

# BMAT eBook



*A comprehensive guide to the  
BioMedical Admissions Test*

**WE ARE MEDICS**



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# Introduction

## Welcome!

We Are Medics is a student-led social media organisation working towards becoming a charity to support young people in their applications to Medicine and Dentistry. We are a group of medical students that believe that support for medical school applications should be freely available for all. So we worked with a few students that were successful in the BMAT to put together this eBook. It has a few pieces of advice and guidance for the BMAT, that we hope will make your journey through the BMAT a bit easier!

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# Survey + disclaimer

## Survey



A survey is available [here](#), this will allow you to leave a short review on the quality of the eBook.

Completing this survey is a way of supporting us, and we can use the results to secure more funding, which will allow us to create more exciting opportunities for you.

Please complete it **after** you have sat your BMAT exam!

## Disclaimer

This advice is based on personal experience, and we cannot guarantee BMAT success based on it. However, as current medical students (who scored highly on the BMAT) we believe it is high quality information.

We do not support or endorse any company or individual which charges money for support during the medical application process. We strongly believe that this advice and information should be available for free.



Therefore, we do not support or endorse paid-for BMAT teaching courses, BMAT eBooks and BMAT question banks. We believe this eBook simulates a premium BMAT teaching course.

Any external content we recommend may contain adverts or suggest you need to purchase paid-for resources. We do not support such adverts or claims.



## What is the BMAT exam?

The BMAT is an exam that prospective medical students are required to do to apply to specific universities.

The following UK universities require the BMAT admissions test:

- Brighton and Sussex Medical School: A100 Medicine
- Imperial College London: A100 Medicine
- Keele University for international students: A100 Medicine
- Lancaster University: A100 Medicine and Surgery, A104 Medicine & Surgery with a Gateway Year
- University of Manchester Medical School for some international students: A106 MBChB Medicine, A104 MBChB Medicine (with foundation year)
- University College London: A100 Medicine
- University of Cambridge: A100 Medicine
- University of Leeds: A100 Medicine, A101 Gateway Year to Medicine, A200 Dentistry
- University of Oxford: A100 Medicine, A101 Graduate Medicine, BC98 Biomedical Sciences

This has been taken from the BMAT [website](#). **Make sure to check specific university websites for up-to-date information.**



# Changes to the BMAT 2020 cycle

The BMAT usually takes place 2 times in a year, but for this year it will only be taking place on **4th November**.

## Online format

The exam will take place on an online platform, although it will still take place at a local test centre. The format of the exam itself has not changed, only it will be on an online platform.

Section 1 and Section 2 are multiple choice, so it will require you to select options from the ones given on the online platform. Section 3 is a written section, for which a word limit of **550 words** has been placed. You will be allowed to use paper that will be provided by the test centre. **Remember to take your own writing equipment.** The paper will be particularly useful for solving maths questions in Section 2 or to plan your essay in Section 3.

Keep up with the latest updates to the online platform [here](#).

## Costs

The costs for the BMAT exam are detailed on their website. Note that the cost varies depending on when you register, so make sure to register early to avoid paying an additional fee. Contact your local test centre to check if they have further costs to facilitate the test.

Standard registration fee within EU, including the EU: **£59**

Find out about the details of the costs [here](#).

## Reimbursement

The cost of your test may be reimbursed to you after the test if you match the eligibility criteria and are able to provide supporting information. This does not include the fees that your local test centre charges to facilitate the test.

First you have to register for the test and pay the fees for the test at the local test centre. After receiving your entry number, submit the reimbursement form before the **15th October** 2020. Once you receive an approval for reimbursement,



contact your local test centre on a date close to your test date to request for a reimbursement.

The process of receiving a reimbursement involves completing an application form and providing supporting evidence with it. The evidence that is considered as suitable supporting evidence can be found on this [page](#).

You can apply for reimbursement on this [page](#).

## Access Arrangements

The BMAT exam organisers, Cambridge Assessment Admissions Testing, facilitate access arrangements in two ways: Access Arrangements and Modified Test Materials. The difference between these two methods is the level of evidence required to support your request, more information available [here](#).

As the format of the exam is online this year, keep an eye out on updated information in this area. Requests for access arrangements such as extra time and enlarged papers must be made **through the test centre**.

The last date for your test centre to request Modified Test Materials is **30th September** and to request other Access Arrangements is **15<sup>th</sup> October**, so make sure to let your test centre know before then. Contact your test centre as soon as possible if you have missed these deadlines.

Find out more about access arrangements [here](#).





# Key dates for your diary



All information taken from [here](#).



# Structure of the BMAT

The BMAT is a 3-section assessment. The first section is a multiple-choice section about Thinking Skills, the second section is a multiple choice about Scientific Knowledge and Application, and the third section is a written task.

