



Café Scientifique Newsletter

Half Term 1: 12/11/22

Why study Science?

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Academic Articles

Written by teachers and current students in the L6th who take science a-levels.

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Events

Updates of what's happening this term.



Hello and welcome to the first edition of the Café Scientifique Newsletter. Throughout the half term's letter, our main focus has been the various Science A-levels we take and how we have mixed them with other options. 'What careers can we go into with Science?'

We have had the privilege of being able to present the work of many students throughout King's High, from their work on articles to film reviews and much more!

As you may know, this is a society led newsletter focusing primarily on a variety of topics in sciences.

If you would like us to explore any specific topics that you have in mind, please let us know!

Megan

Articles

Science careers and their A-Levels

- By Megan

The A-levels I'm taking are Maths, Chemistry and Biology. The obvious thing for me to do at university, after glancing at my options, would be: a medical degree, natural sciences, a biochemistry degree or something along those lines. Whilst I would like to do something like this at university I'm not sure whether my career will be based around this. Studying science at university will consist of various different techniques like writing articles and using problem solving, as well as utilising techniques such as thinking outside the box and expressing opinions. This is why science can open up many doors that you wouldn't even think about. It makes you a very appealing candidate to many jobs including law as you will still have essay knowledge and writing journals/ articles.

- By Megan

We have recently done a talk on the teams' different a-levels and what we intend to do with them in the future. For example, someone is taking physics and maths and is planning to do engineering at university. Another person is doing biology, chemistry and psychology and is hoping to study dentistry at university. The underlining point of the talk was to let you know that there are countless science careers you can go into, and that medicine isn't the only path. Studying natural sciences can allow you to go into many science pathways including medical research. As long as you do the A-levels that you enjoy you will be able to find a science career that interests you.

- By Natassa

For my A levels I have chosen to do psychology, art and English language. Psychology in particular is an extremely relatable and informative a level. Despite only just starting the course, I can already see how relatable to everyday life the findings and research is. The concepts of psychology are extremely applicable to everyday life and almost any workplace. The ability to understand the logic to how people think in a scientific, proven way can be really valuable to any employee in any workspace, as any job is bound to involve people. Despite my A levels not being particularly heavily science based, I am enjoying psychology since, for me, it is the enjoyable part of science - observing people's behaviour. I think with the combination of my A levels, I would like to do something journalism based or graphic design, therefore combining my English and creative skills with art. The psychology slots into both of these as it provides background knowledge and general understanding of my target audience and helps generate a more specific written/ design task for the brief set.

- By Ruby

My A-level choices are Chemistry, Geography and Psychology. When selecting my subjects, I did think 'do these subjects pair well?'; I have soon discovered they do. Regardless of having only recently started the courses, these 3 seemingly unrelated subjects combine perfectly.

Chemistry in particular reinforces mathematical skills which I've already had to repeatedly use in my other two subjects. Additionally, when combined with Geography, possible career and university options open up around earth sciences, such as ecology or geology.

Yet another link between Chemistry and Psychology relates to learning about the chemical components of the brain. In addition to biology, a very biochemical perspective is incorporated in certain areas of the Psychology course; due to this, taking Chemistry or Biology (or both) really aid in learning and understanding of this content.

Furthermore, an alternate link is when using experimental terms. Psychology's 'research methods' topic allows you to fully understand scientific terms - such as reliability and validity - whilst reinforcing previously known terms such as: mean, median, mode, range and standard deviation. This cross over is really helpful for my chemistry skills (similarly helpful for biology students).

Contrary to popular belief, psychology (an empirical science) actually comes into geography. When learning about Changing Spaces Making Places in geography, viewing the content from a psychological perspective has helped me dive deeper, considering more complex correlations between people and their geographical location - this is something I hope to continue later on in my course.

To summarize, science links lots of topics. Even at this early stage in my course I have been surprised by how well the subjects mix and would strongly recommend considering this when selecting your A levels.

