages 50-52	8 Lessons	
Unit 20: Quadratic formula and completing the square	6 lessons		Unit 25: Representing, Interpreting and Analysing Data 2 Pages 183-186	4 Lessons		Unit 29: Rates of Change Pages 82-86	6 Lessons	
Unit 21: Approximations Pages 14-16	6 Lessons					Unit 30: Functions Page 60	6 Lessons	
Unit 22: Fraction Percentages and Proportional Change Pages 6-9 and 98-100	9 Lessons		Unit 26: Probability 2 Pages 166-168	7 Lessons		Unit 31: Circle Theorems Page 116-118	6 Lessons	
Unit 23: Simultaneous Equations Pages 56-57	8 Lessons		Unit 27: Sequences Pages 46 and 53	9 Lessons		Unit 32: Ratio, Direct and Inverse Proportion Page 89-95	8 lessons	

Year 11 Autumn Term			Year 11 Spring Term			Year 11 Summer Term		
Unit 33 Histograms	4 Lessons							
Unit 34: Transformations of Functions Page 78	8 Lessons							

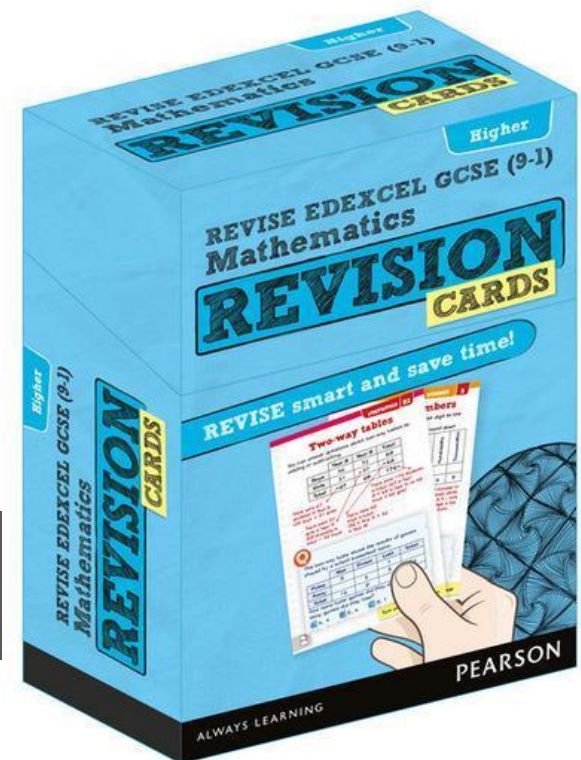


Corbett Maths sells excellent revision cards. They have QR links on the back which take you to revision videos, exam questions and solutions for the topic on the front of the card.

<https://corbettmaths.com/revision-cards/>

These revision cards are made specifically for Edexcel, and have a lot of detail on each card.

<https://www.amazon.co.uk/REVISE-Edexcel-Mathematics-Higher-Revision/dp/129217322X>

