

Lynn High School

SCIENCE

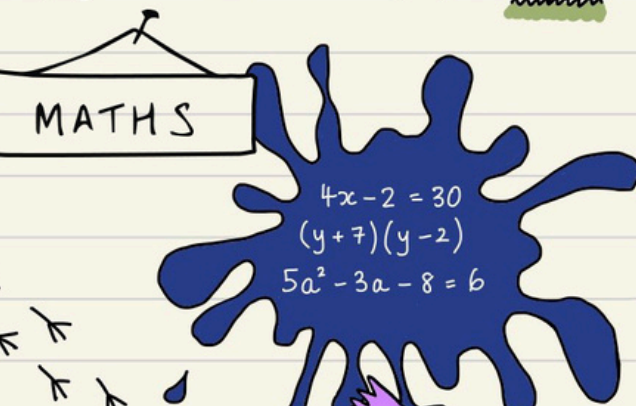
ENGLISH

MATHS

$$4x - 2 = 30$$

$$(y + 7)(y - 2)$$

$$5a^2 - 3a - 8 = 6$$

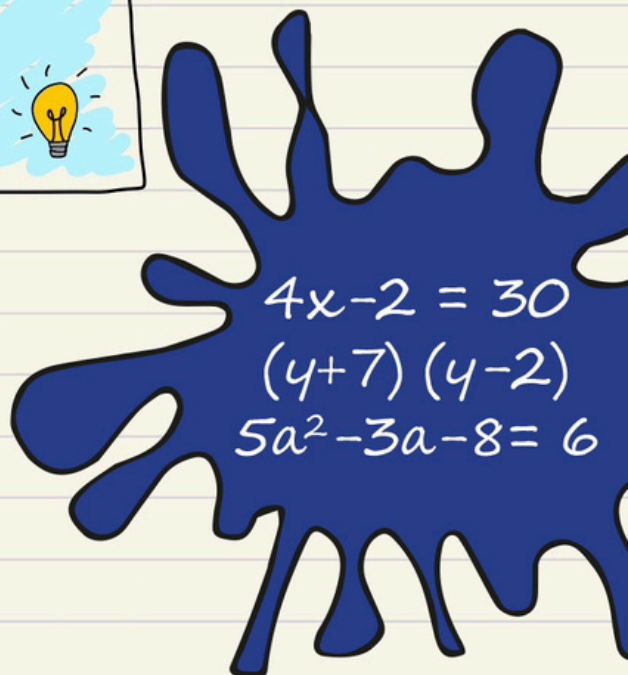
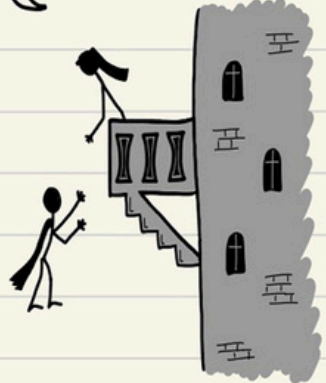


MATHS

SCIENCE

ENGLISH

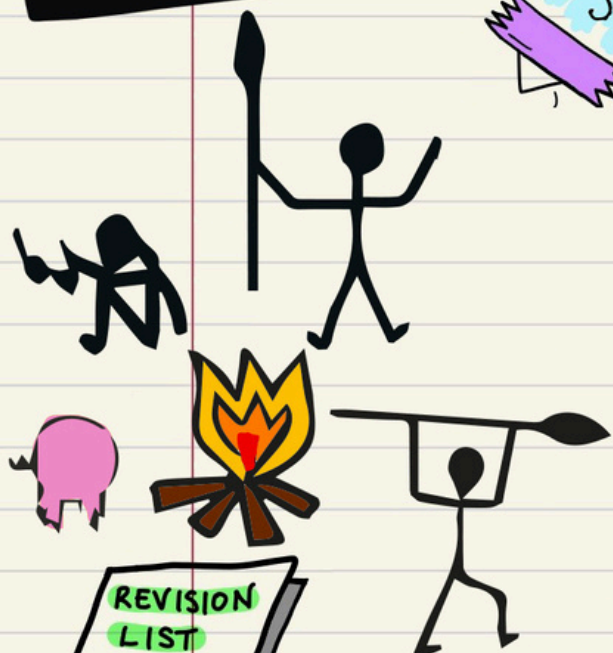
KS3
Revision
Guide
JANUARY 2025



$$4x - 2 = 30$$

$$(y + 7)(y - 2)$$

$$5a^2 - 3a - 8 = 6$$



KS3 Exams

20 JAN

24 JAN

2025

Why is being skilled at revision so important and how can you make it effective?

We acquire a great deal of knowledge and understanding at school, and throughout our lives more generally, but some of the most interesting and useful information we don't always remember. Being able to retain this knowledge builds confidence, gains understanding, can develop a passion for a subject, helps us do well in assessments and exams, and gives us opportunities beyond school as a result of a wider range of choices. Gaining knowledge and understanding of the world helps us develop opinions, empathise with other people and become rounded, interesting and socially responsible citizens.

We want you to do as well as you possibly can in your KS3 exams (and later on in your GCSEs, A' levels and Vocational qualifications). Revising properly is a crucial part of this because it means you experience a real sense of achievement in your own learning, and it also means your exam score is more likely to reflect your true knowledge and understanding in a subject. This helps your teacher to help you, by telling them which subject content you understand well already and which needs a bit more consolidation.