- By Gabrielle

I have chosen to study Biology, Geography and Spanish for my A levels. Like others, when choosing my A levels, I did question if the subjects I decided on would fit together since they are a bit of a mix of subject areas, however despite having only just started my A levels, I can already see the links and why I am so happy to have chosen the A levels I did.

I am not certain of what I want to do after sixth form yet so I decided it would be best to study the subjects that, put simply, I enjoy the most. Of course, I didn't want to do this blindly and not consider future options that would best link some of my most enjoyable subjects, so when thinking about this I realised that the chosen subjects can actually link quite nicely and provide many future options.

An example of a future career for me that could be really interesting is marine biology. This would actually link all 3 of my A levels really well if I were to go on to study this at university. Naturally, biology would be a large part of it, however geography would also be very important in understanding different marine ecosystems and how they function, as well as the more environmental side of marine biology. I could use my Spanish by going and studying marine biology or having a career in it somewhere more tropical, in a Spanish speaking country.

Although I only actually have one direct science A level, this doesn't stop me from pursuing a career in something still very much science directed (for example marine biology), and I think this is something to bear in mind. You don't always have to do, for example, all three sciences if you want to go on to pursue something science related after Sixth Form. Universities and employers in some cases actually find the students with other subjects mixed in to stand out more, as it shows a wider range of skills and interest. For me, I think due to having chosen more of a mix of subjects based mainly off what I enjoy the most, I can already see is beneficial since it simply means I enjoy what I am learning which makes the whole process seem a lot easier.

Film Reviews

My Octopus Teacher (2020)

4.5/5 star rating

Available for viewing on Netflix, this factual film is both a gorgeous wildlife documentary and a moving tale of how a man in crisis found joy and purpose through immersion in nature and a remarkable relationship with an octopus. His health and family life were suffering due to his high-stress lifestyle, and he decided to re-visit a shallow cove he had explored as a child with the aim of slowing down his busy lifestyle. During one dive, he had an encounter with an octopus, and this movie tells the 11-month story of befriendng and learning about her.

As a keen scuba diver, the breath-taking underwater cinematography of a lush green kelp forest astounded, captured my attention and really drew me into the tale.

I would strongly recommend this easy going, 85-minute long movie to anyone interested in marine biology, animal conservation, zoology, geography or art. (A very broad range of subjects; science really does come into everything!)

Ruby



Book Reviews

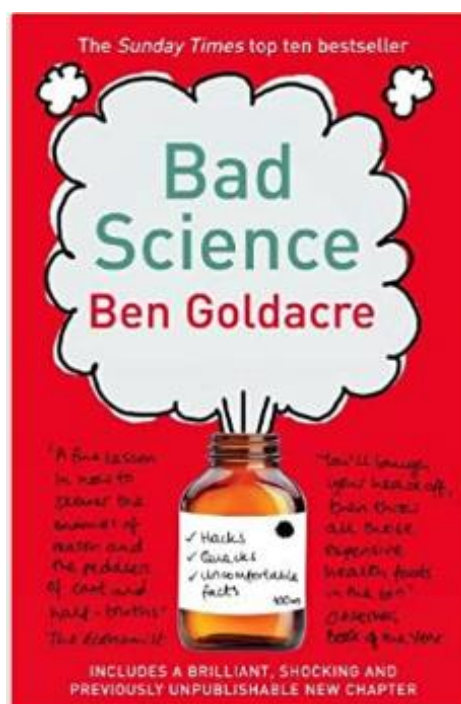
Bad Science - by Ben Goldacre. Recommendation from Mrs Sims.

It's many years since I first read this book but it's one I come back to, time and time again, when I see examples of spurious (or even malicious) scientific claims in the news. Dr Goldacre explores the many examples of dubious science, from vaccine controversy to misleading qualifications used by some practitioners. This book has been described as "necessary to social health" by one reviewer (The Independent) and the current Amazon review describes it as follows:

Since 2003 Dr Ben Goldacre has been exposing dodgy medical data in his popular Guardian column. In this eye-opening book he takes on the MMR hoax and misleading cosmetics ads, acupuncture and homeopathy, vitamins and mankind's vexed relationship with all manner of 'toxins'. Along the way, the self-confessed 'Johnny Ball cum Witchfinder General' performs a successful detox on a Barbie doll, sees his dead cat become a certified nutritionist and probes the supposed medical qualifications of 'Dr' Gillian McKeith.