	Section 1: Thinking Skills*	Section 2: Scientific Knowledge and Applications	Section 3: Written Task
<i>Format</i>	Multiple Choice	Multiple Choice	Essay
<i>No. of questions</i>	32 questions	27 questions	1 of 3 options
<i>Timing</i>	60 minutes	30 minutes	30 minutes

\*Note that Section 1 has been updated for 2020 - bear this in mind when doing past paper questions.

## Advice

### General advice for the BMAT

The BMAT exam is different from usual school exams that you prepare for and from the other medical school admissions test UCAT. Your preparation strategy is likely to be very different purely due to the difference in the content of the exam.

The organising body for BMAT has provided plenty of practice and revision material to prepare for the exam. The first step to preparing for the exam is to read the [specification](#) and Section 2 preparation [guide](#) provided on the website thoroughly. The BMAT specification details the types of questions and the content of the exam. The guide has focused revision material for each section in the specification. There are several past papers that are available to practice from too, and you should pace these out over time. Unlike for the UCAT exam, the preparation for this exam is likely to be in parallel with school studies, so starting preparation early is key. There is a 28-day plan available towards the end of this eBook for guidance.



# Applying strategically with your BMAT score

One of the challenges about the BMAT is that the test is taken after the UCAS deadline. This can make it difficult to know where to apply when the scores are not published until after candidates have made their choices about university applications. There are ways to apply strategically which can help with this situation.

For a start, it is wise to have at least one UCAT medical school application so that if the BMAT does not go well you still have another chance. It is advisable to apply to at least one medical school which you think you have a strong chance of getting an interview at, and that you would be happy to go to if you received an offer. Have a look at the ways different medical schools decide who to invite to interview in order to find which medical school you feel most confident about getting into.

Many medical schools publish the way in which they decide which candidates to interview and give offers to, and the next stage is to decide which BMAT universities you want to apply for. The BMAT score is more highly weighted in the application process for some medical schools than others, so if you are applying to more than one BMAT university it might be a good idea to apply to one with a slightly lower weighting or cutoff score if you are also thinking about applying to one with a higher weighting or cutoff. This forms another safety net, increasing your chances of getting an interview or offer. The [Applican](#) tool developed by We Are Medics can help you go through Freedom of Information requests at BMAT universities to identify the BMAT cutoff requirements at each university.



It is important to know the other aspects of your application that BMAT universities are looking for. For example, if a university uses GCSE grades and the BMAT to decide who to invite to interview, this would be a good university to apply for if



you have particularly strong GCSEs. In contrast, if a medical school focuses more on the personal statement and the BMAT, it would be worth putting a lot of effort into making sure your personal statement matches the requirements for that medical school.

A takeaway about applying strategically is to order your medical schools into most likely to least likely to get into, and to make sure you have a mixture of both likely and less likely. This way you can aim high in your applications, as well as have a better chance at getting into at least one medical school.



# Deep dive: Thinking Skills

Thinking Skills is the first of three papers, and tests problem solving and critical thinking skills. From September 2020 onwards, Section 1 no longer contains data analysis and inference questions so bear this in mind when looking at past papers.

## Why are Thinking Skills important?

Being able to read information critically is an important part of being a doctor and a medical student. Identifying relevant information, comparing data presented in different ways, and analysing the strength of an argument based on the reasoning and evidence presented are key skills for reading scientific articles and engaging with medical research. Finding a logical solution to a problem is also a useful skill to have in many aspects of clinical practice.

## What is the format of the Thinking Skills sub-test?

Thinking skills questions are **multiple-choice**, with five options to choose from where only one answer is correct. There are **32 multiple choice questions**, with **60 minutes** to complete them. Of the 32 questions, there are 16 problem-solving questions and 16 critical thinking questions.

## Problem-solving questions

There are three main themes of problem-solving questions:

- Relevant selection
- Finding procedure,
- Identifying similarity.

Most questions fit into one of the themes, whereas some questions can be a mix of two or three of the themes.

### 1. Relevant section

Questions that involve relevant selection are testing the candidate's ability to identify the useful information amongst distracting or unimportant information. The questions are often set out as a passage or table, asking the candidate a specific question that focuses on some of the information provided. Sometimes the answer is in the text or table without much need for calculations, while if the question also involves finding procedures there may be maths skills required.



For these types of questions, identifying the main objection of the question can be useful so that you can select the relevant information.

## 2. Finding procedures

This aspect of problem solving involves creating a **solution to a problem**, usually with mathematical skills. These types of questions are often not mathematically difficult, but instead test logical reasoning. There is often a logical solution that can be found if you think through the question carefully, so if you are getting stuck on these questions try to see if there is a simpler way to solve the problem.