Creating the right revision environment

- Find a quiet place to study – this should be away from younger siblings, pets and other distractions at home.
- Turn off the TV and your music, put your phone in another room so you are not tempted to pick it up every time you get a message or social media alert!
- Find a flat surface you can work on (this could be a desk or the kitchen table), find a chair to sit in that supports your back.
- Have the following items to hand: this KS3 revision guide, Knowledge Organisers, subject revision guides linked in the subject pages here (or other subject-specific materials), exercise books for the subject, pencil case, lined paper and a drink.
- Go to the toilet before you start.
- Create a timetable for your revision weeks, deciding at which time you are going to do your blocks of revision, and stick to it. Take a photo of your timetable and send to your parent/carer so they can help you stay on track.
- Plan 30 minutes of revision at a time and make sure you have at least a 10-minute break before doing another one. Aim for 45-60 minutes per day in the 3-4 school weeks before the exams, with perhaps a little more at the weekends.
- Be disciplined with yourself – it can be hard not to get distracted sometimes but just remember how great it will feel when you prove what you are capable of.



Revision strategies

THERE ARE A VARIETY OF DIFFERENT REVISION STRATEGIES YOU CAN USE TO REVISE.

3 essential revision strategies



Look, cover, write, check – a quick and easy method for testing yourself

Brain dump
– organising and summarising information for better recall

Quizmaster
– to test yourself and others and strengthen your memory

Look, cover, write, check



Look

- Look at, and read, a section of your Knowledge Organiser a few times.



Cover

- Cover up the information (the definition of words for example).



Write

- Write down what you can remember on a piece of paper



Check

- Check to see what you missed

Brain dump

Look at, and read, a section of your KO a few times (or if you feel confident about the topic already, you can miss this step!)



Put your KO away and mindmap everything you can remember about this topic – keep going until you run out of ideas!



Check to see what you missed, and add this in another colour.

Repeat!

Quizmaster



Look at, and read, a section of your KO a few times



Write 5-10 quiz questions based on the most important information – start with openers like What is...? How does...? Where is...? What does...?



Test yourself using your quiz (or get someone else to test you!)



Mark your answers and fill in any mistakes



Repeat the next day or a few days later to make sure it has stuck!

Knowledge Organisers



WHAT IS A KNOWLEDGE ORGANISER?

Knowledge Organisers are documents that contain the key information, or 'threshold concepts' that you need to know for a particular subject.

They are usually about one side of A4 for each topic, and you should aim to memorise as much of the detail on the Knowledge Organiser as possible.



Maximising Memory

There is currently a lot of academic interest in the role of memory, and how we can maximise its capacity and performance. One particularly effective method of helping facts to 'stick' is something called 'spaced practice', where a subject is returned to again and again.

Recall information from memory

If not used effectively, the Knowledge Organisers will not yield the best results. The method that we endorse is a simple one: Look, Cover, Write, Check. This method is called self-quizzing.

Still aren't sure how to revise?

Click [here](#) for a help video which explains how to use the 3 revision techniques we recommend in KS3:

- self quizzing** use this for mainly English & Science but also in Maths when using your Knowledge Organiser
- brain dump** use for English & Science
- mind-mapping** only use this for planning of answers to practice questions in English, we'd prefer you **not** to spend hours creating your own mind maps - it's more important to use the printed content you already have in KOs and use your time to use the **self-quiz** or **brain dump techniques** or complete **practice questions**.



WHICH KNOWLEDGE ORGANISER?

The following pages include links to the relevant Knowledge Organisers for the Year 7, 8 and 9 January exams.



Key Stage 3 English Revision



Year 7

TIPS FOR REVISING ENGLISH


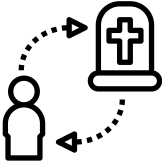


For your January exam, you are going to be answering a question focused on an extract from *The House with the Chicken Legs*. Within the exam you will be expected to read the extract, identify the techniques the writer uses, and explore the language and the writer's purpose.

You will be given 10 minutes reading and annotation time, 25 minutes writing time and 5 minutes proof reading time. In total your exam will be 40 minutes (50 minutes if you have extra time).

Revision Techniques

- **Practice vocabulary** from your vocabulary list.
- **Quizzes from the Knowledge Organiser.**
- **Look, cover, write, check.**
- **Use your exercise book** and teacher feedback from previous work.
- **You will be set a targeted homework** the week before your exam to support your final revision.

Themes to revise

Supernatural		Baba Yaga is a supernatural being and her house with chicken legs magically moves around from place to place.
Life and death		Marinka longs to live amongst the living but her role as future Yaga means she spends all of her time with the dead as she guides them into the stars. Ultimately, learning that even death can inspire us to embrace life and that death doesn't mean the end.
Loneliness		The only people Marinka meets are dead. Other than her grandmother, Baba Yaga, and her jackdaw Jack, Marinka is utterly alone and desperate for friendship.
Love		Marinka is a young girl who is desperate for security. She feels loved by Baba Yaga but misses the love of her parents that she lost at a very young age. Marinka searches for love and security in friendship - the close friendship and love of her pet jackdaw; briefly her friendship with other characters she encounters on her journey to adulthood.

