

REVISION GUIDANCE & SUPPORT

Name _____

INTO 

MANCHESTER

Dear student

As you are about to embark on the most critical period of your education at INTO Manchester, we wanted to provide you with some information that will support your revision and give you every opportunity possible to be successful in the final exams.

There are three main aims of this booklet:

1) *Where are you now and where do you want to be?*

As we move towards the final exams in June, you now have a very clear picture of where you currently are in all of your subjects. The most important aspect of this is identifying your strengths and weaknesses – and then working on your weaknesses to turn them into strengths.

2) *What learning techniques really work?*

Many people have a view on the best way to revise, but often there is no evidence to support whether or not these techniques work. People just think they do. We don't think that this approach is good enough – there is too much to risk from encouraging you to use revision techniques that don't really work.

To help you with this, we have looked at what the research evidence actually says does work – in terms of effective revision strategies. In 2013 there was a major research paper published by Professor John Dunlosky at the University of Kent, USA that looked at what actually works in terms of learning and revision. We have summarised these strategies for you here.

3) *Getting organised*

Once you know the revision strategies that work, you need to get organised and make sure you plan your revision time effectively. This booklet will help you with that.

We hope you find it useful.

This booklet is based upon a booklet produced by Shaun Allison and Andy Tharby. The original may be found at <https://classteaching.wordpress.com/2015/01/29/supporting-learning-through-effective-revision-techniques/>

PART 1: WHERE ARE YOU NOW AND WHERE DO YOU WANT TO BE?

Student Name _____

Group _____

University Course		Required Grades	First Semester Grades						Targets
	F/I		M	B	C	P	FM	EAP/RCS	
Civil Engineering	F	A, A, B, (B in EAP)	A*		C	B			B Chemistry, A Physics – go to Support class, do past papers

An example is done for you.

F/I = Firm and Insurance Choices – When you have received all your offers you must choose a Firm choice (the course you most want to go to) and your Insurance (the one where the offer is for lower grades than your Firm choice)

M = Maths B = Biology C = Chemistry P = Physics FM = Further Maths

EAP/ RCS = English for Academic Purposes/ Research and Communication Skills.



Targets – you must put in what you have to achieve to get to your required grades. For example if your ‘Required Grade’ is B and you have a C then you have to improve by 10% and so your Target Grade is B and you must now plan how you are going to achieve this.

Your tutor will go through strategies that you might adopt to improve. These might include:

- Devising a revision programme that is regular, systematic and workable.
- Attend all lessons.
- Complete all the homework that is set.
- Meet deadlines for submitting work.
- Seek advice from staff in advance of deadlines.
- Ensure all notes are up-to-date and organised.
- Attend support sessions (these will be advertised on Noticeboards)
- Get examples of good pieces of work from your subject teachers.
- Commit to a minimum of 2 hours per night and 4-5 hours at weekend to study.

Some students will be asked to join a Support Group but these students will be given individual information about this.

PART 2: WHAT LEARNING TECHNIQUES REALLY WORK?

It's really important to be using revision techniques that have actually been shown to make a difference to learning. **There are a number of common techniques that have been shown to have very little impact on learning – and so should be avoided:**

Not effective list:

- Highlighting texts
- Re-reading
- Summarising texts



People often use these techniques because they are low stress. They don't really challenge us, but they make us feel good, because we are doing *something*. The truth is though, while it may keep you busy and stop you feeling guilty, **it doesn't really help you learn.**

There is a very simple reason for this. **The way we remember things is by having to think hard about something and recall it from our memory.** The more we do this, the higher the chances of us remembering something.

The following techniques will help you with this.