## 3. Identifying similarity

These questions ask you to **identify similarities** between data represented in different ways, for example in a chart and a table. These questions often involve simple calculations, and it can be useful to be familiar with reading simple graphs such as bar charts and pie charts.

## Critical Thinking questions

The critical thinking questions test the candidate's ability to analyse an argument. For this section, it is helpful to get to grips with the basic structure of an argument. An argument is made up of reasons that support a conclusion. Some arguments may also have assumptions, crucial parts of an argument that are not explicitly stated. The critical thinking questions test a candidate's understanding and evaluation of an argument based on this basic structure.

An example argument could be:

I like to drink tea because it is healthy, but it doesn't help me concentrate. Coffee helps me to study better but affects my sleep pattern. I have a test coming up so I am going to drink coffee instead of tea. Afterall, it is important to always do well in tests to succeed in life.

Reason

Conclusion

*Candidates can be asked to:*

→ **Identify the main conclusion**



In these questions, the main conclusion can appear anywhere in the text. It can be identified because the reasons support it. A useful check can be to place the word “therefore” or “so” between the reasons and the option you think is the main conclusion.

→ **Draw conclusions**

Similar to identifying the main conclusion, these questions ask the candidate to identify which conclusion follows the reasoning in the text. However, the conclusion does not appear in the text itself. The conclusion will be something that the reasoning implies, and that all the reasoning supports, but not anything beyond.

→ **Identify assumptions**

To identify an assumption, it is helpful to identify the conclusion. The assumption can then be identified as a statement that is required for the reasoning to support the conclusion. A useful way to check if something is an assumption is to ask: if the statement was not assumed, would the argument fail? An assumption for the example argument might be that studying will help me with my test.

→ **Assess the impact of additional evidence**

These types of questions ask the candidate to identify a statement not found in the text that would weaken the argument. The statement points out a flaw in an argument, for example by countering an assumption made in the argument. In the example argument, this might be that studying more does not help for the test I am going to take.

→ **Detect reasoning errors**

Here the candidate is asked to point out a flaw in the argument’s reasoning, which means that it must be explained why the conclusion does not follow the reasons given in the argument. Identify the reasons and conclusions, and try to spot where the missing link is. An example of a flaw might be that the reasons leave out an obvious piece of reasoning rendering the conclusion unlikely, or that the conclusion drawn is causation when the reasons suggest correlation.

→ **Match arguments**



Matching arguments is about finding similarities in structure between two arguments. The questions often start with a short argument, followed by five arguments to choose from as a similar argument. One way to approach this type of question is to find repeated statements that you could represent with a letter (e.g. X or Y). Once you have written out the argument in terms of X and Y, using connecting words such as AND or OR, you can find the answer that also has this structure to it. In the example argument, we are choosing between X (tea) and Y (coffee) to stay hydrated. The argument could be given as follows: I will choose either X or Y. X does not help, but Y does help so I choose Y.

### → Apply principles

Principles are guidelines or rules that can be applied to many situations, such as 'It is wrong to lie' or 'People should take responsibility for their mistakes'. They are often ethically or morally grounded. Importantly, they are not specific pieces of advice, but are general and can be applied to many different arguments and circumstances. In these questions, you often are asked which answer illustrates the principle in the argument. You have to first identify the principle in the argument, and find the answer that also applies this principle. Principles can sometimes be identified by words such as: should, always, never, wrong or right. In the example above, the principle would be that 'It is important to always do well in tests to succeed in life'.

## Preparation advice

While the maths skills required for these sections are not complex, performing quick calculations can save you time so that you can focus on the logical problem solving that the questions demand. [Mental maths practice](#)

can be useful for improving the calculations required under a time pressure, particularly focusing on percentage operations, simple fractions, calculating means and calculations involving time or money. And remember, there's [no calculator](#)!



For the critical thinking questions, a tip would be to [find the main conclusion of the argument for all questions](#). This makes finding assumptions, flaws, principles



or reasons much easier. If you can identify the reasons, that would also help in evaluating the argument. With these questions, it helps to read a lot of questions to get a feel for what an argument is and how they are structured, with argument structures often becoming more familiar the more you practice.



# Deep dive: Scientific Knowledge and Application

Section 2 tests your knowledge and understanding of basic concepts of science and maths that you have learned at your GCSE stage. While the topics are the same, the way that they are tested are slightly different and require you to take a different approach when it comes to its preparation.



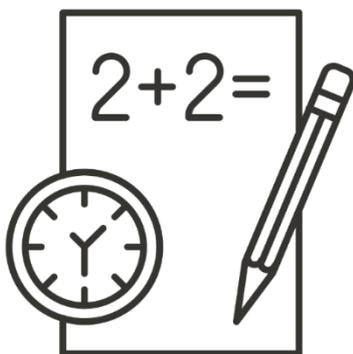
## Why is Scientific Knowledge and Application important?

