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**Southmoor Academy**  
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# Year 10 Revision

## Summer 2022

### Mathematics

#### Foundation

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How to revise maths

Revision Lists

Practice questions

(Revision tasks are also available on Mathswatch)

## How do I revise for my GCSE Maths?

1) Start early using a “little and often” approach... It is so important that you regularly practise the material you have learnt in lessons. The only way to remember what you learnt yesterday/last week/last month/last year is to regularly try questions on those topics. If you find a topic you can't remember how to do a question on, watch the video on Mathswatch to give yourself a reminder.

2) Revise Strategically – You have a list of the topics that are in the exam...

Establish what topics are your strengths and those that need attention by sitting a mock exam, going through your homework or even just asking your teacher. Then focus on the topics that need attention...

- watch the Mathswatch on the topic
- read the notes your teacher has given you on topic in your book
- try the Mathswatch worksheets
- Attend any “revision sessions” offered in school and ask the teacher in advance if you can work on that topic
- revisit the topic in a few days and also in a few weeks time to ensure you remember.

3) Past papers, past papers, past papers! Although every year there will be a tricky question or two, the vast majority of a GCSE maths paper is fairly predictable. So by completing loads (if not all) the past papers, you will be fully prepared for the majority of the questions... it will also help you identify what topics are your “weaknesses” and will let you know which videos and practice questions you will need to work on next. Also with the “problem solving” questions, even though the ones you practise may not come up exactly the same, the skills you apply to solve it when working on the past papers will really help you be prepared for the trickier question(s) in the actual GCSE.

Also mark your papers using mark schemes/model solutions or even ask your teacher very nicely... perhaps with a chocolate bar attached to thank them for their time!

4) Timings – also when you are working on past papers, consider timing yourself to make sure you are working at a good pace. If the exam has 80 marks and is 1 hour 30 minutes long, “a minute a mark” is a good rough guideline.

5) Revision Sessions – I highly recommend taking advantage of any opportunities you have in school... who knows, the questions covered in a revision session may be the questions that come up in the actual GCSE.

6) Variety – Mix up your revision, adding in different activities... Make your own [Revision Cards](#) or [flash revision cards](#). How about making a poster on the cube numbers to add to your bedroom ceiling? How about using window pens to write the Speed, Distance, Time triangle on your window so you can learn while looking out the window? It's important that you don't get bored of revision, however don't spend too long making posters.

7) Use your lesson time wisely... although you may spend a few hours a week revising mathematics, remember you also have 5 hours of maths lessons each week. Keep 100% focussed in your lessons and avoid distractions. Who knows, the moment you decide to chat about something random, might be the moment your teacher passes on the most important piece of advice ever!

8) Create a cheat sheet –By creating a cheat sheet, you have to consider all the key facts that you may need... then as the sheet of paper gets smaller, you have the challenge of learning the material and also removing it from your cheat sheet. It's a great way to gradually learn lots of information. Also you will have a handy sheet to bring with you on the walk to school on the day of the actual GCSE.

9) Use these great resources

[Vle.mathswatch.co.uk](http://Vle.mathswatch.co.uk)

(username:17jsmith@southmoorschool password: southmoor)

[www.mathsgenie.co.uk](http://www.mathsgenie.co.uk)

[www.corbettmaths.com](http://www.corbettmaths.com)

[www.onmaths.com](http://www.onmaths.com)

