



The Castle School
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Year 10

Pre-Public Exams 2018 Information and Support

Exam Timetable

					Fri 13 April
Periods 3-4					English Lit

	Mon 30 April	Tues 1 May	Wed 2 May	Thurs 3 May	Fri 4 May
Periods 1-2	Maths Paper 1	Science	English Language	Maths Paper 2	PE
Break					
Periods 3-4	History	Philosophy, Ethics and Religion	MFL - Writing	Drama	Computing

	Mon 7 May	Tues 8 May	Wed 9 May	Thurs 10 May	Fri 11 May
Periods 1-2	BANK HOLIDAY	Geography	Food	DT	
Break					
Periods 3-4	BANK HOLIDAY	MFL – Reading	Dance		

PPEs are **Pre-Public Exams**. They are conducted in exactly the same way as the final GCSEs will be:

- With a period of revision leading up to the exams.
- Sat in a block, with multiple exams during a week and with more than one exam on each day.
- Using authentic exam papers and questions.
- Marked by the Exam Board GCSE marking scheme.

PPEs are designed to give you an accurate picture of how you are doing and to give you the experience of preparing for and sitting a block of exams so you can hone your revision skills and test your readiness for the real exams later in the year.

Key Revision Messages.

Revision is a process of going back over and **reviewing** the things you have learned to help you to understand and remember them more effectively.

Revision is a skill that you can practise and get better at. We are all individuals and we have different learning strengths and styles. All students benefit from reviewing and revising their prior learning. With time you will discover which strategies help you to learn and revise most effectively.

Revision for your PPEs is great **preparation for the exams you will do later**; get it right now and you'll cement some of that knowledge in place.

When you have lots of exams to revise for it helps to **have a plan** to make sure you are making time for all of your subjects and themes. Later in this booklet there is a timetable you can fill in to help to plan your revision.

It's important to balance the hard work you put into your revision with **time to relax**, with a healthy diet and with adequate sleep; looking after your wellbeing will help you to be at your best in the exam.

Timetable – Plan how you'll fit your revision sessions into your week. When you have several exams it helps to plan how you will fit revising the different subjects and themes into your 6-week countdown period.

Chunking – most people are at their best for about 30 minutes and after that their attention starts to wander, so split your revision into 30 minute chunks. If you have a whole hour to revise do two 25-minute chunks with a 10-minute break in-between when you get up, walk about, take a drink, and relax.

Get Organised – Set up a place at home with all of your revision materials laid out to hand; post-it notes, highlighters, pens and pencils, revision guides at the ready. Display a copy of your exam and revision timetables to remind yourself of what you're working toward.

In the 6 weeks' countdown to your PPEs you'll need to manage your time effectively. Your teachers will help you prepare for the exams with specific revision homework tasks and your revision plan will help you to ensure that important learning is not missed. Remember that during the exam countdown you will also have commitments during the school day and in homework time linking with **Controlled Assessments**, and you will be working on GCSE **Exam Projects** in some subjects.



Read and Highlight – just sitting and reading through your exercise book, a text book or a worksheet is quite poor revision; you can make this into effective revision by going through with a highlighter and picking out the important bits you need to remember. Highlight key words / ideas / facts.



Get **practice questions** from your teacher that are in the same format as the ones you'll meet in the exam.

Thinking about exactly what the question is asking you, and which **key information** or ideas will help you to answer.

Try to **time your answers** to fit the timescale you will have in the exam.



Post-it - get a set of Post-it notes and use one for each key fact or idea on a particular theme. Organise your Post-its like a mind map on your desk or wall.

Use your display to help you pick out the key information needed to answer a practice exam question, or to help you talk through your knowledge on this subject.

Speak - find a quiet place and read your revision notes out loud to yourself; hearing yourself saying the key information can be more powerful than just reading it or hearing someone else say it.





Explain – using any of the resources you have created above work with a partner and explain your theme. Talking it through is very valuable revision because it helps you sort out your ideas and to put them into a logical order; try this at home with parents or friends.

Visual Mapping – create a mind map or a poster to explain the key information. Balance an exciting visual presentation with making sure that all of the key facts, information and ideas are clearly included. A good mind map uses arrows and lines to show how key information and ideas connect.



Select and Summarise – make a set of post card sized cards and title each with one of the themes you're being tested on. Transfer onto the relevant card all of the key information for that theme as **bullet points** or short sentences. Use colour, highlighting and underlining to make your presentation clearer.