Having a thorough understanding of basic concepts in science and maths are essential to form the basis to build your medical knowledge on. The principles introduced in chemistry, biology and physics will form the basis of your knowledge of physiology. The thinking skills involved in manipulating maths questions to find a solution are a good indication of problem-solving abilities.

## What is the format of the Scientific Knowledge and Application sub-test?

There are **27 questions** to be completed in **30 minutes**. There are 7 questions for each of the sciences: biology, chemistry and maths, and 6 questions for maths.

All the questions are **multiple choice**, and you don't lose marks for wrong answers so make sure to attempt each of them. **No calculators** are allowed. There is a specification that details the assumed knowledge that you are expected to know. Note that some sections of the specification that are not tested in the current exam are marked with a red asterisk in the past papers.



### Preparation advice

The first step to prepare for this section is to read the Assumed Knowledge Specification. **Read each of the sections to identify areas of strength and weakness.** After identifying areas that you are less confident with, review them using the **BMAT Section 2 guide** (available



[here](#) through the "Access the guide" option), and supplement it with your GCSE resources if you are struggling.

The BMAT preparation guide goes through the specification and provides revision questions that encourages thought as would be relevant for BMAT.

*Personal experience: My approach was to print the document and to colour code the sections with my level of confidence in the topics. As I had not studied Physics beyond GCSE, this area required focus and I allocated more time in revising Physics than the other sciences and maths.*

**Divide up your revision of specific topics over your days of preparation.** Try to cover the most difficult topics first and to allow your to practice the topics when they come up in the past papers. A recommended approach to reviewing topics is recommended in the **28-day calendar** in this ebook.

The approach that you take to answering each question influences the speed at which you answer a question. For any question, try to find your own answer first and compare to the options given. Use the process of elimination if you are unsure and it seems strategic for the question. The process of elimination is often more useful for science questions than for maths questions, as being able to identify whether a few statements are true or false are helpful in narrowing down the choices to a fewer number of options.

**Try a few different techniques of approaching multiple choice questions and identify the technique that suits you best.** Here are a few links to support you in identifying your approach to multiple choice questions:

- <https://student.unsw.edu.au/multiple-choice-exams>
- <https://www.macleans.ca/education/how-to-ace-multiple-choice-tests/>

The content of this section is not particularly new to you, but the **timing** and **complexity of the questions** are often the more challenging parts of the exam. There is **approximately 1 minute per question, and 3 minutes to spare that can be saved for the section you struggle most with.** You can reallocate time based on your experience in past papers - I found that reading the details in the science questions required a lot of time, whereas I found maths to be relatively easier, so I made sure to spend my additional minutes on the science questions. The more practice papers you do, the better indication you will get of when you should move on to the next question.



Let's work through one of the example questions from the 2014 BMAT paper:

*Which of the following statements about lipid digestion in the small intestine is /are correct?*

*1 Emulsification by bile makes smaller lipid droplets, each with a smaller surface area.*

*2 Bile contains an alkali to reduce the pH of the material from the stomach.*

*3 Lipase secreted in bile breaks bonds in lipids to produce glycerol and fatty acids*

*A none of the statements*

*B 1 only*

*C 2 only*

*D 3 only*

*E 1 and 2 only*

*F 2 and 3 only*

*G 1 and 3 only*

*H 1, 2 and 3*

This question is fairly long, and a quick glance at the options tells us that all combinations of the options are in the answer, so the process of elimination is of limited effectiveness.

It is helpful to identify the key words in the question: it is about lipid digestion in the small intestine. So this is in the context of digestion after the stomach, specifically for lipids.

The first point has 2 separate subpoints, so we must check whether both are correct. Emulsification occurs by bile, and it does make smaller lipid droplets. Each of the lipid droplets do have a smaller surface area. Note that a quick skim of the question might have led us to a false conclusion: the overall effect of emulsification is to increase the overall surface area of the lipid droplets, however each droplet still has a lower surface area than the initial lipid pieces. So the first point is correct.



For the second statement, we have to run through a few questions about the statement. Does bile contain alkali? Yes. Does alkali reduce pH? No, it increases pH, so this statement is already false. This statement does not require any attention if you are short of time and don't have time to check the rest of the statement. Does it act on substances from the stomach? Yes.

A similar approach can be taken to see the accuracy of the last statement. Is lipase secreted in bile? No – lipase is secreted by the pancreas as part of the pancreatic juice. Similar to the previous statement, this statement does not require any more attention if you are short of time. Does lipase break down lipids? Yes. Are the products of lipid breakdown glycerol and fatty acids? Yes.