Full spleen and satire, Ben Goldacre takes us on a hilarious, invigorating and ultimately alarming journey through the bad science we are fed daily by hacks and quacks.

I thoroughly recommend it to all who are interested in the nature of Scientific evidence and how this can be used (or misused) in a whole range of spheres.



Science Careers

O L T E R N T S I T N E I C S
C P D U T E N G I N E E R S R
I H B S I T T S I N A T O B L
N Y I G E L I E P P N B T O R
E S O O N O P A R A M E D I C
G I L D E C I N T T A G T O E
E C O L O G I S T H S C R L S
E I G A E O I S O O T N O O U
E S I D O C T O R L R G T O R
P T S T S I G O L O O Z G S G
A S T R O N A U T G N T M O E
E S Z R O I B O S I O S R T O
O U C H E M I S T S M R R N N
T G E O L O G I S T E A U E O
R R E S E A R C H E R N T T I

Doctor	Astronomer	Zoologist	Physicist
Pathologist	Botanist	Paramedic	Geologist
Scientist	Ecologist	Biologist	Engineer
Researcher	Astronaut	Chemist	Surgeon

Name: _____

Date: _____

Science Careers

marine biologist
astrophysicist
microbiologist
cardiologist
chiropractor
pediatrician
seismologist
veterinarian
vocalologist
electrician
neurologist
optometrist
pathologist
astronomer
Geographer
pharmacist
zoologist
allergist
Astronaut
biologist
economist
geologist
physician
scientist
botanist
engineer
Inventor
chemist
doctor
nurse



D O O C Q H O T Y T S I M E H C A W D O C T O R
A N Z E S R U N C I G H I H L O O T F F Q C T O
R A R Q I Q Q B T S I T N E I C S S Q N M S J A
I I E U M X I L B O P T O M E T R I S T P H J S
O C E O T S I C A M R A H P Z D J G E N D L Q V
Q I N O M K H B N Q X Z C A N A E O F J J D F O
H S I W G V E T E R I N A R I A N L S T A L T C
M Y G T J E L E C T R I C I A N V O S U S Z S A
G H N S T E S G E O L O G I S T G I M D E X P N
U P E I S R F T S I N A T O B T G B I R I O S O
P Q N C I Y U R S O J E V K S O G E A K S T H L
E X W I G L T N N I D S R I L A J N H F M S L O
D S E S O Z W U K M G O G O L N P I H F O I D G
I R C Y L D Y G A D T O I A B Z X R X H L G H I
A E O H O G Q G E N L B L R T T R A E I O R C S
T H N P H W J E E O O P N O G S W M C A G E U T
R P O O T A M V I R R R T H R O I G F S I L E U
I A M R A P N D C N P G T T D U B G A Y S L A L
C R I T P I R I E P A E S S F U E C O M T A F M
I G S S P A M I U H U Z K J A C D N Y L J S B T
A O T A C D Z S R O T C A R P O R I H C O S W C
N E E E N B T S I G O L O I B W C L W O A O K O
J G T N F H U U C M C K K S Z U M E O S D A O L
Z K D A H V S U Y W R R W R E M O N O R T S A Z

Café Scientifique: Future Plans

Within our new Café Scientifique team we have a range of people covering all aspects of science. From people studying maths and physics in hope for an engineering career, or psychology and biology and chemistry in hope of a medical career. We have someone studying Spanish a-level along with biology which is a fascinating combination. So with our new team we hope to cover talks and discussions on many topics covering all aspects of science.



We would appreciate any ideas or topics of interests that you would like us to explore in the terms to come, please contact us.