Betrayal



Marinka feels betrayed by her grandmother and is thrust into the adult world too soon. The difference between the act of betrayal and how that feels versus the feeling of being betrayed by someone you love.

Year 8




TIPS FOR REVISING ENGLISH

For your exam, you will be writing a creative piece based on a stimulus.

You will have 10 minutes planning time, 25 minutes writing time and 5 minutes proof reading time. Your exam will be 40 minutes (or 50 minutes if you have extra time).

Revision Techniques

- **Practice vocabulary** from your vocabulary list from Dystopian Fiction unit (Half Term 1).
- **Quizzes from the Knowledge Organiser.**
- **Look, cover, write, check.**
- **Use your exercise book** and teacher feedback from previous work.
- **You will be set a targeted homework** the week before your exam to support your final revision.

Grammar and punctuation	Definition
Direct speech 	Put speech marks (“...”) around speech and before you close them make sure that you punctuate (usually with a comma). For each new person that speaks, you need to start a new line.
Ellipsis 	Set of dots which denote missing information.
Adverbial phrases	Subordinate clauses, which provide additional information in a sentence, often positioned at the start of a sentence.
Time phrases 	A phrase which gives reference to the time.
Frequency adverbials	A phrase / adverb which gives reference to how often things take place.
Place adverbials	Adverbial phrases which give reference to where the action is taking place.

Language Features	Definition
Adjective	A word added to, or grammatically related to, a noun to modify or describe it.
Metaphor	A figure of speech in which something is described as though it IS something else (non-literal).
Simile	A comparison of two things using the terms 'like' or 'as'.
Personification	Applying human qualities or characteristics to inanimate objects.
Semantic field	A collection of words that are related to each other thematically, by their meaning.
Pathetic fallacy	A device in which human emotions are attributed to aspects of nature (e.g., weather used to reflect mood).
Zoomorphism	Figurative language that characterises people, objects, places, and ideas with animal attributes.

Structural Features	Definition
Catalyst	An incident (often at the start) which starts the narrative.
Cliff hanger	A story that is left on a moment of suspense and is open for interpretation by the reader.
Narrative / narration	Spoken or written account of events - story, style or process of telling a story.
Omission	The deliberate 'leaving out' of key information.
Narrative focus	What the writer chooses to focus the reader's attention toward.
Shift in focus	When the writer moves the reader's attention to something else.
Flashback	When the narrator or protagonist remembers back to a time prior to the setting or time before the main story.
Foreshadowing	A narrative device in which suggestions or warnings about events to come are dropped or planted.

Checklist for effective narratives

- An attention grabbing first sentence
- Clear description of setting
- Well described characters
- Information to establish tone / atmosphere
- Details to allow reader to understand what is happening (plot)
- Use of enigma / mystery - questions that need answering

- A hook - a way to draw the reader into the story - could be through the use of one of the other features
- Clear sense of genre (e.g. mystery, horror, thriller, romance, etc)
- Varied openings
- Varied sentence structure
- Upgraded or ambitious vocabulary
- A sense of pace
- A sense of action - that something is happening
- A moral purpose

Year 9

YEAR 9 EXAM

The exam: You will write an argument that is based on a statement, similar to those you have practiced throughout the Morality of the Modern Age scheme.




45 minutes to complete the written task (55 minutes if you have extra time)


- 10 minutes to plan
- 30 minutes to write
- 5 minutes to check

Revision Techniques

- Knowledge Organiser quiz
- Practice using key vocabulary
- Exercise books and teacher feedback

Key Knowledge

PATHOS		The means of persuasion that appeals to the emotions of an audience.
ETHOS		The believably and credibility of a speaker - this encourages the audience to listen.
LOGOS		The means of persuasion by demonstration of logical proof or reasoning that is real or apparent.



Use techniques to help you achieve ethos, logos and pathos:

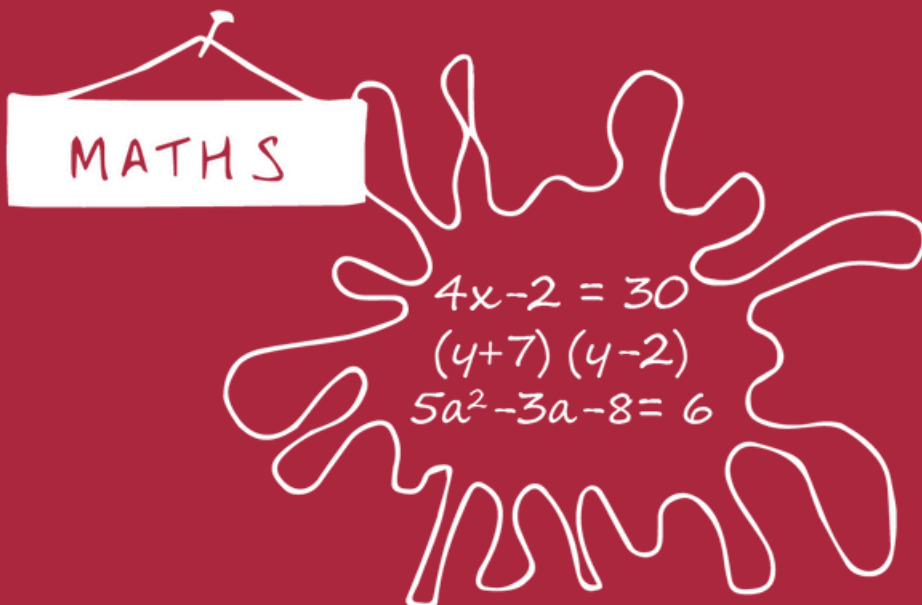
Language Techniques	Definition	Example
Rhetorical question	A question asked in order to prompt further thought or to make a point rather than to get an answer.	If not me, then who? If not now, then when?
Emotive language	Words or phrases deliberately used to evoke a powerful feeling from the reader i.e. sympathy, anger, outrage.	I find the notion that I am not worthy of voting for my country's next leader because of my age, both demeaning and deeply insulting.