The final answer is B – only statement 1 is correct. The next steps that come after trying a practice question are crucial. If you got the answer correct, well done – this topic area does not require much more revision. If you answered the question incorrectly, go back to the specification and review which key point was being assessed. Here is the section from the specification that is being addressed in this question:

*d. Digestive system:*

- i. Understand the structure and function of the digestive system.*
- ii. Understand the processes of peristalsis, digestion, absorption and egestion.*

All in all, Section 2 for BMAT is **best prepared for by practising from past papers under timed conditions and reflecting on your results to improve gradually.**



# Deep dive: Writing Task

## Why is the Writing Task important?

This writing task can feel like a daunting prospect and the temptation is to try and learn everything there is to know about every hot topic in healthcare! Although it is useful to have some background knowledge, this task is not examining how many facts you can write. In fact, the BMAT website specifically states that section 3 is **not a knowledge test**. The writing task is designed to assess your ability to **develop ideas, create balanced arguments** and to **present your thoughts concisely under a time-pressure**.

In a medical career you will be presented with many new situations that you will need to appraise with a logical and balanced approach. This section is assessing your thought process and how you construct an argument much in the same way that you will be asked to do in a medical interview. It's all great practice!

## What is the format of the Writing Task?

Although often referred to as the essay section, you actually have only **550 words** so it may be helpful to think of this more as **three or four paragraphs**.

You are given **30 minutes** to complete this task. Although this sounds pretty tight, it is not a long piece of writing so do not rush. Take the time to plan out your answer before you begin writing.

## Questions

You will be given a choice of three questions and you will **pick just one to answer**.

Each question begins with a statement or quote. It will then have a few sentences with sub-questions or directions on what to include in your essay. You are almost always asked to firstly explain the meaning of the statement. Here is an example taken from the BMAT website:

*'It is ridiculous to treat the living body as a mechanism.'* Explain what this statement means. Argue to the contrary. To what extent do you think this apparent contradiction can be resolved?



## Marking

Unlike the other two sections, this part of the BMAT is scored using a **number from 1-5** and a **letter from A-E**. The following marking guidance has been sourced from the official BMAT website, available [here](#).

Each candidate's work is marked by two examiners who will give a number score for the content and a letter grade for the quality of the candidate's written English. The marks given by the two examiners are then averaged. For example, if one examiner gives your quality of content a 4, and the other gives a 5, then your score will be 4.5

For the quality of writing, examiners only have three grade brackets to assign - A, C or E. The grades B and D can only be given as a result of averaging. For example, if one examiner gives you an A, the other gives a C, then your grade will be a B.

### Quality of Content

The top score for this component is a 5. Examiners are looking for answers which cover all aspects of the question, give well-constructed arguments and counterarguments and come to a strong conclusion.

### Quality of Written English

The top score for this component is an A. To achieve this, you will need to use correct spelling, punctuation and grammar (although a couple of slips will not harm your grade). The examiners are looking for answers that flow well with appropriate sentence structure. This is why planning what you will write before you begin is so important!

## Exam technique

In contrast to sections 1 and 2, this task is not very time pressured. You have 30 mins and it will only take you 10-15 mins to fill the page so first take the time to pick your question carefully and plan your answer.

There is only one answer sheet and you do not want to waste that space with crossings-out. Do not be tempted to pick a question that appears to be more difficult to be impressive - the examiner is looking for how well you can consider



an argument and present your thoughts, and the choice of question is not important to them so pick something you have the most ideas for!

Ensure you cover every part of the question detailed underneath the statement. If a part is neglected, then the maximum score the examiners can give is a 2. Usually the first requirement is to explain the statement you are given. You should do this by **defining the key terms in one or two sentences** at the beginning of your essay, to show you understand what the statement is expressing and why this is important.

Here is a good approach to use once you have picked a question:

1. **Brain dump** - usually points for and against the statement given in the question
2. **Add in facts from your own knowledge.** This is like a long GCSE question in Geography or History where you are backing up your arguments by showing off the facts you know!
3. **Writing phase!** Use relatively small and neat handwriting to make it easier for the examiners to mark and to show that you have thought out your argument - plus you'll fit more words in! You could even time how long it will take you to write that amount of text, so you know how long you've got for planning beforehand.
4. **Check through.** Remember you can only write on the front of the sheet so no "PTOs". Try to avoid making big scribbling corrections unless it would alter the intended meaning of your essay! As you have planned your answer carefully, you will mostly be checking for spelling, grammar and the flow of your argument.

## Preparation

### Basic principles

Make sure you are aware of the **current legal position in the UK for key ethical topics such as abortion and euthanasia.**

Most ethical dilemmas in medicine do not have a straight answer and people will have varied opinions - this task is looking at whether you can **appreciate the different sides of an argument.** There are however some key principles used in medical ethics considerations. I would recommend you have an understanding of these principles as they make great buzzwords and will help you consider your answer.