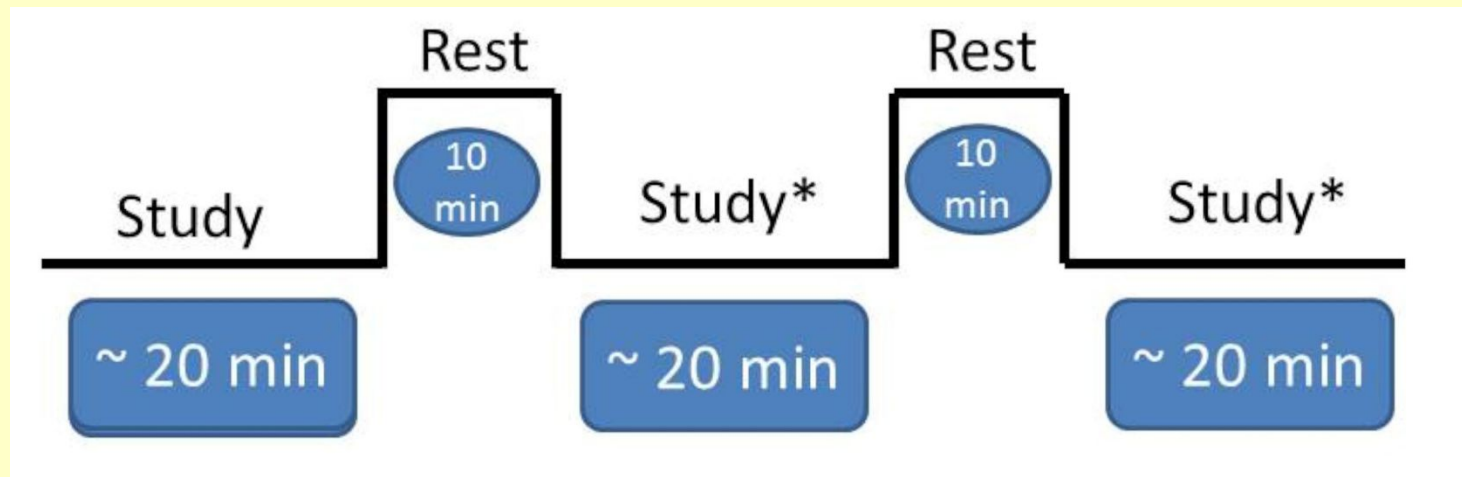


2. Plan when (and where) to revise

Make sure it is a quiet space. Remove distractions (e.g. mobile phone, computer games)

Plan to work in 20 to 30 minute chunks.

Take (short) breaks.



3. Have little treats and things to look forward to.

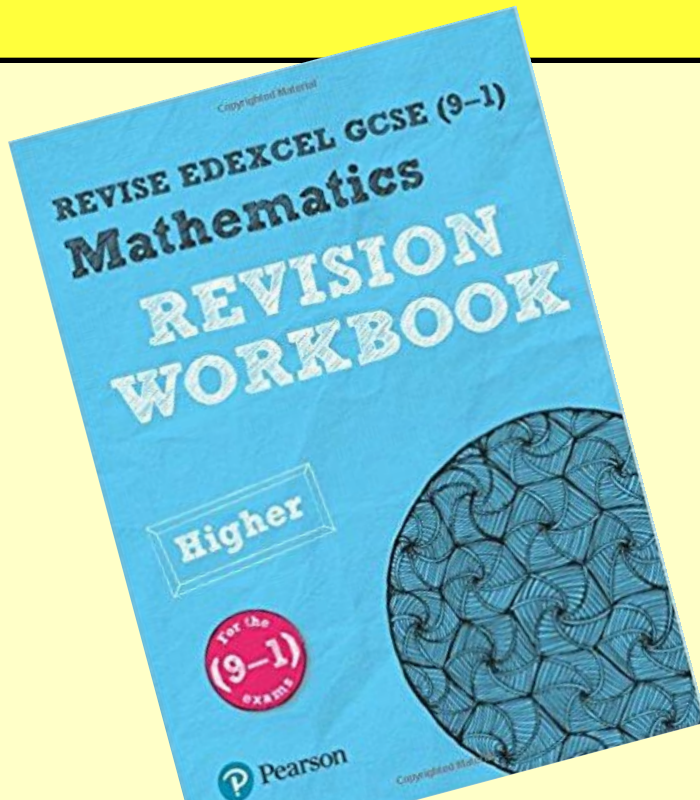
Rewards can help keep people motivated.
Make sure these come **after** revision!



