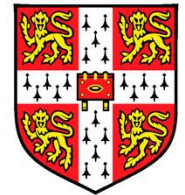


# Application Workshop 2013



Admissions Team  
Jesus College Cambridge

# What we'll cover

- What are tutors looking for?
- The application timeline
- Personal Statements
- Admissions tests
- Interviews
- What to do next





# BEFORE YOU APPLY

Preparing a competitive application



# What are tutors looking for?

- Excellent academic record
- Appropriate subjects at higher level
- Independent interest in the subject
- Suitability for the teaching system



# College and course choice

- Open application vs. college preference
- Check the entrance requirements
- Check the selection criteria for your course

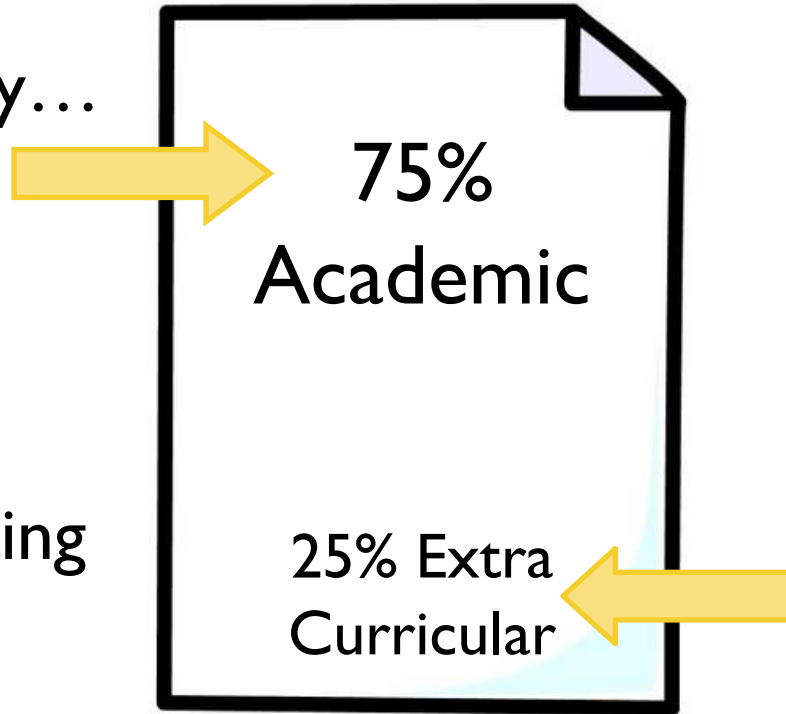


# Writing a personal statement

I want to study...

I have  
read/watched/  
visited...

It was interesting  
because...



In my spare  
time I play...

I had some  
work  
experience at...

I enjoy...

**Show, don't tell**  
**Discuss, don't list**  
**Don't lie!**



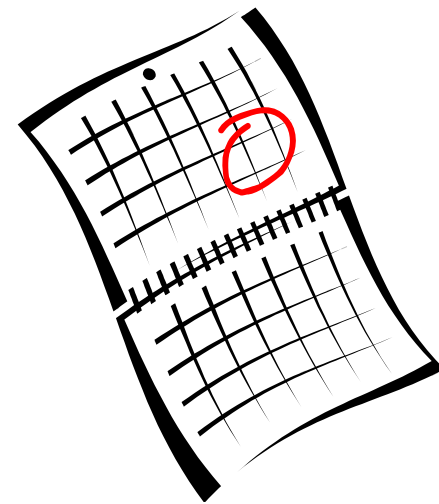


# MAKING AN APPLICATION

How to apply for 2014 entry



# Key dates



- **Now** - UCAS applications open; register for tests\*
- **15 Oct** - application deadline
- **22 Oct** - SAQ deadline
- **6 Nov** - pre-interview tests in schools (BMAT for Cambridge)
- **15 Nov** - deadline for written work \*
- **Dec** - interview period
- **early Jan** - applicants notified of decision

\*Where applicable





# Written tests: Cambridge

- Tests are designed to assess ability and aptitude for your chosen subject.
- Predominantly sat when you come for an interview.
- Varies college to college – check websites to see.
- BMAT only external one, and only universally used one.