Language Techniques	Definition	Example
Statistic and facts	A fact that is supported by numerical data. Facts are information that can be proved to be true.	The Trussell Trust's foodbank network distributed 1,332,952 three day emergency food supplies to people in crisis, a 13% increase on the previous year. 484,026 of these went to children.
Flattery	Deliberately complimenting the reader.	The very fact that you are reading this article suggests that you are compassionate and understanding of the plight of your fellow man.
Hyperbole	Deliberately exaggerated language.	He was so obnoxious; I was hoping he would be arrested on the spot and given a very long prison sentence purely for not saying please or thank you.
Eye-witness quotation/ expert opinion	Direct speech from a person who witnessed an event or direct speech from someone who has an in-depth understanding of the topic.	The British Nursing Association said the move was "hugely concerning" and a stark example of the "extreme workforce pressure" at NHS emergency services, which are facing rising demand while recruitment and retention of nurses gets harder.

Structure your writing:

Paragraph structure	Sentence examples
An opening idea that links to the question/ continues your argument.	Building on the latter idea.... Whilst this idea is important, it is also crucial that we consider....
An example that supports your point/idea.	This became clear to me when.... Consider the example of... This is especially true of...
An explanation of how your example and point work together to support your argument.	This indicates that..... You must recognise that..... It is evident that....
Link back to the question.	Ultimately..... Considering the latter..... With this mind...

Key Stage 3 Maths Revision



TIPS FOR REVISING MATHS

- **Use Knowledge Organisers** and the Read, Cover, Write, Check, Correct method to learn key definitions and formula.
- **Do the targeted Mathswatch** revision homeworks set by your teacher, these are the most similar questions to the tests.
- **Use websites** such as Mathswatch, Corbett Maths, Mr Barton's Maths and BBC Bitesize to target topics you have struggled with and practise questions on them.
- **Practice using your calculator efficiently.**
- **Copy down your examples** from class again and justify each step in your teacher's solution.
- **Ask your teacher** about any work that you have not understood and ensure you practise it again.
- **Use your January Assessment Feedback Sheet** to highlight your weaker topics and then use the websites above to practise questions on these areas.
- **Find past papers online from AQA and Edexcel** and attempt them in test conditions. Please bear in mind that these will be GCSE papers and will be most appropriate for Year 9. Practise, Practise, Practise!

Past Paper Questions & Mark Schemes

AQA GCSE Maths Past Papers

<https://www.aqa.org.uk/find-past-papers-and-mark-schemes>

Sample question papers also available on mathswatch

These will be issued by Miss Dunne and notification given on Class Charts.

Useful Websites

Mathswatch

www.vle.mathswatch.co.uk/vle/

Please see your maths teachers for log-in details

Maths Made Easy

www.mathsmadeeasy.co.uk

BBC Bitesize

KS3 Maths - BBC Bitesize

Maths Genie (Year 9 only)

www.mathsgenie.co.uk

(choose GCSE revision)