Subject Information and Topics

You may find it useful to highlight the exams you are taking and to cross through the ones you are not.

Computing

The exam is 1 hour and 30 minutes long and be Paper 1 Computer systems with an additional question on Data Representation. Lessons will be allocated for revision strategies and homework time will be given specifically for revision.

Useful websites:

www.bbc.co.uk/education/subjects/z34k7ty - BBC Bitesize for computer science

www.teach-ict.com/gcse_computing.html - a good resource with a number of theory mini-webs

Useful Textbooks:

- CGP OCR Computer Science textbook and workbooks - Exam board specific. Students have own copies
- GCSE Computing textbook and worksheets (James Franklin, Axsied) and OCR GCSE Computing textbook 3rd edition (Susan Robson) - PDF copy available in school, no charge
- Collins OCR Computer Science
- Pearson OCR Computer Science

PPE Revision for Topics for Computer Science

Systems Architecture

I can state the purpose of CPU; I can describe what Von Neumann architecture is.

I can describe common CPU components and their function.

I can describe the function of the CPU as fetching and executing instructions stored in memory.

I can explain how common characteristics of CPUs such as clock speed, cache size and number of cores affect their performance.

I can describe the purpose of embedded systems and can identify examples.

Memory

I can explain the difference between RAM and ROM.

I can explain the purpose of RAM in a computer system.

I can explain the purpose of ROM in a computer system.

I can explain the need for virtual memory.

I can describe about flash memory.

Storage

I can explain the need for secondary storage.

I know about data capacity and the calculation of data capacity requirements.

I can describe common types of storage e.g. optical, magnetic, solid state.

I can explain about suitable storage devices and storage media for a given application.

I can explain the advantages and disadvantages of storage devices and storage media.

Wired and wireless networks

I can explain the different types of network e.g. LAN, WAN.

I can explain factors that affect the performance of networks.

I can explain the different roles of computers in a client-server and peer-to-peer network.
I know the hardware needed to connect stand-alone computers into a LAN.
I can describe how the internet works as a collection of computer networks.
I can describe what DNS, hosting and the cloud are.
I can explain the concept of virtual networks.

Network topologies, protocols and layers

I can explain what star and mesh network topologies are.
I can describe Wi-Fi, frequency and channels and encryption.
I can explain about the Ethernet.
I can explain about the uses of IP addressing, MAC addressing and protocols.
I can explain what TCP/IP, HTTP, HTTPS, FTP, POP, IMAP and SMTP are.
I can explain what the concept of layers are.
I know about packet switching.

System security

I can identify different forms of attack.
I can explain about threats posed to networks.
I know how to identify and prevent vulnerabilities.

Systems software

I can explain the purpose and functionality of systems software.
I can explain the need for the following functions of an operating system: user interface, memory management, peripheral management, multi-tasking and security.
I can describe the purpose and use of common utility programs for computer security (antivirus, spyware protection and firewalls), disk organisation (formatting, file transfer, and defragmentation), and system maintenance (system information and diagnosis, system clean-up tools, automatic updating).

Ethical, legal and environmental concerns

I can explain the impact of ethical and legal issues when looking at Computer Science technologies.
I can explain the impact of cultural and environmental issues when looking at Computer Science technologies.
I can explain the impact of privacy issues when looking at Computer Science technologies.
I can explain how key stakeholders are affected by technologies.
I can describe the differences between open source and proprietary software.
I can explain the legislation relevant to Computer Science.

Dance

The exam is 1 hour and 15 minutes long and will be split into two sections:

Section A: Your knowledge and understanding of performance skills and how you apply these to achieve performance.

Section B: Your knowledge and understanding of the GCSE Dance Anthology works. Interpreting, analysing and evaluating the choice of movement content, aural setting and production design features.

For revision aids students should use their own class notes, set Phrase booklets and video links on Show My Homework.

DT

The exam is 2 hours long. Work will be done in lessons in the four weeks leading up to the exam. Students should use revisions guides, workbooks and www.technologystudent.com to revise. Students will need the following equipment for the exam: calculator, protractor and normal writing and drawing instruments.