## KEY DATES

- 1 Oct – Deadline to register for the BMAT
- 6 Nov – sit BMAT



# Written tests: Oxford

- Tests are designed to assess ability and aptitude for your chosen subject.
- Sat by all applicants to a course, before interview.
- It is your responsibility to register for the required test.
- Preparation materials are available online for free.

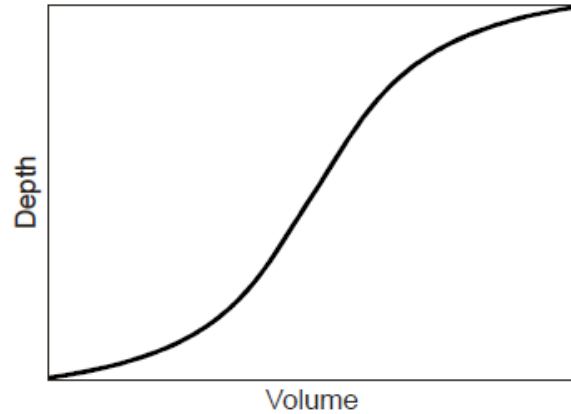
## KEY DATES

- 1 Sept to 20 Oct – LNAT tests
- 1 Oct – Deadline to register for the BMAT
- 15 Oct – Deadline to register for all tests administered by the Admissions Testing Service (ATS)
- 6 Nov – All tests run by ATS are sat in school

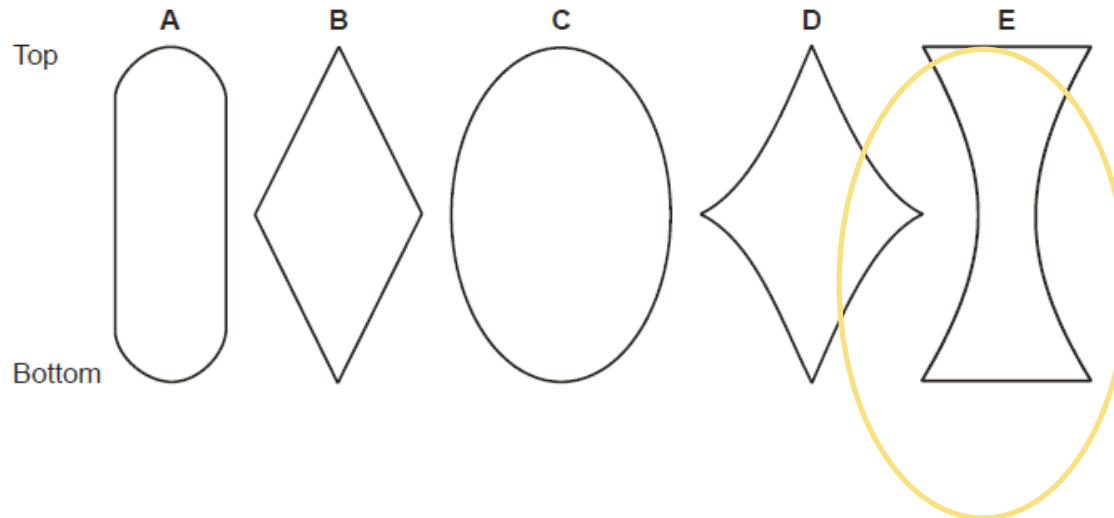


# BMAT

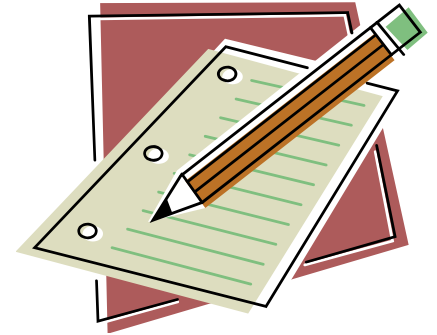
- 1 A farmer has an underground water tank which he decided to calibrate by adding known volumes of water and measuring the depth using a dip-stick. His calibration graph is shown below. The horizontal cross section of the tank is circular at all points.