The four pillars of medical ethics:

**BENEFICENCE**

**NON-MALEFICENCE**

**JUSTICE**

**AUTONOMY**



Also consider the effects of the statement and your arguments to different groups - what are the **implications to individuals, their families and the wider healthcare system/economy?**

## Background knowledge

Keep up to date with current affairs in healthcare; I used:

**STUDENT BMJ**

**BBC NEWS HEALTHCARE**

Publications such as the **Guardian** and **New Scientist** may also be useful! The essay is mainly there to assess your ability to present a structured and balanced argument. Doing this will easily score you a 3/4. Do not stress about learning every healthcare topic! To elevate your mark, you will want to show off what you have read so I would recommend focusing on facts that can be sprinkled into any question like the cherry on a cake. For example, 'this may not be feasible due to the limited resources of NHS England, which has a budget of £140 billion per year.'

## Exam practice

**How many timed essays should I do?**

Not many! At most I would suggest doing 2 or 3 practice essays **to give you an idea of timing**. Particularly pay attention to how long it takes you to write out your answer fully. You want to allocate as much time as possible to planning so it's very helpful to know how much time to leave to get your answer written. I spent around 18 minutes planning my answer, 10 minutes writing and 2 minutes checking through, but everyone has different writing speeds.



**Practice planning out essays!** When you are doing your reading for background knowledge, you could practice planning out arguments for and against to get used to this style of thinking.

The example question below is taken from the BMAT website.

*'A little learning is a dangerous thing.'* (Alexander Pope) Explain what this statement means. Argue to the contrary to show that a little learning is not dangerous. To what extent do you think learning can be a dangerous thing?

Example essay plan:

### 1. Meaning of statement

This statement means that knowing a small amount can have negative consequences. The statement implies that this may be worse than having full depth of knowledge, or even no knowledge at all on a subject.

### 2. Arguments supporting the statement

- Learning that only includes one opinion rather than a rounded worldview can lead to dangerous beliefs e.g. propaganda in 1930s Germany
- The misconception that you know more than you do could lead to overconfidence e.g. performing an operation you are not experienced enough for as you know the procedure, but you are not aware of potential complications and how to manage them
- Only knowing some information could be more dangerous e.g. knowing how to start a car but not how to stop! Would be better to have never started the car at all.

### 3. Counterarguments

This view of knowledge is very black and white.

- Better to know basic CPR and increase chances of survival until an ambulance arrives
- a little awareness of other worldviews or cultures can make a huge difference to someone's outlook and set them on a journey to learn more
- small amounts of knowledge can save lives e.g. teaching rural villages how to sanitise water massively decreases cholera deaths

### 4. Weigh-up and conclude ("to what extent"):



NB the question is now asking generally about learning, not just a "little learning"

- dangerous to some extent
- more dangerous if the individual is not aware of the extent of their knowledge and where they are lacking
- can also be dangerous if knowledge is used for malevolent purposes
- however, allows innovation, opens eyes to other worldviews, encourages tolerance and basic knowledge can make large differences to communities

An idea for exam practice would be to **provide a copy of the mark scheme to a family member/friend to give you feedback on your essay**. Clarity of expression is a key part of the assessment, and it is often useful to get feedback on this from a new set of eyes.



# Common pitfalls + how to avoid them

## Overall

Remember to answer all the questions for section 1 and 2. With no negative marking for these sections, if you are stuck on a question it is better to guess than to leave no answer at all.



## Section 1

A common pitfall for this section is assuming that it is based on common sense and therefore difficult to revise for. This can mean that candidates spend less time revising for this section because particular subject knowledge is not needed, in contrast to section 2. Make sure to spend time practicing questions, which will improve the problem solving and critical thinking skills required for this section.

Not understanding the question asked is another common pitfall that can cost easy marks in the exam. Remember that these questions are testing the candidate's ability to read, understand and select relevant information so understanding what the question is asking for is key. Give time to read the question and properly understand it before answering the question. It can help to identify key words in the question, and then also identify the key information in the text or table given.

## Section 2

A pitfall is to assume that all of the knowledge base for Section 2 was covered in GCSEs. Although the section 2 specification is based on GCSE Science and Maths knowledge, the depth in which topics are covered and their variety of topics may not have been covered by all GCSE exam boards. Make sure to read the specification in detail to cover all the topics.

The questions in this section can be long, and this section of the exam is time pressured. Spending too long on each question is a common pitfall. Try to



allocate specific amounts of time to each question and stick to that even when doing practice papers.

### **Section 3**

A common pitfall for the writing task is leaping straight into writing an answer. You will have less than 550 words to write your answer. Spend most of your 30 minutes planning and deciding how to structure your answer. In your preparation, mostly practice planning essays but also do a few to time so you know how long it will take you to write your answer – this will allow you to maximise your planning time.