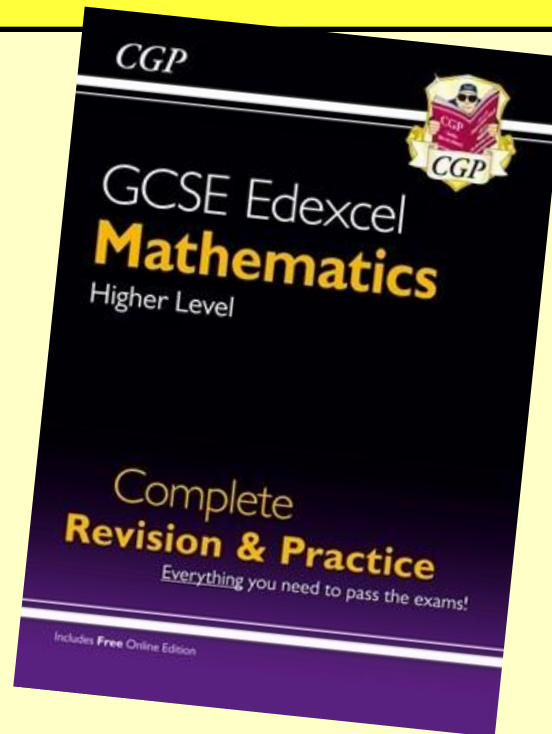
Healthy (but tasty) snacks are a good choice.

4. Don't just read through the textbook!

The only way to revise maths is to do maths.



https://www.amazon.co.uk/Revise-Edexcel-Mathematics-Revision-Workbook/dp/1292210885/ref=pd_lpo_sbs_14_t_0?encoding=UTF8&psc=1&refRID=QY112608TYXD2S1NCYSK



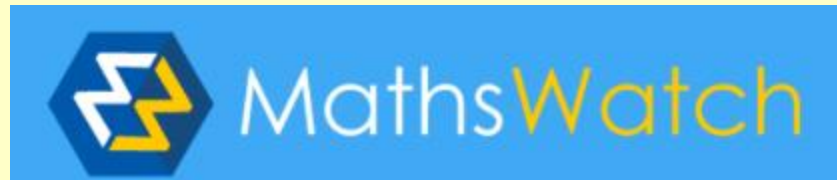
<https://www.cgpbooks.co.uk/secondary-books/gcse/maths/mxhs43-gcse-maths-edexcel-complete-revision-pr>

You can purchase the CGP Complete Revision and Practice Book via **ParentPay** for **£5.57** (RRP £10.99)

(Pay by 4th October and it should be in school by half term.)

5. Use the internet. The internet is like having your own personal teacher who is available for you whenever you like.

Find which resources you like the most. Then use them to practice the topics on your revision list.



<https://corbettmaths.com/5-a-day/gcse/>



Corbett
mαths

<https://corbettmaths.com/>

This website has some fantastic revision videos.

The 5-a-day section is a great way to do some maths every single day. There is a choice of difficulty and the answers are available

<https://corbettmaths.com/5-a-day/gcse/>

Maths Genie

Exam questions and solutions by topic, with links to videos to help you revise.

<http://www.mathsgenie.co.uk/gcse.html>

Mathswatch

Use the “Resources” tab from the KS4 area (link should be on Google Classroom).



6. Don't just practice the topics you can do.

Work on the difficult topics *now* rather than leave them until the exam!



7. Make sure you ask for help.

You can't ask for help in the exam, but you can now!

Online videos, revision guides, friends, teachers, etc.