1. Practice Testing

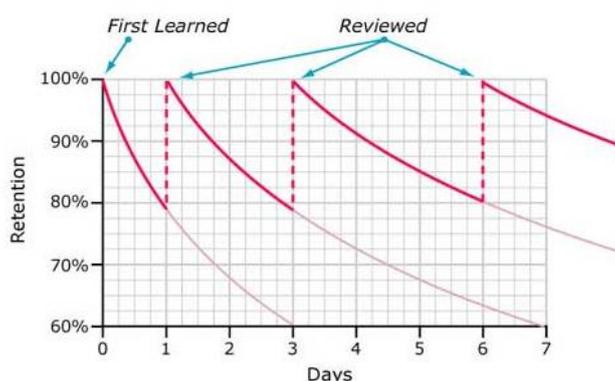
This technique is pretty straightforward – **keep testing yourself** (or each other) on what you have got to learn. This technique has been **shown to have the highest impact** in terms of supporting student learning. Some ways in which you can do this easily:

- Create some **flashcards**, with questions on one side and answers on the other – and keep testing yourself.
- Work through **past exam papers**
- Simply **quiz each other** (or yourself) on key bits of information.
- Create **'fill the gap' exercises** for you and a friend to complete.
- Create **multiple choice quizzes** for friends to complete.

2. Distributed Practice

Rather than cramming all of your revision for each subject into one block, **it's better to space it out** – from now, through to the exams. Why is this better? Bizarrely, because it gives you some forgetting time. This means that when you come back to it a few weeks later, you will have **to think harder**, which actually helps you **to remember** it. Furthermore, **the more frequently you come back to a topic, the better you remember it**. Look at the 'forgetting curve' below:

Typical Forgetting Curve for Newly Learned Information



So, use the calendar towards the back of this booklet, to space your revision for subjects out, over the coming months.

3. Elaborate Interrogation

One of the best things that you can do (either to yourself or with a friend) to support your revision is to **ask why an idea or concept is true** – and then answer that why question. For example:

- In chemistry, increasing the temperature can increase the rate of a chemical reaction....why?
- In physics, if you double the amplitude of a wave you give it four times as much energy....why?
- In biology, a change in DNA sequence may alter the gene product/its potential activity....why?

So, rather than just try to learn facts or ideas, ask yourself why they are true.

4. Self-explanation

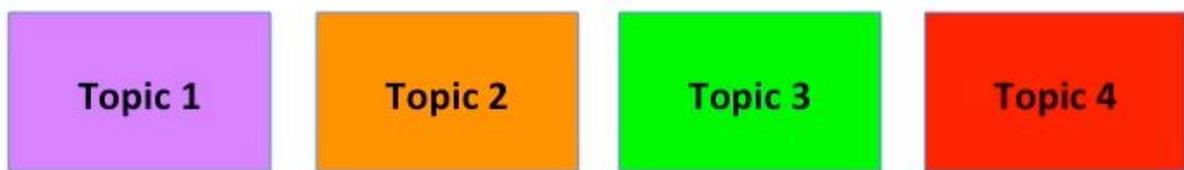
Rather than looking at different topics from a subject in isolation, **try to think about how this new information is related to what you know already**. This is where mind- maps

might come in useful – but **the process of producing the mind map, is probably more useful than the finished product**. So, think about a key central idea (the middle of the mind map) and then how new material, builds on the existing knowledge in the middle.

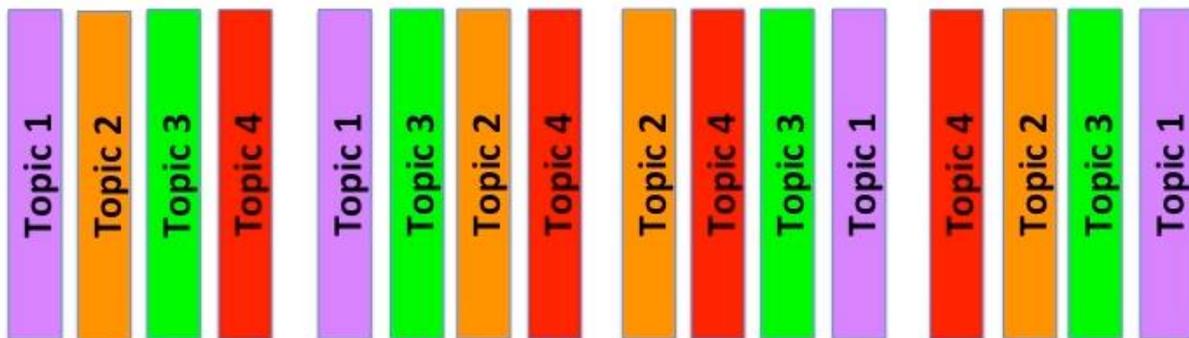
Alongside this, when you solve a problem e.g. in maths, explain to someone the steps you took to solve the problem. This can be applied to a whole range of subjects.