Which **one** of the following shows a possible vertical cross sectional shape of the tank?



# Submitted work



- Follow the guidance for your course.
- Think about the selection criteria for your course.
- Keep a copy!

## KEY DATES

Deadline for submitting written work

- Oxford, 11 November
- Cambridge, 15 November





# INTERVIEWS

What to expect and how to prepare



# Interviews

- We don't interview every applicant.
- Students might be interviewed at more than one college.
- Each interview is 20-30 mins of subject focussed discussion or exercises.
- Interviews are not a personality test or a test of general knowledge.
- Interviews are the final stage, but not the only basis for tutors' decisions.
- Keep the dates free (early-mid December; check websites).
- Accommodation and meals are usually provided free of charge, where necessary.



# Preparing for interviews

- You can't be “coached” for interviews but you can prepare by:
  - Revising relevant curriculum;
  - Organising a practice interview;
  - Reading widely and critically around your subject;
  - Taking opportunities to discuss your ideas with other students or teachers;
  - Reminding yourself of your personal statement and any submitted work.



# Sample interview questions

[www.admissions.ox.ac.uk/interviews](http://www.admissions.ox.ac.uk/interviews)

<http://www.study.cam.ac.uk/undergraduate/apply/interviews/>

1. Here's a cactus. Tell me about it.
2. How do pirates divide their treasure?
3. Is violence always political? Does 'political' mean something different in different contexts?
4. If the punishment for parking on double yellow lines were death, and therefore nobody did it, would that be a just and effective law?
5. How hot does the air have to be in a hot air balloon if I wanted to use it to lift an elephant?
6. In a world where English is a global language, why learn French?
7. What is the greatest tragedy in human history?
8. Is someone who risks their own life (and those of others) in extreme sports or endurance activities a hero or a fool?
9. If you could invent a new musical instrument, what kind of sound would it make?
10. Why do you think an English student might be interested in the fact that Coronation Street has been running for 50 years?





# WHAT TO DO NEXT

A checklist for applicants

- Check application requirements
- Register for test
- Choose submitted work
- Finalise personal statement
- Continue to explore your academic interests
- Put the interview dates in your diary
- Visit [admissions.ox.ac.uk](https://admissions.ox.ac.uk) or [study.cam.ac.uk](https://study.cam.ac.uk) for more info





**ANY QUESTIONS?**



[access@jesus.cam.ac.uk](mailto:access@jesus.cam.ac.uk)

Twitter: @Jesus\_outreach

# Biological Sciences: Here's a cactus. Tell me about it.

*Martin Speight, St Anne's College*

We wouldn't actually phrase the question this way – we give the student a cactus in a pot and a close-up photo of the cactus's surface structure and ask them to describe the object in as much detail as possible using the plant and the photo. We are looking for observation, attention to detail, both at the large and micro scale. We ask them to account for what they see – this means they don't have to use memory or knowledge about cacti (even if they have it) but to deduce the uses and functions of the shapes, sizes, structures that they have just described. So for example, why be fat and bulbous, why have large sharp spines, surrounded by lots of very small hair-like spines? Why does it have small cacti budding off the main body? There will frequently be more than one logical answer to these questions, and we are likely to follow one answer with another question – for example:

'the big spines are to stop the cactus being eaten, yes, but by what sort of animals?' We would also bring in more general questions at the end of the cactus discussion such as what are the problems faced by plants and animals living in very dry habitats such as deserts.