Revision Maths

www.revisionmaths.com

Mr Barton's Maths

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

Corbett Maths

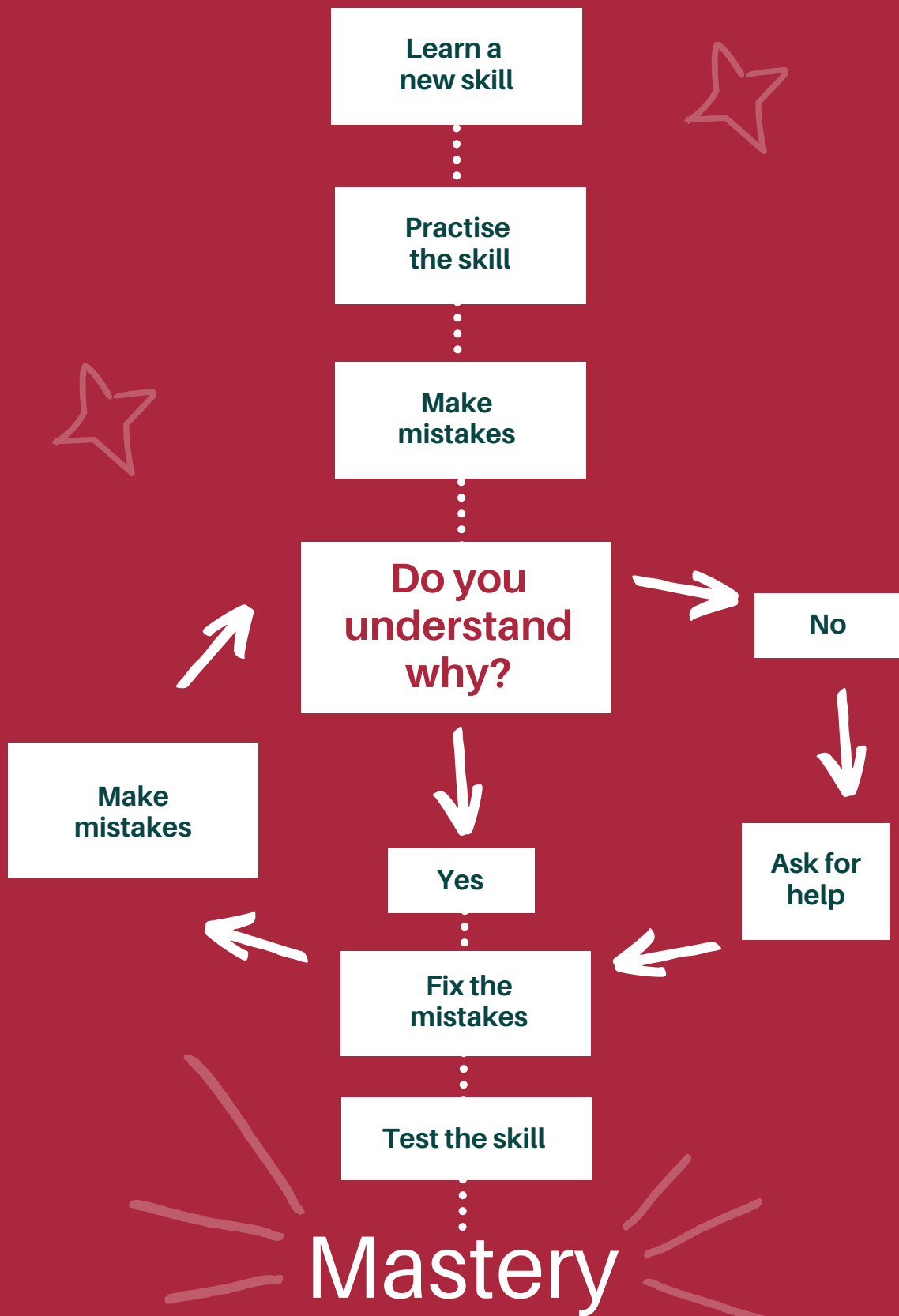
www.corbettmaths.com

Sparx

www.sparxmaths.uk

(topic codes for the videos can be found on the maths revision lists)

How to learn Maths



Maths Revision List

All Year 7 and Year 8 Maths exams will last 45 minutes non-calculator.

Students will require: pen, pencil, ruler, rubber, pencil sharpener, protractor and a pair of compasses

Year 7

CORE & EXTENSION (SETS 1A, 1B, 2A & 2B)

- Factors, multiples, primes, cubes and squares (U211 & M322)
- Rounding to significant figures and estimating (M994, M131 & M878)
- Prime factorisation. HCF and LCM (M108 & M365)
- Writing and simplifying algebraic expressions (U105)
- Expanding single brackets (M237)
- Factorising into single brackets (M100)
- Probability of events occurring (M332 & M206)
- Multiplication and division (M187 & M354)
- Reading train timetables (M963)
- Area and Perimeter of rectangles (M390 & M635)
- Area of trapezia, area of circles (M705 & M231)
- Angles on a straight line, around a point, in a triangle, in parallel lines and in regular polygons (M818, M351, M606 & M653)



[Year 7 Maths \(Core & Extension\) Knowledge Organiser - Term 1](#)



[Year 7 Maths \(Core & Extension\) Knowledge Organiser - Term 2](#)

Year 7

CORE & SUPPORT (SETS 3A & 3B)

- Addition and subtraction (M928 & M347)
- Multiplication and division (M187 & M354)
- Adding with negative numbers (M106)
- Rounding to the nearest 10,100,1000 (M111)
- Probability of events occurring (M332 & M206)
- Prime factors (M108)
- Working with time (M627)
- Factors, multiples, primes, squares and cubes (U211 & M322)
- Money (M681)
- Reading train timetables (M963)
- Simplifying in algebra (U105)
- Angles around a point, on a straight line and angles in triangles (M818 & M351)
- Expanding single brackets (M237)
- Area of triangles and rectangles (M610 & M390)



[Year 7 Maths \(Core & Support\) Knowledge Organiser - Term 1](#)



[Year 7 Maths \(Core & Support\) Knowledge Organiser - Term 2](#)

MATHS topics you need to revise for the exam

Year 8

CORE & EXTENSION (SETS 1A, 1B, 2A & 2B)