5. Interleaved practice

When you are revising a subject, the temptation is to do it in ‘blocks’ of topics. Like below:



The problem with this is that **it doesn't support the importance of repetition** – which is so important to learning. So rather than revising in ‘topic blocks’, **it's better to chunk these topics up in your revision programme and interleave them:**



This means that you **keep coming back to the topics**. So, instead of doing a one hour block of revision on topic 1, do 15 minutes on topic 1, then 15 minutes on topic 2, then the same for topic 3 and 4.

PART 3: GETTING ORGANISED

To **be really organised in your revision**, you need to be able to answer these **5 key questions**:

- a. **when** am I going to revise?
- b. **where** am I going to revise?
- c. **what** am I going to revise?
- d. **how** am I going to revise?
- e. **with whom** am I going to revise?

Research suggests that people who **spend some time planning** their study **achieve higher results** than those who do not.

Before you plan your study periods, remember these (hopefully obvious) facts:

- You need regular breaks
- You can study on a bus, on a train and in a café
- Sleep will help you learn more
- You can record questions, facts, formulae etc on your phone and listen to them
- Listening to your recordings while going for a walk can make it easier to remember things
- To improve your memory, you need to *almost* forget!

What am I going to revise

- For each subject, break down your revision into key topics (look at the syllabus to help you)
- Break the key topics into sub-topics
- Rate each sub-topic according to:
 - How important it is
 - How confident you feel about it
- Use these sub-topics to plan your revision timetable

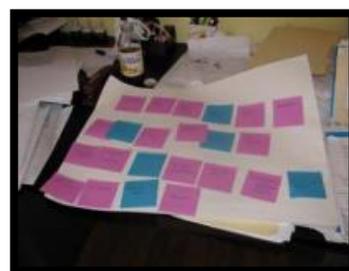
When am I going to revise

- On Sunday, make a plan of the following week
- Identify times when you are not in class and are free to revise
- Identify hours when you will revise
- Divide those hours into 20 minute periods
- Allocate a sub-topic to each 20 minute period
- Allocate time to mini-breaks when you have done 4 or 5 20 minute periods
- Allocate time to longer breaks when you have been working for 3 or 4 hours.

How am I going to revise

There are many different ways to revise – but remember that re-reading, highlighting, and summarising are not very effective. Here is a whole alphabet of ways to revise that you might want to do:

- a. organising the materials that you are going to be studying
- b. creating mind or concept maps; bullet point lists; grids or tables; hierarchy charts; annotated diagrams; flashcards etc
- c. recording some questions that you will listen to later
- d. recording gapped summaries of texts
- e. going for a walk and listening to your questions
- f. reviewing your flashcards (put the easiest flashcards to one side and only look at them once a week)
- g. labelling diagrams/charts etc
- h. meeting with friends and testing each other
- i. writing your own exam questions
- j. looking at past exam questions
- k. making outline essay plans
- l. identifying links between sub-topics
- m. making questions for a friend to answer
- n. reviewing topics where you got something wrong
- o. writing against the clock: set yourself five minutes to write down everything you know about (eg. photosynthesis). Then compare it with your notes – what *didn't* you remember?
- p. take notes from your tutors and copy them with words missed out. Give these to friends to complete. You mark them.
- q. make notes about a topic with mistakes in – get your friend to find the mistake
- r. memorise definitions word for word – then test your friends
- s. analyse exam questions – what must you include in order to get top marks
- t. create “Common errors” flashcards to share with friends
- u. make posters with Post-Its to help you get an overview. Remove key post-its and test yourself with your poster. Then test your friends.
- v. use existing revision materials on the internet.
<http://www.bbc.co.uk/education/subjects> is a great resource. Your teachers will know others.
- w. make a list of questions that you would like your teachers to help you with.
- x. use mnemonics to help you to remember things. A mnemonic is a memory device that can help you remember pieces of information. SOHCAHTOA is a well-known mathematical mnemonic – do you know what it means?
- y. identifying similarities and differences between key concepts
- z. correcting a friend's work.



When am I going to revise?