**Paper 1**

<b>Topic</b>	<b>Mathswatch</b>	<b>Textbook Pages</b>	<b>GCSE Pod</b>
Algebra reasoning			MATHS-07-004
Area and proportion	117	255	MATHS-32-006
Bearings	124	213	MATHS-30-002
Calculation	135	98	
Coordinate problem	113	134-136	MATHS-22-001
Decimal addition and subtraction	17, 18, 75	7-15	MATHS-18-002
Decimal multiplication	66	7-15	MATHS-18-003
Describe a population			
Direction and scale drawing		209	MATHS-30-001
Expand brackets	134b	91	MATHS-001-006
Expression	137	116	MATHS-01-001
Factors	28	35	MATHS-008-001
Fraction bigger than 1	72	51	
Fraction to decimal	66	56	MATHS-29-002
Inverse proportion graph	161	54	MATHS-17-005
Inverses	21		
Laws of indices	29, 131	30	MATHS-10-004
LCM	80	38	MATHS-008-004
Mode from line graph	64	336	MATHS-25-001
Money puzzle	22a		
Multiplication	19	4	MATHS-19-002
Negative number subtraction	68a	1	MATHS-19-005
Parallelogram	43	176-180	MATHS-13-003
Percentage of an amount	87	75	MATHS-11-001
Probability	59	342	MATHS-26-001
Probability with two events	151	342	MATHS-27-001
Proportion and rounding	20	6	MATHS-20-003
Ratio in form 1 : n	165a	69	
Reading from a graph	161	54	
Rearrange a formula	136	121	MATHS-05-003
Reverse percentage	110	73	MATHS-11-004
Rhombus	43	176-180	MATHS-13-003
Share an amount in ratio	106	70	MATHS-17-002
Simplify a ratio	38	63	MATHS-17-001
Solids	43		MATHS-22-008
Standard form	83	32	MATHS-18-005
Trapezium	43	176-180	MATHS-13-003
Tree diagram	151	356	MATHS-27-002
Types of angle	13	168	
Volume of a cuboid	115	270	MATHS-33-006

Paper 2			
Topic	Mathswatch	Textbook Pages	GCSE Pod
Algebraic notation			MATHS-07-001
Angles around a point	45	168	MATHS-31-001
Average speed	142	201	MATHS-35-002
Bank statement	22b		
Bar chart	15	328	MATHS-16-002
Calculation	77		
Check by rounding	91	23	MATHS-20-003
Constructions	146	242	MATHS-30-003
Conversion graph	107	155	
Cube numbers	81	26	MATHS-10-001
Direct proportion graph	42	161	MATHS-22-002
Draw a linear graph	96	336	MATHS-22-003
Fraction to decimal	85	56	MATHS-29-002
Frequency tree	57	353	
Inequalities	138	107	MATHS-04-010
Intercept of a line	159	336	MATHS-22-003
Line symmetry	11	283	MATHS-32-001
Median with grouped data	130a	323	MATHS-25-002
nth term of linear sequence	103	130	MATHS-23-002
Number line	4	189	
Number problem	72	60	
Percentage	88	73	MATHS-11-001
Pressure	54	204	MATHS-35-002
Probability	59	342	MATHS-26-001
Pythagoras, area and ratio	150, 53, 106	217	MATHS-24-001
Ratio and percentage	38	63	MATHS-17-003
Ratio to function	165c	63	
Reciprocal	76	54	MATHS-10-003
Scales	38	209	
Set up and solve an equation	137	111	MATHS-04-001
Similarity	144	306	MATHS-32-006
Time and fraction of an amount	72	60	MATHS-09-002
Types of data	63	245	
Unit conversion	112	192	MATHS-35-001
Venn diagram	127	358	MATHS-14-001

## Paper 3

<b>Topic</b>	<b>Mathswatch</b>	<b>Textbook Pages</b>	<b>GCSE Pod</b>
Algebraic argument			
Algebraic expression	7	116	MATHS-07-003
Angle problem	45, 121, 122	168	MATHS-31-001
Assumption			
Best buy	41	161	
Compound interest	164	86	MATHS-10-008
Compound measures and time problem	42	203	MATHS-35-002
Density	142	203	MATHS-35-002
Enlargement fractional scale factor	148	294	MATHS-32-002
Equation	135a	98	MATHS-04-001
Equation of a line	159a	136	MATHS-22-03
Factorisation	94	95	MATHS-01-004
Function machine	36	124	MATHS-07-006
Inequality notation	138	107	
Limits	132	25	MATHS-20-006
Mean and ratio	62	320	MATHS-25-001
Metric imperial conversion	112	192	MATHS-35-005
Mixed number to fraction	71	44	
Multiples	28	34	MATHS-08-001
Ordering numbers	70	46	MATHS-18-001
Pictogram	16	329	MATHS-16-001
Pie chart	128a	332	MATHS-16-001
Place value	1	7	MATHS-20-002
Positive and negative roots	160	111	MATHS-10-001
Prime numbers	28	36	MATHS-08-002
Proportion problem	42	161	
Rotational symmetry	11	185	MATHS-32-001
Set up and solve an equation	137	116, 98	
Simplification	33	89	
Substitution	95	118	MATHS-05-001
Systematic listing	69	348	
Triangle properties	150	217	MATHS-34-001
Triangular numbers			MATHS-23-003
Trigonometry	168	221	MATHS-24-002