There are three sections for the exam:

- Section A: core technical principles– multiple choice and short answer questions (20 marks)
- Section B: specialist technical principles (30 marks)
- Section C: designing and making principles (50 marks)

Topics that will be covered: Materials (forces, primary sources, stock forms, **properties**), smart, modern and composite materials; technical textiles, energy generation and storage, mechanisms, scales of productions, commercial processes, ecological and social footprint, anthropometrics and ergonomics, design process – all parts, isometric drawing, tessellation, area of geometric shapes, working drawings/ third angle projection, calculating percentages, drawing pie charts.

English Language

The exam is 1 hour and 45 minutes long and will focus on Writers' viewpoints and perspectives. This paper has been taught this year so exercise books can be used for revision, as well as Show My Homework. There will be revision sessions after school and some lessons will be used for revision.

Section A: Two extracts from non-fiction texts will be printed. They will be on the same subject, but be from different centuries. One of them will be C19th.

Question 1: identify the four correct pieces of information about the text out of the eight possible answers. It is important that you remember to shade the box: if you tick, you will NOT get the marks even if you have ticked the correct responses. This only uses extract A.

Question 2: This is the first comparison question. You have to summarise the two extracts using quotes from both and explain what the quotes tell you about the two texts. This means that you must use inference and look under the surface. Aim to identify 4 quotes from each text to discuss.

Question 3: This is an analysis question. You must identify key language and explore how effect is created using subject terminology and single word analysis. This will only use one of the extracts: usually extract 2

Question 4: Essay comparing BOTH extracts. You must analyse language to explore how effects are created: the key is to link all the way through the essay. This question always has three bullet points: compare attitudes, compare methods used, support your ideas with quotes from both texts. It is vital that you use these signposts to help when responding.

It is also important to remember that you can use the same quotes as you used for Question 2. You will not be penalised for doing this. You just have to develop analysis in a lot more depth.

English Literature

On 13 April, there will be Literature Paper 2 in the hall. This paper comprises of 'Lord of the Flies', Anthology Poetry and Unseen Poetry.

'Lord of the Flies' - there will be a choice of two questions - normally one character or a theme. By now you should be learning quotes and should be able to remember contextual information.

Anthology Poetry: I am limiting the number of poems that you will have to revise. In the exams in Year 11 you will have to remember quote from all 15 poems, but for this mock you need to be revising the following (remember that one of these will be published and you will then have to link another to it):

Bayonet Charge, Remains, Exposure, War Photographer, Emigree, Checking Out Me History, Poppies, Kamikaze.

Unseen Poetry: One poem (never seen) will be printed in your exam booklet. You will have to apply the same skills used with anthology poetry to help you to write an essay analysing how a poet creates effects.

Another unseen poem will then be printed. You have to compare this to the other unseen poem. This is only worth 8 marks, so you won't need to write very much. Find three things to compare, linking to the question.

Food Preparation and Nutrition

The exam is 1 hour and 15 minutes long and will cover the following topics:

- Commodities
- Sauces
- Dietary requirements
- Scientific processes
- Nutrients – Macro and micronutrients, protein, carbohydrate
- Processes and fortified products
- Healthy living

A GCSE Food Preparation and Nutrition revision guide is available. You can use BBC Bitesize or Getrevising.co.uk as revision aids as well as workbooks, CPG revision book, and One Drive for resources. Lessons will be allocated for revision strategies and mind mapping for the above topics is advised.

Geography

The exam is 1 hour and 15 minutes long and will be the paper 3 – geographical applications paper which includes Issues Evaluation and Unseen Fieldwork questions.

The issue evaluation will be based around a resource booklet that will be released to students before the exam which will be available on Show My Homework and to download, as well as other key resources. Lessons will be allocated for revision strategies and in the week before the exam we will look at the resource booklet and activities.

History

The exam is 1 hour and 45 minutes long and will focus on 'The Peoples' Health' and 'Elizabethan England'. Lessons will be allocated for revision strategies – we will recap on a previous lesson provided on People's Health exam skills and have a fresh lesson for Elizabethan England. Please see Mr Lowe's website for power points, example questions, how to answer the questions as well as videos, and revision books will be given to students.