- Non calculator percentages (M476)
- Squares and square roots (M135)
- Fractions of amounts
- Adding, subtracting, multiplying and dividing fractions (M835, M157 & M110)
- Fractions, decimals, percentages equivalence (M958)
- Percentage increase/decrease (U773)
- Percentage change (M476)
- Equivalent fractions, ordering fractions (M410 & M335)
- Prime factorisation (M108)
- Writing expressions
- Substituting into expressions (M327)
- Expanding single and double brackets and simplifying (M237, M792 & M960)
- Factorising into single brackets and quadratic expressions (M100 & M908)
- Simplifying algebraic fractions (M754)
- Angle properties on a straight line, around a point, in parallel lines (M818 & M606)
- Bearings (M416)
- Area of triangles, parallelograms, circles and parts of circles (M610, M291, M231 & M169)



[Year 8 Maths \(Core & Extension\) Knowledge Organiser - Term 1](#)



[Year 8 Maths \(Core & Extension\) Knowledge Organiser - Term 2](#)

Year 8

CORE & SUPPORT (SETS 3A & 3B)

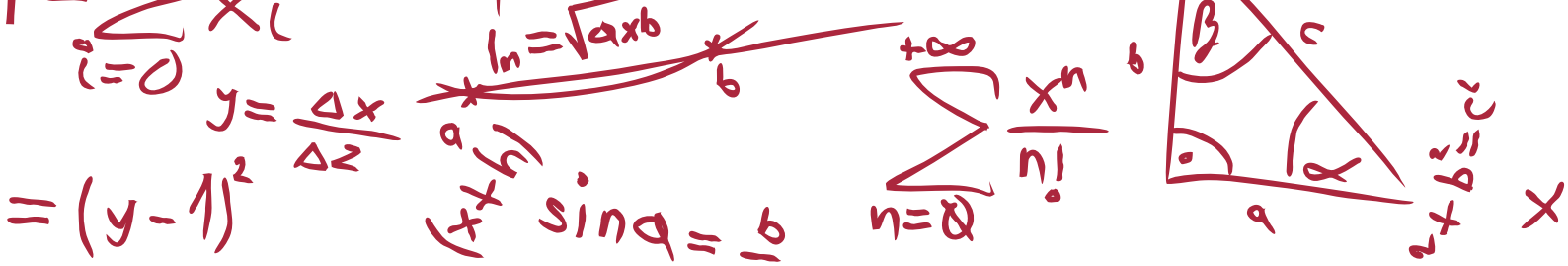
- Place value of numbers (M704)
- Rounding to nearest 10,100,1000 (M111)
- Non calculator percentages (M476)
- Prime factors (M108)
- Adding, subtracting, multiplying and dividing fractions (M835, M157 & M110)
- Rounding to significant figures and estimating (M994, M131 & M878)
- Squares and square roots (M135)
- Fractions of amounts
- Equivalent fractions, ordering fractions (M410 & M335)
- Angles properties around a point, on a straight line (M818)
- Long multiplication (M187)
- Writing expressions and Collecting like terms (U105)
- Finding the mean, range and mode from a list of data and a table (M940, M328, M841 & M127)
- Expanding single brackets and simplifying (M237, M792)
- Substitution (M327)
- Factorising single brackets (M100)
- Find the area and perimeter of rectangles (M390 & M635)
- Find the area of a trapezium (M705)
- Find the area and perimeter of circles and semicircles (leaving answer in terms of) (M231 & M169)



[Year 8 Maths \(Core & Support\) Knowledge Organiser - Term 1](#)



[Year 8 Maths \(Core & Support\) Knowledge Organiser - Term 2](#)




All Year 9 Maths exams will last 55 minutes Non-calculator.


Students will require: pen, pencil, ruler, rubber, pencil sharpener, protractor and a pair of compasses.

Year 9

CORE & EXTENSION (SETS 1A, 1B, 2A & 2B)

- Rounding to significant figures and estimating (M994, M131 & M878)
- Nth term and linear sequences (U498)
- Error Intervals (M730)
- HCF and LCM (M698 & M227)
- Writing expressions
- Solve linear equations with unknowns on both sides (M554)
- Factorise and solve quadratic equations (M908)
- Rearranging formula (M242 & M983)
- Expanding single and double brackets and simplifying (M237 & M960)
- Factorising into single brackets (M100)
- Simplifying algebraic fractions (U298)
- Simplifying ratios (M885)
- Find the area of a trapezium, circles, parts of circles, and compound shapes (M705, M231, M430 & M269)
- Volume of cuboids (M765)
- Probability trees (M299 & M572)
- Sample space diagrams (M718)


 [Year 9 Maths \(Core & Extension\) Knowledge Organiser - Half Term 1](#)


 [Year 9 Maths \(Core & Extension\) Knowledge Organiser - Half Term 2](#)

Year 9

CORE & SUPPORT (SETS 3A & 3B)

- Addition and subtraction including decimals (U478)
- Multiplication and division including decimals (M803 & M491)
- Factors, multiples, primes, squares and cubes (U211 & M322)
- Money (M681)
- Fractions, decimals, percentages equivalence (M958)
- Nth term and linear sequences (U498)
- Equations of lines and midpoints (E538 & M622)
- Rounding to significant figures and estimating (M994, M131 & M878)
- Angles properties around a point, on a straight line (M818)
- Representing data in charts and graphs (M460)
- Writing expressions
- Expanding brackets and simplifying (M237)
- Simplifying in algebra (U105)
- Factorising single brackets (M100)
- Solve linear equations including with brackets (M902)
- Properties of special triangles (Q763)

 [Year 9 Maths \(Core & Support\) Knowledge Organiser - Half Term 1](#)

 [Year 9 Maths \(Core & Support\) Knowledge Organiser - Half Term 2](#)

Key Stage 3 Science Revision



KS3 SCIENCE REVISION

The Science exam for all years will last 45 minutes.