# Computer Science: How do pirates divide their treasure?

*Brian Harrington, Keble College*

A group of 7 pirates has 100 gold coins. They have to decide amongst themselves how to divide the treasure, but must abide by pirate rules:

- The most senior pirate proposes the division.
- All of the pirates (including the most senior) vote on the division. If half or more vote for the division, it stands. If less than half vote for it, they throw the most senior pirate overboard and start again.
- The pirates are perfectly logical, and entirely ruthless (only caring about maximizing their own share of the gold).

So, what division should the most senior pirate suggest to the other six?

This is a standard logic problem and is a good example of the type of question that could be asked. I like to see how students can take directions, and if they can break problems into smaller subsets, and work through a complex

concept applying a solution in an algorithmic way. If students have any questions, I want them to ask – not to sit in silence feeling stuck!



Law: If the punishment for parking on double yellow lines were death, and therefore nobody did it, would that be a just and effective law?

*Liora Lazarus, St Anne's College*

Candidates are not meant to give a right or wrong answer to this question. They need to demonstrate that they have recognised the various issues that arise. The candidate who distinguishes between “just” and “effective” does best. The issues are different once that distinction is made. A just law might not be effective, or vice versa. The issues of how proportionate the punishment is to the crime refer to the justness of the law. The answer to its effectiveness is already in the question: “and therefore nobody did it.”



# History/Politics: Is violence always political? Does 'political' mean something different in different contexts?

*Ian Forrest, Oriel College*

This pair of questions allows the interviewer to deal with historical material from any period the candidate is studying or knows about from more general reading. It could also be answered extremely well from contemporary, current affairs, knowledge. The aim of the question is to get the candidate to challenge some received notions about what constitutes politics, and to think about how political history might be studied away from the usual kings, parliaments etc. A good candidate would, with assistance, begin to construct categories of when violence looks more and less political. A very good candidate would, with assistance, begin to construct a useful definition of “political”, but this is challenging. The main aim would not be to solve these problems, but to use them to find some new interest in a subject that the candidate already knows something about.



# Materials Science: How hot does the air have to be in a hot air balloon if I wanted to use it to lift an elephant?

*Steve Roberts, St Edmund Hall*

When I actually used this question in interviews, no-one actually got as far as an actual “X degrees C” answer, in the ten minutes or so we allowed for it, nor did we expect them to. We use this sort of question to try to find how applicants think about problems, and how they might operate within a tutorial. We make this clear to interviewees before even giving them questions of this type. Things we are looking for include how readily they can see into the core of a problem (what’s the essential physics in this? – what concepts and equations might be useful?); how they respond to hints and suggestions from us (can they take a hint or two and run with it, do they have to be dragged through every step?); their approach to basic concepts (how does a hot-air balloon work, anyway? What else operates like one?); estimates (typical size of balloon, weight of elephant) and sorting out what’s important (what about the weight of the balloon itself?); and how they use “rough maths” to get a quick idea of the likely sort of answer, using sensible approximations in working through formulae, and keeping track of units.



# Modern Languages: In a world where English is a global language, why learn French?

*Helen Swift, St Hilda's College*

I might use this question early in an interview in order to set the candidate thinking, and to elicit some idea of their motivation before moving on to more specific questions. Given the nature of the Modern Languages course, I would be interested in responses about the French language as a 'window' into French culture/literature/history, knowledge of which is valuable in itself/essential to understanding today's world, etc.; but would also be happy to see candidates investigate some of the assumptions underlying the question: *Is English a global language? What about Mandarin Chinese, Spanish, etc.? Can we not in fact still consider French a global language? And so on.*





# History: What is the greatest tragedy in human history?

*Tutor, Corpus Christi College*

This is a great question because it clearly has no right or wrong answer. It allows for easy debate on a topic and a necessary justification of any given answer. You can't be wrong – for example, to say 'the Holocaust' might seem like an obvious answer but what is crucial is a candidate's defence of their answer; though there is nothing wrong with being obvious and there are, of course, many persuasive arguments to be made in support of that answer. However, the range of answers to this question allows us to see how all the candidates approach it and to see how they broadly view history and its causations, rather than to decide who gave the 'most right' answer.