Maths

You will sit two maths exams

- Paper 1: Non-Calculator: duration 60 minutes
- Paper 2: Calculator allowed: duration 60 minutes

To prepare for your maths exam you should

- Use the relevant revision list to find out what topics you will be assessed on.
- Prioritise those topics you feel less confident on. Watch the Corbettmaths video and make revision notes in your book.
- Try some of the practice questions. You can either do these in your exercise book or print them out. Do a mixture of questions (not just the first few) and make sure to include some problem-solving style questions.
- Mark your work. You can get the answers by pressing the 'Click here for answers' tab.
- If you have done this and you still do not understand a topic, then ask your teacher for help.
- You may also use the PIXL Maths App and your Revision Guide and Workbook to revise.
- Make sure you bring a black pen, pencil, ruler, scientific calculator, protractor and compasses to the exam.

HIGHER REVISION LIST (you should use this if you are in sets 1,2,3 or 4)

TOPIC	CORBETTMATHS	DONE?
Recurring decimals	96	
Reverse %	240	
Product rule for counting	383	
Error intervals	377	
Calculations with bounds	183,184	
Fractional & negative indices	173,175	
Simplify indices	174	
Surds	305,306,307	
Solve linear equations (incl. brackets)	110,113	
Form & solve equations	114,115	
Rearrange formulae	7,8	
Expand triple brackets	15	
Factorise quadratics	118,119	
Use the quadratic formula	267	
Recognise graphs		

Use graphs to solve equations	267c	
Equation of a straight line ($y=mx+c$)	191	
Find the gradient of a straight line in context	189,194	
Equations of parallel & perpendicular lines	196,197	
Inverse & composite functions	369,370	
Linear sequences: Use the n^{th} term to find further terms	288	
Quadratic sequences: find the n^{th} term	388abc	
Reflection	272	
Describe transformations	275	
Enlarge by a negative scale factor	108	
Pythagoras	257	
Trigonometry	329,330,331	
Exact trig values	341	
Angles in polygons	32	
Similar shapes	292, 293b	
Congruent triangles		
Loci	75,76,77	
Scatter graphs	166,167,168	
Histograms	157,158,159	
Basic probability	245	
Probability tree diagrams	247,252	

FOUNDATION REVISION LIST (you should use this if you are in set 5)

TOPIC	CORBETTMATHS	DONE?
Indices	172, 174	
Square roots	228	
Cube numbers	212	
Prime numbers	225	
Error intervals	377	
Money problems		
Coordinates	84, 85	
Equation of a straight line ($y=mx+c$)	191	
Equation of parallel lines	196	
Gradient of a straight line in context	189,194	
Name 2D shapes	1	
Nets	4	
Types of angle	38	
Angles in quadrilaterals	33	
Angles in triangles	37	
Angles in polygons	32	
Plans & elevations	354	
Area on a grid	43	
Perimeter & area of rectangles	45,241	
Area of compound shapes	41	
Circumference of a circle	60	
Properties of quadrilaterals	2	
Recognise congruent & similar shapes	66,291	
Reflection	272	

Describe transformations	275	
Volume of cuboid	355	
Pythagoras	257	
Trigonometry	329,330,331	
Loci	75,75,77	
Venn diagrams	380	
Basic probability	245, 250	
Mean, median, mode, range	50, 53, 56, 57	

MFL – French/German/Spanish/Mandarin (Reading and Writing)

The reading exams are 60 minutes long for Higher and 45 minutes for Foundation, the writing exams are 80 minutes long for Higher and 70 minutes for Foundation. Lessons will be used for revision. Purple Edexcel revision guide and workbook and the website www.thisislanguages.com are good sources of revision materials.

Questions across all four language skills are set in common contexts, addressing a range of relevant contemporary and cultural themes. They are organised into five themes, each broken down into topics and sub-topics.

Theme 1: Identity and culture

Who am I? relationships; when I was younger; what my friends and family are like; what makes a good friend; interests; socialising with friends and family; role models

Daily life: customs and everyday life; food and drink; shopping; social media and technology (use of, advantages and disadvantages)

Cultural life: celebrations and festivals; reading; music; sport; film and television

Theme 2: Local area, holiday and travel

Holidays: preferences, experiences and destinations

Travel and tourist transactions: travel and accommodation; asking for help and dealing with problems; directions; eating out; shopping

Town, region and country: weather; places to see; things to do

Theme 3: School

What school is like: school types; school day; subjects; rules and pressures; celebrating success

School activities: school trips, events and exchanges

Theme 4: Future aspirations, study and work

Using languages beyond the classroom: forming relationships; travel; employment

Ambitions: further study; volunteering; training

Work: jobs, careers and professions

Theme 5: International and global dimension

Bringing the world together: sports events; music events; campaigns and good causes

Environmental issues: being 'green'; access to natural resources

GCSE PE

The exam is 1 hour and 45 minutes long and will cover the following topics: skeletal system, muscular system, respiratory system, cardiovascular system, fitness training/ components of fitness/ principles of training/testing, warm-up and cool down, injuries and drugs. Resources will be shared using Show My Homework and students can buy revision guides from Student Reception.