Your Science exam will be one paper and will cover all the content you've learned so far this year from all 3 sciences: Biology, Chemistry and Physics. You will need to make sure that you have revised all of this content in preparation for the exam. All questions will be exam-style. In the Year 9 paper there may be extended writing questions (maximum 6 marks). For the exam you will need to bring a calculator, ruler, pen and pencil. You will be provided with a periodic table.

TIPS FOR REVISING SCIENCE

Remember... revision is all about **testing yourself**. Copying out notes is an activity that will not help you revise no matter how wonderful they look. If you make flash cards or mind-maps you must then **test yourself** on these if the knowledge is to embed itself effectively in your long-term memory.

Use your Knowledge Organisers for each of the topics on pages 22-24 and use the **LOOK, COVER, WRITE, CHECK** technique to help memorise the knowledge. You could also get a friend or family member to quiz you on the content of the Knowledge Organiser.

Use the [Seneca links here](#) to access quizzing resources for each of the topics. These will also be posted on Class Charts. Once you have followed the link, click the 'start quizzing' button to begin. You can work through the relevant subtopics using the number codes on the word document as guidance.

REVISE FROM THE KNOWLEDGE ORGANISERS OR SUMMARY MAPS

Use the **read/cover/write/check** technique on one box at a time from your term 1 knowledge organizers. You can also ask a someone at home to quiz you on these. Please don't waste time copying out your knowledge organizer - remember you have to **test yourself** for your revision to be effective!

Y7 Biology 13 - Living systems

Structure of the human body

- Identify a group of cells that is important to the body.
- Name a group of tissues that is important to the body.
- Major structures of the body are described in the table for assessment.
- Blood cells are described in terms of their function.
- Explain how a group of cells, tissues and organs work together to form an organ.

Specialised tissues

The following are the main types of specialised tissue found in the body:

- Epithelial tissue** - This tissue covers the body and is made up of cells that are arranged in a regular pattern.
- Connective tissue** - This tissue supports and connects other tissues and organs.
- Muscle tissue** - This tissue is made up of cells that can contract and relax.
- Nerve tissue** - This tissue is made up of cells that can carry electrical messages.

Microscopic structures

The following are the main types of microscopic structures found in the body:

- Cells** - The basic unit of life.
- Tissues** - A group of cells that work together to perform a specific function.
- Organs** - A group of tissues that work together to perform a specific function.
- Systems** - A group of organs that work together to perform a specific function.

The human skeleton

The human skeleton is made up of bones and cartilage. It provides support and protection for the body. The main parts of the skeleton are the skull, spine, ribs, and limbs.

Cell biology - Cells & magnification

Microscopes

Microscope	Advantages	Disadvantages
Light microscope	Can see living cells	Low magnification
Electron microscope	High magnification	Cannot see living cells