Ensure you address ALL parts of the question. The usual structure is a statement followed by several points the examiners wish you to address. The marker cannot score your essay above a 2 for quality of content unless you answer every part required of you.



# Night before and morning of the exam

## The night before the exam

Most importantly, make sure that you get enough sleep! Work out how you are going to get to the test centre and how much time that leaves you to get ready in the morning, so that you can set your alarm for a reasonable time. From there you can work out what time to go to sleep so that you get a good amount of sleep. **Keep your revision to looking over notes and essay plans rather than practicing a paper** – often this can make the exam much more daunting and cause more worry. Leave a good amount of time between finishing revising and going to sleep so that you can wind down for the day too, for example by reading a book or listening to music.



## The morning of the exam

Like any exam, it is important to be in the right state of mind beforehand so that you can perform at your best. It is completely natural to feel nervous, and an adrenaline boost can be a help in the exam to get you through the first few questions! Keeping the 'nerves' under control is important though so that you don't feel panicked or your exam performance is hindered. Firstly, make sure that you have a healthy breakfast so that you have some energy, or bring a snack that you can eat on the way to the test centre. Make sure you have kept hydrated throughout the morning too.



Getting to the test centre in good time is important too and gives you some time to get everything sorted for the test. It is not advisable to try to revise everything on the morning of the test, but if there are some formulas or quick facts that you often forget, you could make a revision card that you can look at just before going into the exam.

*These tips were compiled from personal experience, and online research. The sources of information used to compile these tips are available*



# Some BMAT Resources

Alongside this eBook there are various other free resources available. Below we have included a range of materials with different ways of preparing you for the BMAT.



## Note

There are many BMAT advice videos, blogs, eBooks etc. – a significant number may be sponsored by for-profit companies or may recommend paid-for services. Once again, the We Are Medics team does not endorse these. We are sharing these resources because some of the advice included is still extremely relevant, useful and applicable.

## Written resources

Blog series by Medify: <https://blog.medify.co.uk/tags/bmat-advice>

This blog series has advice about how different sections can be approached. By using this advice in conjunction with this eBook, try to identify an approach to the exam that works best for you.

Blog series by Medic Portal: <https://www.themedicportal.com/application-guide/bmat/>

Medic Portal has a lot of information about the structure of the BMAT and advice from those that have taken the exam.

## Question banks

We did not find any free question banks that have questions in the format of the BMAT exam. However, the organisers of BMAT have plenty of past papers freely available. Having done well in the BMAT, I think the resources available are sufficient for practising for the exam.



# 28-day revision plan

## Guidance

The timing of the BMAT exam is such that its preparation must take place alongside studying for A Levels. I would suggest starting to prepare early and to allocate a fixed amount of time to BMAT preparation every day. Bear in mind that half-term holidays are immediately before the exam, and this is a good time to ramp up your BMAT revision.

The calendar has been divided into 'Practice' and 'Review' sections. Section 2 of the BMAT exam tests basic scientific knowledge and its applications, which requires some amount of revision of previous learning. We have divided the review sections into portions that fit together and can be revised in one go.

Alongside reviewing Section 2 topics and practising papers, remember to keep up with the news and medical events to generate ideas for Section 3.

## Week 1

### Day 1

- Read the **BMAT test specification**
- Read the **BMAT preparation guide**
- Read BMAT **Section 2 Preparation Guide**
- Review
  - B1 Cells
  - B2 Cellular Movement
  - B3 Cell Division and Sex Determination
  - P1 Electricity

### Day 2

- Read BMAT Section 1 test guide
- Practice: **BMAT Section 1 Specimen Paper** – try to answer the questions and read the attached explanations
- Review
  - C1 Atomic Structure
  - C2 Periodic Table



- C3 Chemical Reactions
- C4 Quantitative Chemistry

### Day 3

- Practice: **BMAT Section 3 Specimen Paper** – plan the essay, type essay, read the mark scheme and the sample responses, reflect on how your essay went and how it can be improved
- Review
  - B4 Inheritance
  - B5 DNA
  - P2 Magnetism
  - M1 Units
  - M2 Number

### Day 4

- Practice: **BMAT Section 2 Specimen Paper** – answer the questions under relaxed conditions, see the answers, identify major and minor gaps in knowledge, restructure your 'Review' calendar to cover the gaps in knowledge in the first 2 weeks of preparation
- Review
  - B6 Gene Technologies
  - B7 Variation
  - C5 Oxidation, reduction and redox

### Day 5

- Practice: **2017 paper Section 1**
- Review
  - M3 Ratio and Proportion – understand the concepts detailed and practice questions on specific topics such as compound interest and similar shapes
  - P3 Mechanics
  - C6 Chemical bonding, structure and properties

### Day 6

- Practice
  - 2017 paper Section 3** – plan essay, type it, hand it over to a family member/friend/teacher for feedback