Philosophy, Ethics and Religion

Two religions will be covered: Buddhism and Christianity beliefs and practices. They will cover the following topics: religion and life; existence of God and revelation; religion, peace and conflict. There will be revision material and revision lessons put aside for both answering questions and structure. There are revision materials on One Drive, and revision guides available from Finance.

Science

Your Science exam will be 1 hour 10 minutes long. Lessons will be allocated for revision strategies and websites shared via Show My Homework, as well as use of Edexcel revision guide and workbooks and Mindjet software. Strategies such as mind mapping and concept mapping will be modelled.

10a1: (PCL) Chemistry topics 1-8

10a2: (SGO) Biology topics 1-4

10a3: (SHL) Chemistry topics 1-8

10a4: (MWK) Physics topics 1-4

10a5: (LDE) Physics topics 1-4 (F)

10b1: (RDA) Chemistry topics 1-8

10b2: (MAL) Biology topics 1-4

10b3: (KL) Chemistry topics 1-8

10b4: (SGO) Biology topics 1-4

10b5: (LDE) Physics topics 1-4 (F)

Biology topics 1-4:

Key Concepts in Biology, Cells and Control, Genetics and Natural Selection and Genetic Modification.

Chemistry topics 1-8:

States of Matter, Methods of Separating and Purifying Substances, Atomic Structure, The Periodic Table, Ionic Bonding, Covalent Bonding, Types of Substance and Acids and Alkalis.

Physics topics 1-4:

Motion, Forces and Motions, Conservation of Energy and Waves.

On the Exam Day:

Sleep – don't stay up late revising (or watching TV or Gaming!) a good night's sleep will help your brain to be at its best in the exam.

Breakfast – a good breakfast has been shown to help your brain to work more effectively.

Be on time – and make sure you have used the toilet before the exam.

Equipment—use a clear pencil case or bag to carry the things you will need for the exam.

Behaviour – Exams are formal and the behaviour code must be observed. Enter the room in silence and don't communicate with others. Face the front and listen to instructions carefully.

Phones / mobile devices should not be with you at your exam desk; turn them off and leave them in your bag.

Listen carefully and follow instructions – you might not need to answer all of the questions on the paper, there may be time limits, you need to listen to instructions and to start only when you're asked to.

Read the paper carefully – it's a good idea to spend a couple of minutes at the start of the exam reading through so you know how much work you have to do. Exam papers will usually tell you how many marks are awarded for each question, some students like to start on the "big point" questions so they have those marks "in the bag" before going back to do the smaller mark questions.

Write clearly and don't forget grammar and punctuation – all exams require accurate and clear written English. If the examiner can't read your writing they will award no marks; remember the examiner can change your grade +/- 10% for correct English, spelling and grammar.

Start—don't panic if your mind goes blank, choose a question that you can answer and get something jotted down, this can help you to relax.