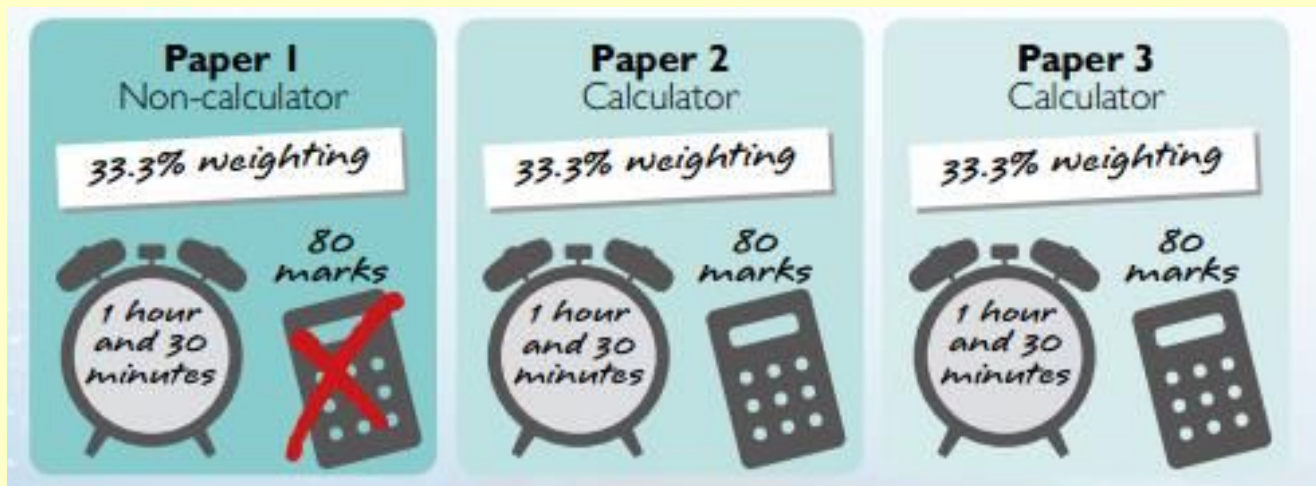


8. Practice doing questions under exam conditions.

This will help you get used to the time pressure.

Once you've done that, you can go through the paper again in a different colour.

Don't leave lots of blanks in your practise papers!



9. Practice using your calculator

Do you know how to use all the functions on **your** calculator?

Could you reset it if you kept getting the “True/False” message?

To reset this Casio calculator, press shift then 9 and follow the instructions.



10. If it works for you, try revising with a friend for a bit of the time.

Explaining things to others can really help your own understanding. Don't distract each other though!

And if you work better on your own, that is fine.

11. Most important of all, try not to worry.

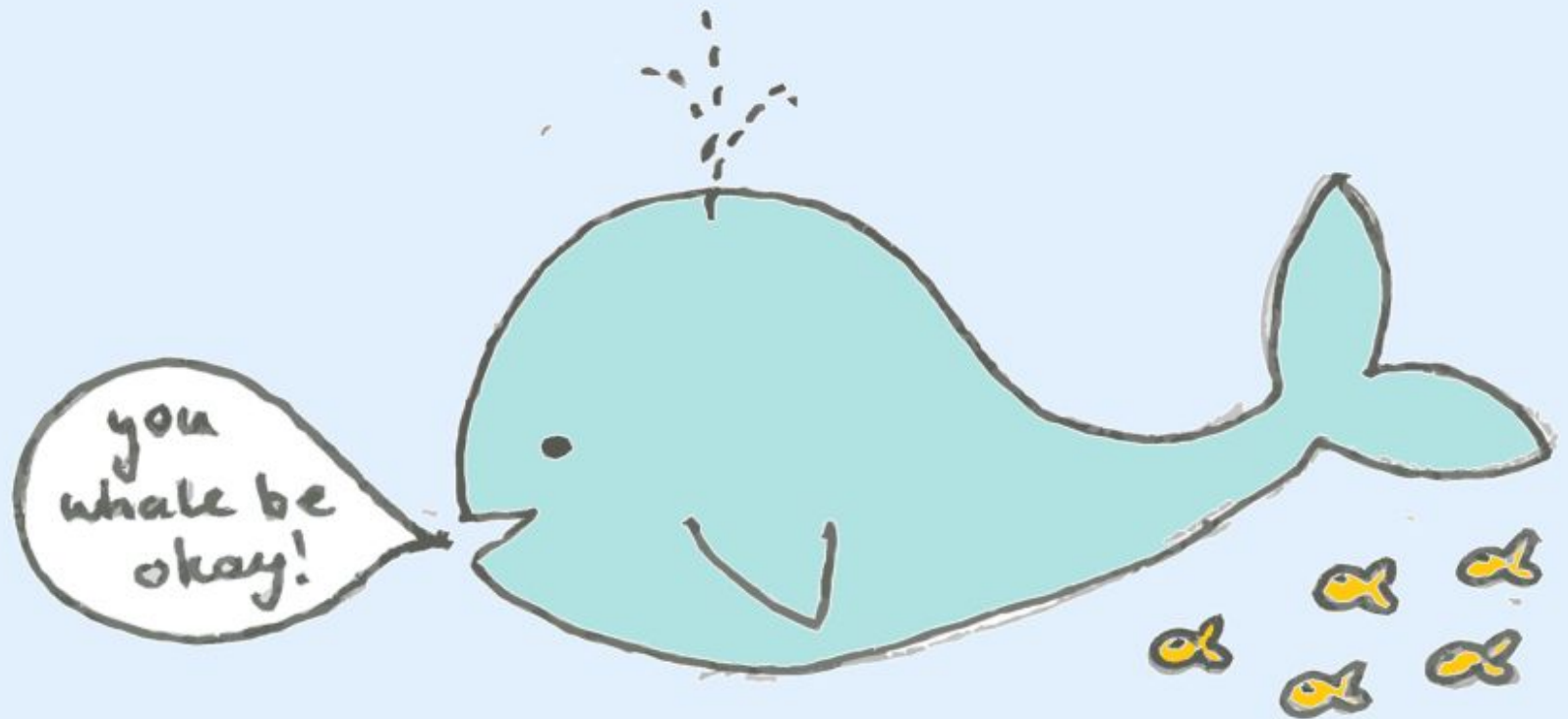
But remember, it is natural to worry a little bit.