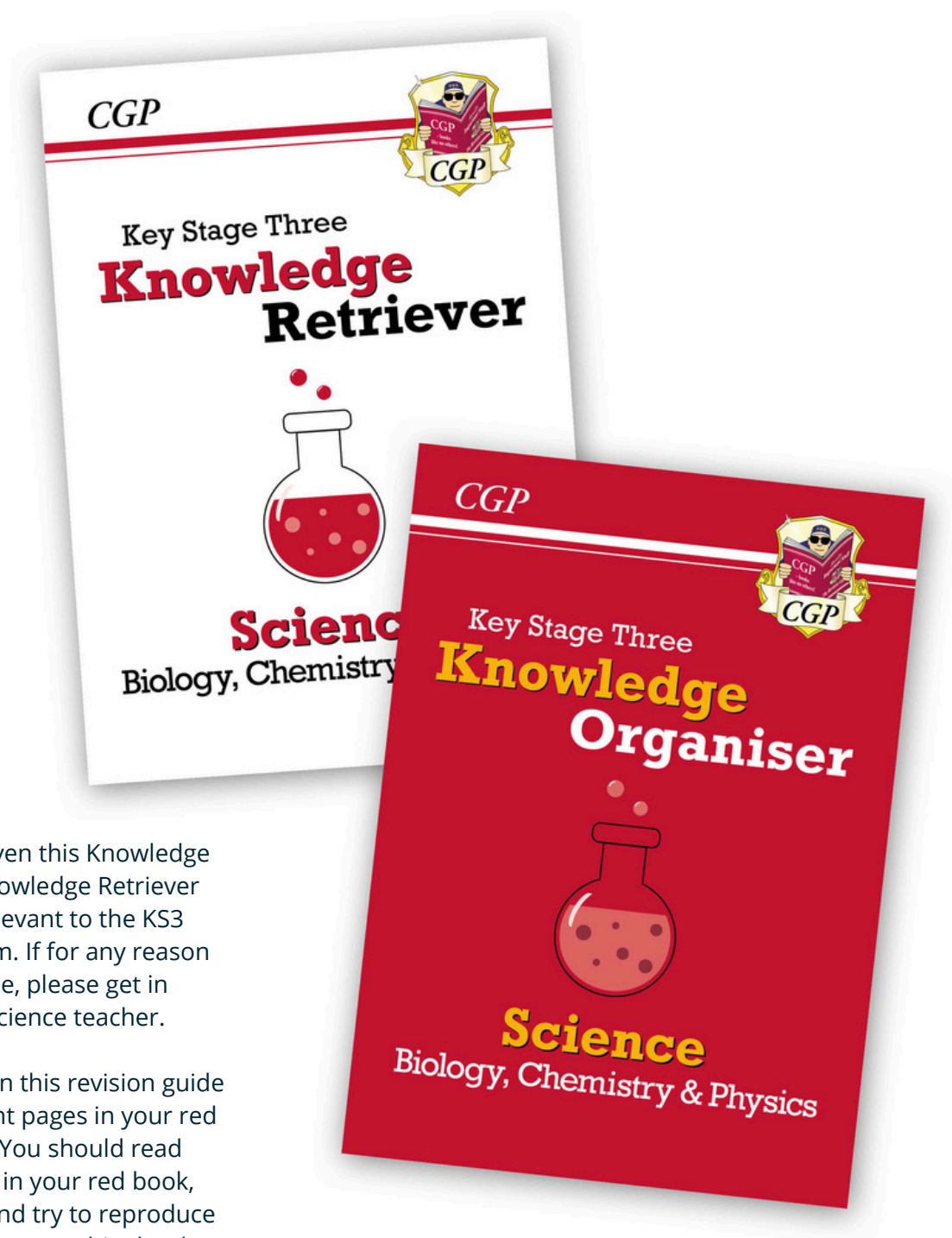
Cells

Cells are the basic unit of life. They are made up of a cell membrane, cytoplasm, and a nucleus. Some cells are specialized to perform a specific function.

Magnification

Magnification is the process of making something appear larger than it really is. It is calculated by dividing the size of the image by the size of the object.

KS3 Knowledge Organisers



You have been given this Knowledge Organiser and Knowledge Retriever with questions relevant to the KS3 Science curriculum. If for any reason you don't have one, please get in touch with your Science teacher.

Use the topic list in this revision guide to find the relevant pages in your red and white books. You should read one box at a time in your red book, then cover it up and try to reproduce it from memory in your white book - this should not be a copying exercise! Once you have done this for a whole page, you can have a second go in your white book, attempting a whole page at a time. Remember to check your use of keywords each time.

Science topics you need to revise for the exam

Year 7

Science

Biology

TERM 1: LIVING SYSTEMS

- Using microscopes
- Plant & animal cells
- Specialised cells
- Organisation of cells
- The skeletal system
- Muscles

Year 7 Biology
Knowledge Organiser

Chemistry

TERM 1: STATES OF MATTER & SEPARATING TECHNIQUES

- States of matter
- The particle model
- Changing states
- Pressure & diffusion
- Pure mixtures and solutions
- Filtering & evaporation
- Distillation
- Chromatography

Year 7 Chemistry
Knowledge Organiser

Physics

TERM 1: FORCES

- Forces
- Mass & weight
- Balancing forces
- Friction
- Speed
- Distance-time graphs
- Speed-time graphs

Year 7 Physics
Knowledge Organiser

Year 8

Science

Biology

TERM 1: BIOENERGETICS

- Photosynthesis
- Gas exchange in plants
- The respiratory system
- Aerobic & anaerobic respiration
- The circulatory system
- Blood vessels
- Effects of exercise

Year 8 Biology
Knowledge Organiser

Chemistry

TERM 1: ACIDS & ALKALIS

- Acids and alkalis
- Hazard symbols
- pH scale and universal indicator
- Acids and metals
- Neutralisation
- Acids and carbonates
- Naming salts
- Uses of acids & alkalis

Year 8 Chemistry
Knowledge Organiser

Physics

TERM 1: LIGHT & SOUND

- Waves
- Reflection and refraction
- Colours and filters
- Sound
- The ear and hearing
- Ultrasound and infrasound

Year 8 Physics
Knowledge Organiser

Year 9

Science

Biology

TERM 1: CELLS

- Animal & plant cells
- Microscopy
- Microscopy calculations
- Use of a light microscope
- Specialised animal cells
- Specialised plant cells
- Cell differentiation
- Exchange surfaces
- Surface area to volume ratio

[Year 9 Biology Knowledge Organiser](#)

Chemistry

TERM 1: RATE AND EXTENT OF CHEMICAL CHANGE

- Collision theory
- Calculating rate of reaction
- Concentration theory
- Temperature on rate of reaction
- Surface area
- Catalysts

[Year 9 Chemistry Knowledge Organiser](#)

Physics

TERM 1: ENERGY

- Energy stores and transfers
- Efficiency
- Work done
- Kinetic and gravitational energy
- Electrical energy
- Power and electrical power

[Year 9 Physics Knowledge Organiser](#)

USEFUL

CONTACTS



SUBJECT STAFF

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Miss L Penketh, Y9 Lead for English
Miss S Dunne, KS3 Lead for Maths
Mr J Blackburn, KS3 Lead for Science

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Miss N Beck, Head of Y9
Mrs C Lambert, Pastoral Manager Y9
Miss K Yates, SENCO

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