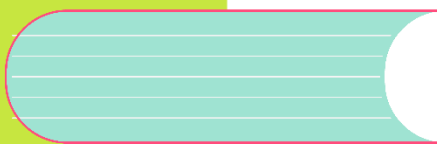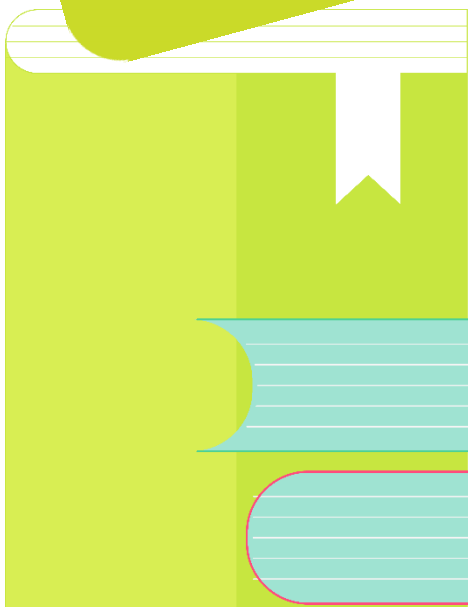# GCSE 9-1 Maths Revision Guide

E=MC²

Primrose Kitten

YouTube tutorials for science and maths.

Still to come…..

Questions on each topic

Key words

Whole topic video links

Bits to help if you don't understand sections

Other books in this series

Previously published...

- Maths and Calculator skills for Science Students   March 2016
- Maths (The Chemistry bits) for GCSE Combined Science   May 2016
- Maths (The Chemistry bits) for GCSE Triple Science   May 2016
- Science revision Guide   April 2017
- Maths Revision Guide   April 2017

Coming soon…

- Maths (The Physics bits) for GCSE Combined Science
- Maths (The Physics bits) for GCSE Triple Science
- Summer Start for A-Level Chemistry
- Summer Start for A-Level Physics
- Maths for A-Level Chemistry

Chances are if you want a maths/science book I've written it or I am writing it.

For full book listings visit www.PrimroseKitten.com

First published 2017

Copyright; Primrose Kitten ©

Image credits, pixabay

Acknowledgements

Thank you to my husband for putting up with my spending every night writing this and for correcting all of my SPG mistakes. To my sons for being the inspiration behind this project.

Table of Contents

Revision Techniques

- Why do you need to revise effectively? Revision techniques #1
- When should I start revising? Revision Techniques #2
- How to find your motivation and stay motivated. Revision Techniques #3
- 5 easy and effective ways to revise and study. Revision Techniques #4
- Flashcards. Revision Techniques #5
- Using past exam papers to study. Revision Techniques #6
- Colour - The easiest way to make study interesting. Revision Techniques #7
- How to revise for the new specification maths exams. Revision Techniques #8
- How to fill MASSIVE gaps in your knowledge. Revision Techniques #9
- How to best use your revision guide. Revision Techniques #10
- How best to use your revision guide, part 2. Revision techniques #11
- The easiest way to improve your grades, which you're going to hate!! Revision Techniques #12
- Study timetable. Revision techniques #13
- Study Timetable - Plan with Me. Revision Techniques #13
- Another easy way to improve your grades, which you're going to hate!! Revision Techniques #14
- Study Space. Revision Techniques #15

Don't believe me? – here are some more links to help you.

The science of revision: nine ways pupils can revise for exams more effectively.

The Guardian. Bradley Busch Psychologist @Inner_drive Tuesday 19 April 2016

Ditch the highlighter and teach a friend. Psychology shows us a lot about how to improve our memory and avoid distractions – here are some dos and don'ts

https://www.theguardian.com/teacher-network/2016/apr/19/students-revise-exams-revision-science?CMP=share_btn_tw

Planning Tips

1. Write your timetable in pencil (or make a version on the computer) so you can change things around if necessary.
2. Start by thinking about what activities you can't miss (dinner, clubs or TV programs) and put these into your timetable.
3. Plan in when you need to do your homework to get it in on time
4. On top of your homework time, aim for a minimum of 2 extra hours on a weekday and 4 hours each day over the weekend.
5. Plan to revise for 1 hour per subject each week (this is in addition to homework) fill in the table below to help you work out how much time you need to spend on revision
6. Fill in the timetable spreading out the subjects (e.g., don't do a whole day of Maths, do a bit each day) put contrasting subjects next to each other, to give your brain a break (e.g. English and Physics)
7. Stick to the timetable, it will help ensure you cover each subject and spread out your revision.

