

## Why study science:

Science is a subject, yes, but it's also a way of thinking: science graduates have been trained to think critically, research properly and be guided by the evidence. These are critical workplace skills and employers value the creativity and problem-solving skills of science graduates.



# SCIENCE

Why do we study science?

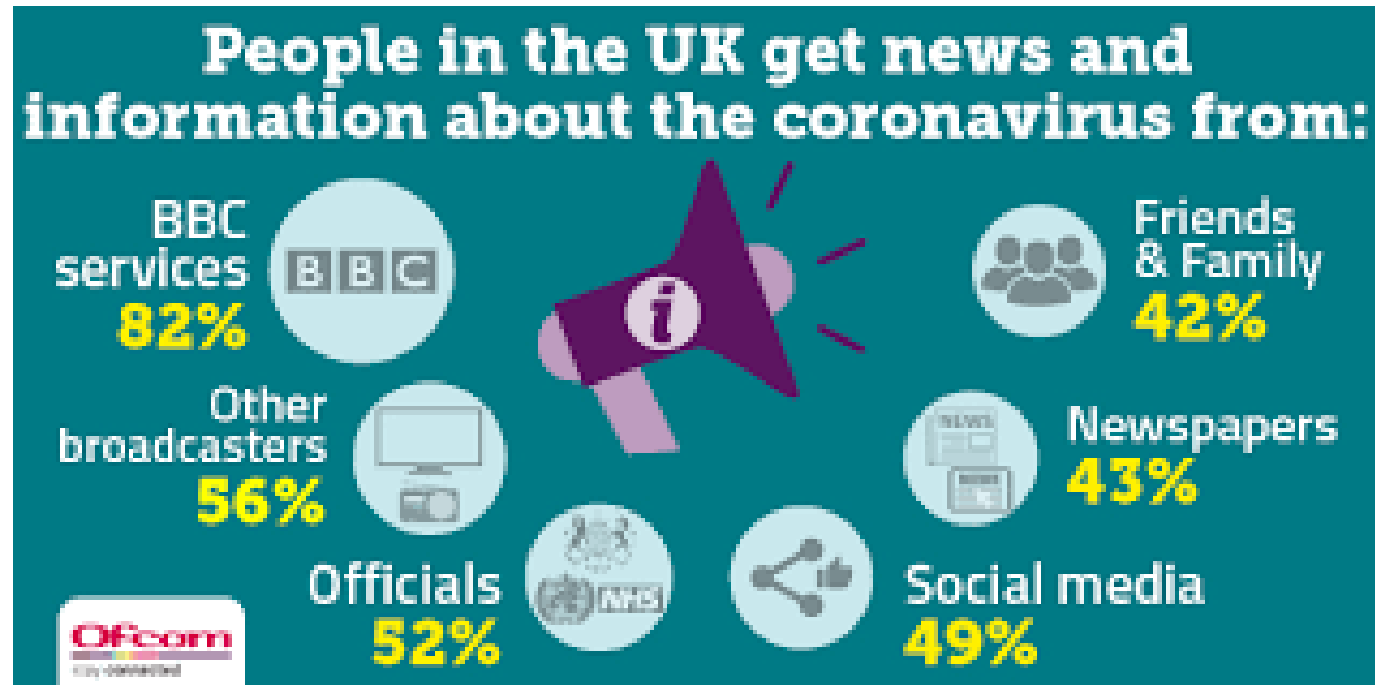
1. To understand how and why things work
2. To understand the world around us and new technologies
3. To learn practical skills
4. Transferable skills
5. Career opportunities



# SCIENCE

Students will develop transferable skills that are useful outside of science and directly applicable to the world of work including:

- Investigative skills
- Problem solving
- Research
- Decision Making
- Mathematical Skills
- Analytical Skills
- Communication Skills
- Critical thinking





# SCIENCE

	Combined science	Separate science
Tiers	Foundation + higher	
Subjects	Biology, chemistry, physics	
Number of exams	6	6
Length of each exam	1 hr 15 mins	1 hr 45 mins
Number of marks	70	100
Number of GCSEs	2	3
% each paper contributes	16.7%	50%



# SCIENCE COMBINED VS. SEPERATE

## Biology

- 1. Cell biology
- 2. Organisation
- 3. Infection and response
- 4. Bioenergetics
- 5. Homeostasis and response
- 6. Inheritance, variation and evolution
- 7. Ecology

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- 7. Ecology
- 8. Key ideas



# SCIENCE COMBINED VS. SEPERATE

## Chemistry

- 8. Atomic structure and the periodic table
  - 9. Bonding, structure, and the properties of matter
  - 10. Quantitative chemistry
  - 11. Chemical changes
  - 12. Energy changes
  - 13. The rate and extent of chemical change
  - 14. Organic chemistry
  - 15. Chemical analysis
  - 16. Chemistry of the atmosphere
  - 17. Using resources
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  - 10. Using resources



# SCIENCE COMBINED VS. SEPERATE

## Physics

- 18. Energy
- 19. Electricity
- 20. Particle model of matter
- 21. Atomic structure
- 22. Forces
- 23. Waves
- 24. Magnetism and electromagnetism

- 1. Energy
- 2. Electricity
- 3. Particle model of matter
- 4. Atomic structure
- 5. Forces
- 6. Waves
- 7. Magnetism and electromagnetism
- 8. Space physics (physics only)



Separate scientists cover all the core concepts of the combined course in greater depth.