If you get too worried, just think of this cute panda.

12. Look after yourself

- Sleep
- Health
- Exercise
- Time



Edexcel GCSE (9-1) Maths: need-to-know formulae

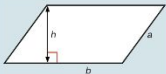
www.edexcel.com/gcsemathsformulae

Areas

Rectangle = $l \times w$



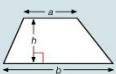
Parallelogram = $b \times h$



Triangle = $\frac{1}{2} b \times h$



Trapezium = $\frac{1}{2} (a + b)h$

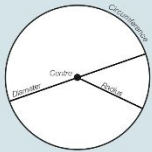


Circles

Circumference = $\pi \times \text{diameter}$, $C = \pi d$

Circumference = $2 \times \pi \times \text{radius}$, $C = 2\pi r$

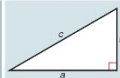
Area of a circle = $\pi \times \text{radius squared}$ $A = \pi r^2$



Pythagoras

Pythagoras' Theorem

For a right-angled triangle,
 $a^2 + b^2 = c^2$



Trigonometric ratios (new to 9)

$\sin x^\circ = \frac{\text{opp}}{\text{hyp}}$, $\cos x^\circ = \frac{\text{adj}}{\text{hyp}}$, $\tan x^\circ = \frac{\text{opp}}{\text{adj}}$



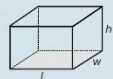
Quadratic equations

The Quadratic Equation

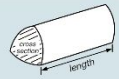
The solutions of $ax^2 + bx + c = 0$,
where $a \neq 0$, are given by $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Volumes

Cuboid = $l \times w \times h$



Prism = area of cross section
 $\times \text{length}$



Cylinder = $\pi r^2 h$



Volume of pyramid =
 $\frac{1}{3} \times \text{area of base} \times h$



Compound measures

Speed

$\text{speed} = \frac{\text{distance}}{\text{time}}$



Density

$\text{density} = \frac{\text{mass}}{\text{volume}}$



Pressure

$\text{pressure} = \frac{\text{force}}{\text{area}}$

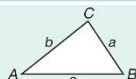


Trigonometric formulae

Sine Rule $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Cosine Rule $a^2 = b^2 + c^2 - 2bc \cos A$

Area of triangle = $\frac{1}{2} ab \sin C$



Foundation tier formulae

Higher tier formulae

You do not get a
formula sheet.

Learn the formulae!

You could make some
flash cards and get
people to test you.

Finally...

You probably know what works best for you, so feel free to ignore this advice if it doesn't suit you.

Happy revising! 😊

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