- 2017 paper Section 2**
- Review
  - B9.1 – 9.2 Animal Physiology
  - P4 Thermal Physics
  - P5 Matter

## Day 7

- Practice: **2014 paper** under timed conditions - this paper has explanations for the answers, read through that and reflect on areas of strength and weakness
- Review
  - B8 Enzymes
  - B10 Ecosystems

## Week 2

### Day 1

- Practice: **2009 paper Section 1**
- Review
  - B9.3 – B9.5 Animal Physiology
  - P6 Waves
  - C7 Group Chemistry

### Day 2

- Practice
  - 2009 paper Section 2**
  - 2009 paper Section 3** – plan essay
- Review
  - M4 Algebra - understand the concepts detailed and practice questions on specific topics
  - C8 Separation Techniques
  - C12 Electrolysis

### Day 3

- Practice: **Sample A Section 1**
- Review



- C9 Acids, bases and salts
- P7 Radioactivity

## Day 4

- Practice
  - 2008 Section 2**
  - 2008 Section 3** - plan essay
- Review
  - C10 Rates of Reaction
  - C11 Energetics
  - M6 Radioactivity

## Day 5

- Practice: **2008 Section 1**
- Review
  - C13 Organic Chemistry
  - M7 Probability

## Day 6

- Practice
  - 2007 Section 2**
  - 2007 Section 3** - plan essay
- Review
  - M5.1 - 5.9 Geometry
  - C14 Metals
  - C17 Air and water

## Day 7

- REST

## Week 3

### Day 1

- Practice
  - Sample B Section 1**
  - 2003 Section 2**
- Review



- M5.10 - 5.19 Geometry

## Day 2

- Practice
  - 2003 Section 1**
  - 2003 Section 3**
- Review
  - C15 Kinetic/Particle Theory
  - C16 Chemical tests

## Day 3

- Practice: **2004 paper**

## Day 4

- Practice: **2005 paper**

## Day 5

- Practice: **2006 paper**

## Day 6

- Practice:
  - 2015 paper**
  - 2007 Section 1**

## Day 7

- REST

## Week 4

### Day 1

- Practice: **2019 paper**



## Day 2

- Practice: **2011 paper**

## Day 3

- Practice: **2010 paper**

## Day 4

- Practice: **2012 paper**

## Day 5

- Practice: **2013 paper**

## Day 6

- Practice: **2018 paper**

## Day 7

- Practice: **2016 paper**

This calendar is for guidance – please adapt it to your time availability and your own strengths and weaknesses.



## 50 word-advice

We thought it would be helpful to have a few pieces of wisdom in 50-words from some students that have successfully taken the BMAT. Here is a collection of advice from current medical students that are currently studying in BMAT universities or have a score of >5 in Section 1 and 2, and >3 in Section 3.

The key to the BMAT is doing lots of practise under timed conditions and remaining calm during the exam. It is a skill you can develop – not something everyone can naturally do! For the essay, keep it simple and well-structured. Try to pick an essay title that you find really interesting – this will definitely come across in the final piece.

*Greta, Oxford*

To prepare, I would start about 1 month before by using the assumed knowledge specification (found on the BMAT website) to review my knowledge for any gaps. For all those who left physics behind at GCSE, this is the time to use your GCSE revision notes and revision guides again!

*Hannah, Leeds*

Firstly, skim the answers before the question so you know what you're looking for. Secondly, beware of words like 'the most' or 'all' – definitive answers are rare in medicine. For the essay, make sure to critique the question, give a balanced argument as well as your opinion.

*Harry, Cambridge*

The BMAT assesses your ability to apply prior knowledge to new scenarios. Although it is a challenge, be confident in your abilities! The beauty of multiple choice is that the answer is already on the page – if you get stuck, work through each option.

*Isy, Birmingham*

My advice for the BMAT would be firstly, don't stress! The BMAT has a rep as being the more difficult medicine admissions test but it actually uses far more of your A-level skills than the UCAT. Go through the specification and identify weak points to focus your revision.

*Jess, Birmingham*



My advice would be to sit as many practice papers as you can in timed conditions. The exam is very time pressured (especially section 1 and 2), and learning to quickly answer the questions can relieve some pressure in the exam. And if you don't know how to approach the question, move on and come back to it at the end.

*Lizzie, Oxford*

You'll always hear: "BMAT is challenging", "BMAT is competitive", "you can't prepare for the exam". I'll tell you this is not true. So much of it is just like you practiced, just like the past papers. Make sure you practice, and you understand how the questions work. You'll do great.

*Niraj, UCL*

The BMAT exam has several different sections and the aim is to cross a threshold in each section. Make sure to manage your time during revision to focus on your weakest points. Once you have finished your preparation, be confident that you have tried your best and good luck!

*Pratyusha, Birmingham*