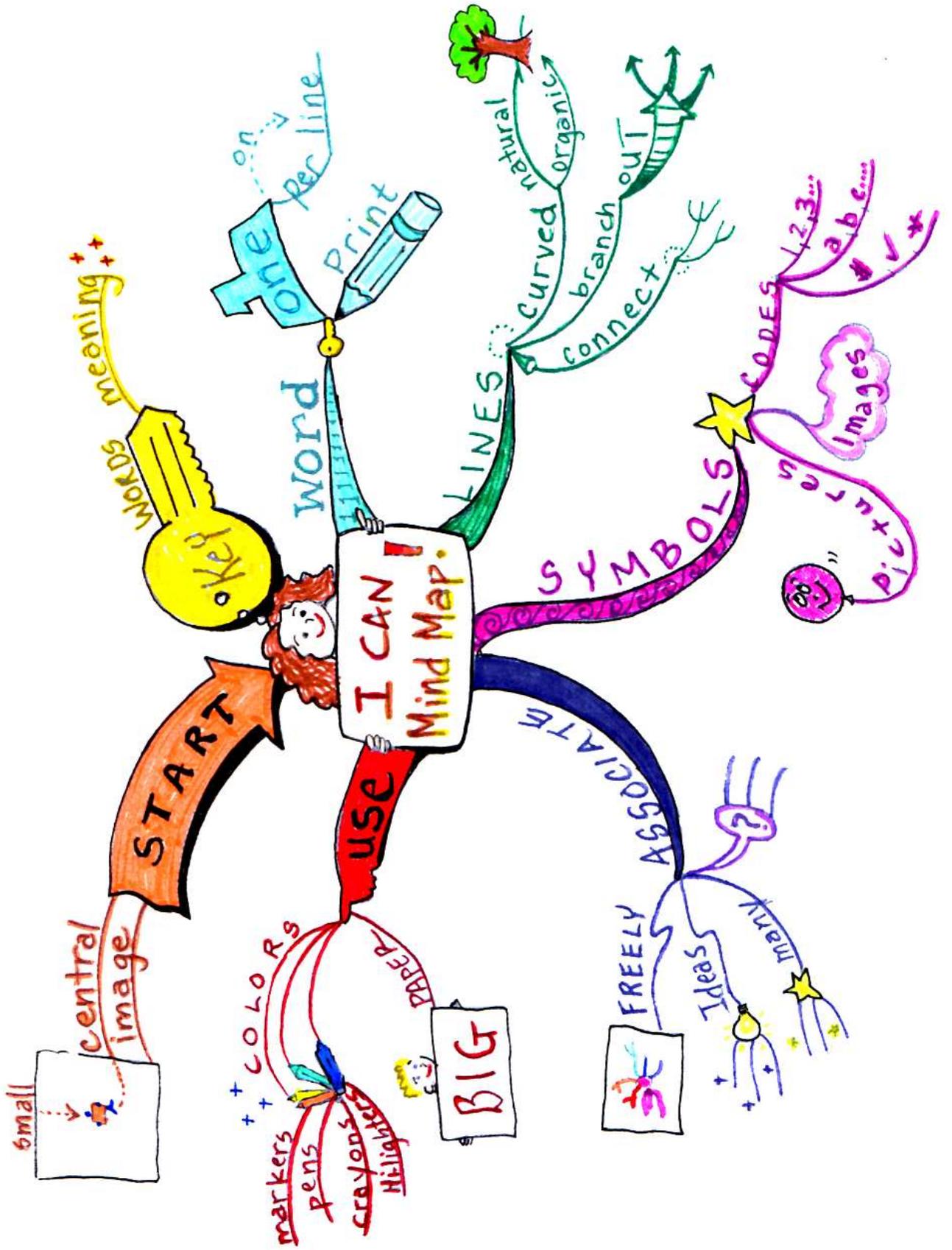
Check—at the end of the exam take time to read your paper through carefully, check for questions or pages you might have accidentally missed out, and for simple errors that you can correct.

If you're stuck – If you have a practical query, eg your paper is not clearly printed, you need more paper or your pen has run out you can put up your hand and an invigilator will come over to you. If you're really stuck move on and come back to the question later; it's worth remembering that a guessed answer is better than no answer at all.

At the end – you will be told when you have 5 minutes left. Stop writing and put down pens as soon as you are asked to. Remember you must continue to obey exam rules until you are outside of the exam room.



Mind Mapping Basics



Revision timetable:

Block in the timetable into you already have – eg. Clubs.
Then plan how you will fit your subject revision into your week.

Monday:	Lunchtime	3.30pm	4.30	5pm	5.30	6 pm	6.30	7 pm	7.30pm	8 pm	8.30pm	9 pm
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday	10	11	12	1	2	3	4	5	6	7	8	9
Sunday	10	11	12	1	2	3	4	5	6	7	8	9

Holiday	9:00 am	10:00am	11:00am	12 noon	1:00 pm	2:00 pm	3:00 pm	4:00 pm	5:00 pm	6:00 pm	7:00 pm	8:00 pm
Revision Plan												
Monday												
Tuesday												
Wednesday												
Thursday												
Friday												
Saturday												
Sunday												

A Plan for how you use the critical Easter Holiday is important to help you "Chunk" your revision and to make sure you cover all key areas. You do not have to fill all of the slots—think about when you learn best and remember to include time for rest and relaxation to help you be at your best. Plan to take breaks regularly.