Some people revise better in the morning, some people revise better in the evening. But this doesn't mean that morning people *shouldn't* revise in the evening – it just means that *how* they revise in the evening should be easier and more enjoyable. Perhaps this would be a good time to go for some **walking revision**. Or perhaps this is a good time for just **a short review** of what has been learned that day. The important thing to remember is that **you will have to revise a lot** – not only when it feels most comfortable.

It is **important not to over-commit!** Make sure that you **commit yourself to times that you will do**. And then treat these times as sacred – let nothing get in your way!

With whom am I going to revise?

Revision is often something that students do alone in their rooms or in the learning centre. But research suggests that social learning is also very, very effective. If you have a friend who is asking you a lot of questions, you may find it more difficult to answer than if you are making all the questions yourself. Your brain may also find it easier to remember things that it associates with certain people. It is more difficult to remember “mass accelerates downwards at 9.8ms^{-2} ”; it's easier to remember that “Ahmed showed me in Starbucks that Friday how mass accelerates downwards at 9.8ms^{-2} .” Sometimes, however, you will need to do this on your own – especially when you are reviewing your progress and identifying areas for your next week of revision.

Where am I going to revise?

You can revise anywhere – trains, buses, walking, in bed, in the learning centre, in Starbucks etc. However, by planning your location, this will make it easier for you to commit to your plan. The more you plan the details, the more likely you are to actually do your studies. Some research shows that the brain likes to associate information with places – so you might revise the properties of transition metals in one particular place and the process of DNA analysis in another.

The most important thing to decide when you are planning on where to revise is whether or not you will actually go there to do the work. Don't say you will go to the learning centre if you know that you will be too tired to go there.

The last thing to do is to commit your plan to a **Revision Calendar**. Some examples are given.

EXAMPLE WEEKLY PLAN

WEEK COMMENCING 6 MARCH 2017

CLASS
SELF-STUDY
FREE TIME

	0730 - 0830	09.15 - 10.15	10.15 - 11.15	11.15 - 12.15	12.15 - 13.15	13.15 - 14.15	14.15 - 15.15	15.15 - 16.15	16.15 - 17.15	17.15 - 18.15	18.15 - 19.15	19.15 - 20.15	20.15 - 21.15	21.15 - 22.15	22.15 - 23.15	23.15 - 00.15
MON	Review and planning	CHEMISTRY	MATHS		LUNCH	Revision				EAT	Revision			Review	Break	
TUES	Review and planning	Revision	ENGLISH		LUNCH	MATHS	Revision			EAT	Revision				Review	
WEDS	Review and planning	ENGLISH		Revision		LUNCH	BIOLOGY			Break	EAT	Revision			Review	Break
THURS	Review and planning	CHEMISTRY		Revision		LUNCH	MATHS		Revision		EAT	Revision				Review
FRI	Review and planning	ENGLISH		Revision	LUNCH	BIOLOGY		Revision		Break						
SAT	Review and planning	Revision				LUNCH	Revision				Review	Break				
SUN	SLEEP!	Revision			LUNCH		Revision				EAT	Revision			Review	

EXAMPLE DAILY PLAN

MONDAY

- 0730 Review yesterday's work
- 0800 Plan today's work (see below)
- 1415 **Physics revision – Forces (SUBTOPIC 1)**
- 1445 **Maths revision - Differentiation (SUBTOPIC 1)**
- 1515 **Physics revision - Light (SUBTOPIC 2)**
- 1545 **Further Maths revision - Complex numbers (SUBTOPIC 1)**
- 1615 BREAK!!!!
- 1630 **Maths revision – Sequences and series (SUBTOPIC 2)**
- 1700 **Physics revision - Simple harmonic motion (SUBTOPIC 2)**
- 1730 **Further Maths revision - Vectors (SUBTOPIC 2)**
- 1915 **Maths revision - Differentiation (SUBTOPIC 1)**
- 1945 **Physics revision - Light (SUBTOPIC 2)**
- 2015 **Further Maths revision – 3D coordinate geometry (SUBTOPIC 3)**
- 2045 BREAK!!!!
- 2100 **EAP - reading**
- 2130 **EAP - writing**
- 2200 **Maths revision – integration (SUBTOPIC 3)**
- 2230 BREAK!!!!
- 2245 Review of day's notes