# Theology: Is someone who risks their own life (and those of others) in extreme sports or endurance activities a hero or a fool?

*Andrew Teal, Pembroke College*

Theology doesn't require A-level Religious Studies, so we always want to find issues that enable us to see how a student is able to handle and unpick a question, relating the particular to more general concepts. The question appeared to work well because there really isn't a single answer – it's open not least because we could state the opposite case and observe how flexible, reasoned and committed each student was. The question is properly approached from many perspectives and opens up many topics – is there something distinctively human about going beyond boundaries? Is this impulse selfish, or does it contribute to the whole of humanity's attainment? Is the heroism of those who respond to the need of the sportsperson more heroic still? What debts do individuals owe to society, and society owe to individuals? What is a hero, and is that category in opposition to folly? What we found with this question is that it did manage to open what is a stressful occasion into a real discussion, and we want to offer places to gifted candidates who are willing to think out loud with us in tutorials, and in a college community, whilst they are still explorers into truths.



# Music: If you could invent a new musical instrument, what kind of sound would it make?

*Dan Grimley, Merton College*

This question is really very open-ended, and I'm interested in answers which demonstrate a critical imagination at work--what kinds of sounds do instruments/voices make now, and how might these be imaginatively extended/developed? Are there new ways of producing sound (digital media) which have transformed the way we listen or understand sound? Is the idea of an 'instrument' somehow outdated these days, and can we imagine more symbiotic/hybrid ways of generating/experiencing musical sound? It's by no means limited to classical music – I'd welcome answers which deal with musical styles and tastes of all kinds (and which are produced/consumed in all places).



# English: Why do you think an English student might be interested in the fact that Coronation Street has been running for 50 years?

*Lynn Robson, Regents Park*

First and foremost this brings popular culture into the mix and also shows that techniques of literary analysis can be applied to other media. It could also open up discussion about things such as techniques of storytelling; mixing humorous and serious storylines/ characters; how a writer might keep viewers or readers engaged; collaborative writing; the use of serialisation, and how writers/texts might move from being perceived as 'popular' (like Dickens, say) to be 'canonical'.



# Solution to the Pirate Problem

## The solution

The solution involves looking at what happens with only 2 pirates, and working up from there. (We assume that the most senior pirate has the letter A. Others will be B, C, D etc, depending on how many there are in the group.)

## 2 Pirates

Pirate A suggests he gets all the gold. He votes for it, so it carries. *Pirate A gets 100 coins, pirate B gets 0.*

## 3 Pirates

Pirate A knows that if he's thrown overboard, pirate C would get nothing (as the situation would revert to the two pirate example above, with pirate C promoted to pirate B). So if pirate A bribes pirate C with 1 coin, pirate C will vote in favour. *Pirate A gets 99 coins, pirate B gets 0, pirate C gets 1.*

## 4 Pirates

Pirate A knows that if he dies, then pirate C gets nothing (again, it will become the 3 pirate case, and pirate C will be promoted to pirate B), so he needs 1 coin to bribe him. *Pirate A gets 99 coins, pirate B gets 0, pirate C gets 1, pirate D gets 0.*

## 5 Pirates

Now pirate A needs 3 votes, so he must bribe each of the pirates who would get 0 coins if he dies with 1 coin each. *Pirate A gets 98 coins, pirate B gets 0, pirate C gets 1, pirate D gets 0, pirate E gets 1.*

## 6 Pirates

Same story: bribe pirate B and pirate D. *Pirate A gets 98 coins, pirate B gets 0, pirate C gets 1, pirate D gets 0, pirate E gets 1, pirate F gets 0.*

## 7 Pirates

In this final stage (although you can continue indefinitely!) the senior pirate has to get 4 votes, so must bribe 3 pirates... might as well bribe the 3 that have the most to lose if he dies (i.e., pirates B, D and F). *Pirate A gets 97 coins, pirates B, D and F get 1 coin each, and the others get nothing.*