Subject	Group	Priority	Number of hours each week
Maths	Core	High (+2 hours)	
English Language	Core	High (+2 hours)	
English Literature	Core	High (+2 hours)	
	A-level choice	High (+2 hours)	
	A-level choice	High (+2 hours)	
	A-level choice	High (+2 hours)	
	A-level choice	High (+2 hours)	
	Subject I struggle with	Medium (+1 hour)	
	Subject I struggle with	Medium (+1 hour)	
	Subject I struggle with	Medium (+1 hour)	
	Subject I struggle with	Medium (+1 hour)	

Time	Monday	Tuesday	Wednesday	Thursday	Friday
4.00 - 4.25					
		5-minute break			
4.30 – 4.55					
		5-minute break			
5.00 – 5.25					
		5-minute break			
5.30 – 5.55					
		5-minute break			
6.00 – 6.25					
		5-minute break			
6.30 – 6.55					
		5-minute break			
7.00 – 7.25					
		5-minute break			
7.30 – 7.55					
		5-minute break			
8.00 – 8.25					
		5-minute break			
8.30 – 9.00					

Time	Saturday	Time	Sunday
5-minute break			
5-minute break			
5-minute break			
5-minute break			
5-minute break			
5-minute break			

Number

Specification statement	Self-assessment		
These are the bits the exam board wants you to know, make sure you can do all of these…	**First review** 4-7 months before exam	**Second review** 1-2 months before exam	**Final review** Week before exam
I can define the term integer	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can order positive integers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can order negative integers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can order fractions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can order decimals	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use $=, \neq, <, >, \leq, \geq$	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define the mathematical term operation	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can add, subtract, divide and multiply integers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can add, subtract, divide and multiply fractions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can add, subtract, divide and multiply decimals	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can order operations; and identify which should be used first.	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise opposite operations	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify prime numbers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify factors	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify multiples	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify common factors	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify common multiples	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify highest common factor (HCF)	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify lowest common multiple (LCM)	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can define and identify prime factorisation	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify and calculate square numbers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify and calculate cube numbers	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify and calculate square roots	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify and calculate cube roots	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate powers of 4 or higher	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate roots	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate using fractions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate using π	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate and interpret standard form	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can convert fractions to decimals and decimals to fractions **Flashcards to help with this available to download from www.primrosekitten.com**	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹

I can use fractions in ratios	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can use percentages	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can recall and convert standard units for mass	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can recall and convert standard units for time	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can recall and convert standard units for length	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can recall and convert standard units for money	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can use estimation to calculate quantities	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can round numbers to a specified number of decimal places or significant figures	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can use inequalities to show the interval a number might fall between	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹
I can interpret limits of accuracy	☺ ☻ ☹	☺ ☻ ☹	☺ ☻ ☹

Algebra

Specification statement	Self-assessment		
These are the bits the exam board wants you to know, make sure you can do all of these…	**First review** 4-7 months before exam	**Second review** 1-2 months before exam	**Final review** Week before exam
I can recognise that *a x b* is equal to *ab*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise that *4a* is equal to *a + a + a + a* or *4 x a*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise that y^2 is equal to *y x y*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise that $\frac{a}{b}$ is equal to *a ÷ b*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use *a x b* is equal to *ab*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use *4a* is equal to *a + a + a + a* or *4 x a*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use y^2 is equal to *y x y*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use $\frac{a}{b}$ is equal to *a ÷ b*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can put numbers into an algebraic expression and if needed calculate an answer	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can collect like terms in an algebraic expression	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can multiple out a number in front of a bracket	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can factorise an algebraic expression by taking out common factors	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can multiple two expressions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can factorise $x^2 + bx + c$	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can simplify an algebraic expression	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can rearrange an algebraic expression to change the subject	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use and manipulate surds	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use the laws of indices	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use functions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can plot and determine coordinate from a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can plot a line from the expression *y = mx + c*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify parallel lines from the expression *y = mx + c*	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can determine the expression *y = mx + c* from a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can find the gradient of a line	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can find the intercept of a line	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify roots from a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify intercepts from a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can identify turning points from a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise and sketch the graphs for linear functions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise and sketch the graphs for quadratic functions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise and sketch the graphs for cubic functions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹

I can recognise and sketch the graphs for $\frac{1}{x}$	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can plot graphs	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can interpret distance-time graphs	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can interpret velocity-time graphs	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can solve an equation	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can find approximate solutions to an equation from a graph	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can solve quadratic equations by factorising	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can solve two simultaneous equations	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can make equations from a situation given in text	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can solve linear inequalities and show the answer on a number line	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can find terms in a sequence from the nth term	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can find the nth term from a sequence	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recognise and use square numbers	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recognise and use cube numbers	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recognise and use triangular numbers	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹

Ratio, proportion and rates of change

Specification statement	Self-assessment		
	First review 4-7 months before exam	Second review 1-2 months before exam	Final review Week before exam
These are the bits the exam board wants you to know, make sure you can do all of these…			
I can recall and convert standard units for time	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for length	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for area	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for volume	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for mass	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for speed	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for rates of pay	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for prices	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for density	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall and convert standard units for pressure	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can interpret and use scale factors	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can interpret and use scale diagrams	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can interpret and use maps	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can interpret and use ratio notation	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can apply ratio to real life context	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can express a relationship as a ratio	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use parts to work out ratios	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can link ratios to fractions	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use and interpret percentages	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate percentage change	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can compare two things using percentages	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate interest	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can solve questions that involve direct proportionality	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can solve questions that involve inverse proportionality	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can compare different quantities using rations	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall that x being inversely proportional to Y is the same as x being proportional to $\frac{1}{y}$	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can use equations to show direct and inverse proportion	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recognise direct and inverse proportion on a graph	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can recall that the gradient of a line shows the rate of change	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹
I can calculate compound interest	☺ 😐 ☹	☺ 😐 ☹	☺ 😐 ☹

Geometry and measures

Specification statement	Self-assessment		
These are the bits the exam board wants you to know, make sure you can do all of these…	First review 4-7 months before exam	Second review 1-2 months before exam	Final review Week before exam
I can define the term point	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term line	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term vertices	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term edge	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term plane	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term parallel lines	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term perpendicular lines	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term right angles	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term polygons	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term regular polygon	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term reflection	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can define the term rotational symmetry	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can use a ruler and compass to draw the perpendicular bisect of a line	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can use a ruler and compass to solve loci problems	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the rules of angles to find angles at a point	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the rules of angles to find angles on a straight line	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the rules of angles to find vertically opposite angles	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the rules of angles to find corresponding angles on parallel lines (do not call them Z angles)	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall the rules of angles to find the sum of angles in a triangle	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a square	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a rectangle	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a parallelogram	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a trapezium	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a kite	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of a rhombus	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the rules of congruence triangles (SSS, SAS, ASA, and RHS)	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of an equilateral triangle	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall and apply the properties of an isosceles triangle	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can rotate a shape	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹

I can reflect a shape	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can translate a shape	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can enlarge a shape	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term centre of a circle	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term radius	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term chord	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term diameter	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term circumference	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term tangent	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term arc	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term sector	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can define the term segment	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of cubes	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of cuboids	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of prisms	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of cylinders	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of pyramids	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of cones	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can identify properties (including; faces, edges, surfaces and vertices) of spheres	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can convert a 2D shape in to a 3D shape and a 3D shape into a 2D shape	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can measure lines and angles	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can measure lines on a map and use scale conversions	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can use bearings	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and use how to find the area of a triangle **Flashcards to help with this are available on** www.primrosekitten.com	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and use how to find the area of a parallelogram	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and use how to find the area of a trapezium	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and use how to find the volume of a cuboid	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and use how to find the volume of a cylinder	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the circumference of a circle	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the area of a circle	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the perimeter of a 2D shape	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the surface area of a sphere	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹

I can recall the formulae to determine the volume of sphere	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the surface area of a pyramid	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the volume of a pyramid	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the surface area of a cone	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the formulae to determine the volume of a cone	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can calculate arc lengths	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can calculate angles in a circle	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can calculate sectors of a circle	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can determine relationships in similar shapes	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and apply the formula for Pythagoras $a^2 + b^2 = c^2$	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall and apply the formula for the trigonometric ratios (sin, cos, tan)	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can recall the exact values of sin θ and cos θ where θ = 0°, 30°, 45°, 60° and 90°; and know the exact value of tan θ where θ = 0°, 30°, 45° and 60° **Flashcards to help with this are available on** **www.primrosekitten.com**	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can describe a translation as a vector	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can add vectors	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can subtract vectors	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹
I can multiply vectors	☺ ☺ ☹	☺ ☺ ☹	☺ ☺ ☹

Probability

Specification statement	Self-assessment		
These are the bits the exam board wants you to know, make sure you can do all of these…	**First review** 4-7 months before exam	**Second review** 1-2 months before exam	**Final review** Week before exam
I can describe the probability of an event from a table or tree	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can determine if an event if fair, random or equally likely	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can give a value (out of 1) to the probability of an event	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recall that total probability must equal 1	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can combine sets of probability data using tables	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can combine sets of probability data using Venn diagrams	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can combine sets of probability data using trees	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can combine sets of probability data using grids	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the probability of a combination of independent events	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the probability of a combination of dependent events	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹

Statistics

Specification statement	Self-assessment		
These are the bits the exam board wants you to know, make sure you can do all of these…	**First review** 4-7 months before exam	**Second review** 1-2 months before exam	**Final review** Week before exam
I can determine the properties of a population or distribution from a sample	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret, construct and use frequency tables	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret, construct and use bar charts	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret, construct and use pie charts	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret, construct and use pictograms	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret, construct and use line charts	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can compare sets of data from graphs	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the median	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the mode	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the mean	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the range	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can calculate the modal class	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can apply statistic to a population	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can interpret scatter graphs	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can recognise correlation	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can draw a line of best fit	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can make predictions from data	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹
I can work out future trends	☺ ☹ ☹	☺ ☹ ☹	☺ ☹ ☹