# SCIENCE – PASS RATE

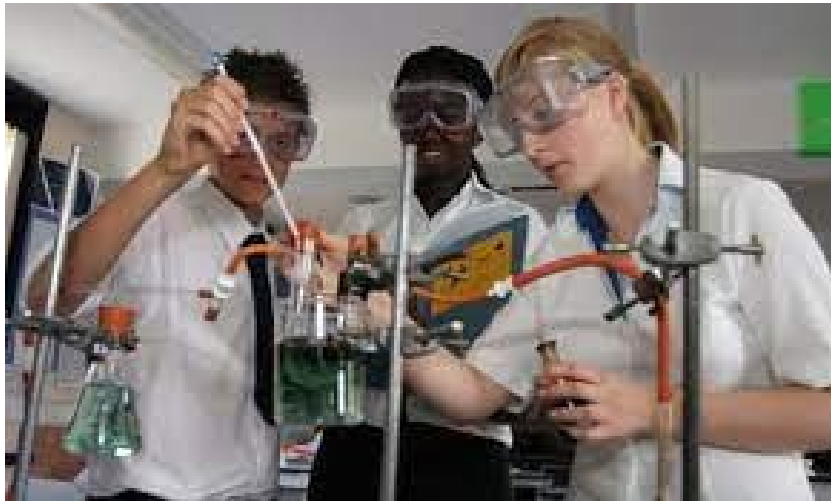
**Triple vs Combined – How do the PASS RATES of the exams compare?**

You may be surprised. In a nutshell, Triple Science pass rates (grade 4 upwards) are much higher than for Combined – **in the region of 90% against 60%.**



# SCIENCE – PASS RATE

More curriculum time, so a lot more experiments.



# SCIENCE – why?

Why choose to study separate sciences?

1. Greater depth of study better prepares you for A Level science
2. There are 28 required practical's, more than combined sciences.
3. Transferable skills



# SCIENCE - careers

1. Universities prefer you to have separate sciences
2. Careers that these qualifications can lead to with further training and study include:
  - Sports and fitness (nutritionist, personal trainer)
  - Engineering (biochemical, civil, electrical, chemical, and mechanical engineering)
  - Medicine and health - nurse, dentist, doctor, radiologist etc.
  - The police and emergency services (paramedic, crime scene investigator or police officer)
  - And many other potential careers

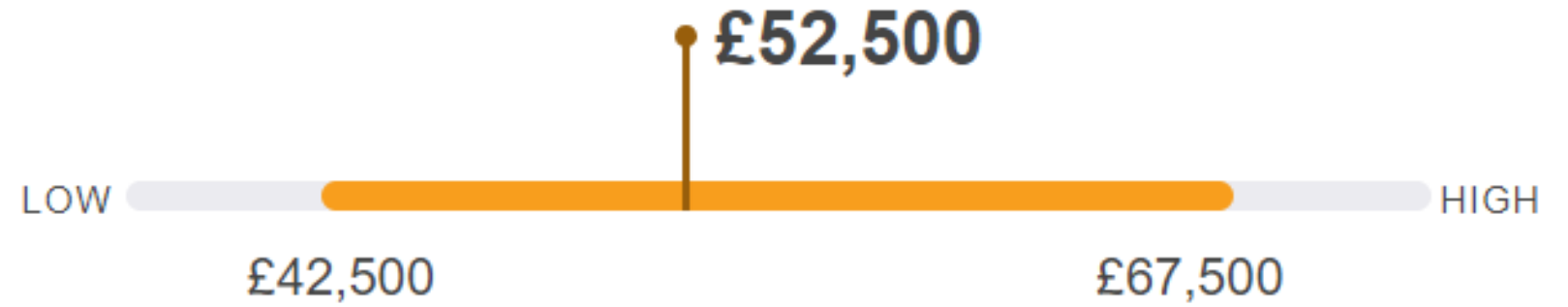


# SCIENCE

AVERAGE

**£52,500**

Sample size 1,574



# SCIENCE

Who is separate sciences for?

Anyone who has an interest in science or a career in science



# SUMMARY

1. No extra topics (except space), you just learn them in more detail
2. Transferable skills
3. Higher pass rate
4. Better prepares you for A Level science
5. Preferred by universities and colleges
6. Links to well paid in demand careers

