

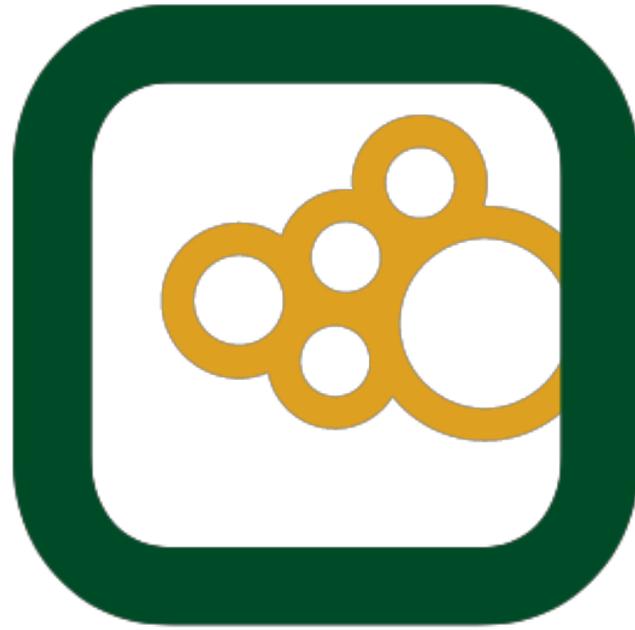


Tudor Grange Academy Solihull

Year 8

**CURRICULUM CHOICES**

2019



**SCIENCE**

**Trilogy or Separate**



# WHAT YOU WILL STUDY

## BIOLOGY

- Cell biology
- Infection and response
- Bioenergetics
- Homeostasis and response
- Inheritance, variation and evolution
- Ecology

## PHYSICS

- Forces
- Energy
- Waves
- Electricity
- Magnetism and electromagnetism
- Particle model of matter
- Atomic structure

## TRIOLOGY OR SEPS?

- Both courses cover the same list of topics
- The main difference is that separate sciences cover some of the topics in a greater depth

## CHEMISTRY

- Atomic structure and the periodic table
- Bonding, structure, and the properties of matter
- Quantitative chemistry
- Chemical changes
- Energy changes
- The rate and extent of chemical change
- Chemical analysis
- Chemistry of the atmosphere
- Using resources

# ACTIVITIES IN LESSONS



**We take enormous pride in the Science department that we make practical application of Science the core of what we do.**

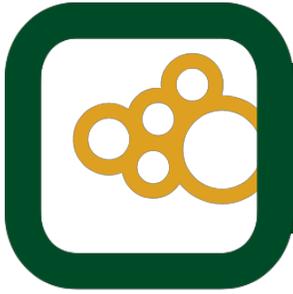
Students will be expected to complete required practicals as part of the course, but this will just be a small part of what students will be exposed to over the next three years.

Students will be supported in developing a wide range of practical skills such as writing a method, analysing data (both numerical and graph based) and creating conclusions.

Each lesson is as varied as is demanded by the variety of content of the course. as we will support students understanding a variety of ways such as:

- Building models
- Interactive simulations
- Research tasks
- Group work
- Discussion led/debates
- Teacher demonstrations

We ensure that students get a chance to experience their knowledge in a wide range of concepts, preparing them to understand the world around them.



# HOW WILL I BE EXAMINED?

## TRILOGY

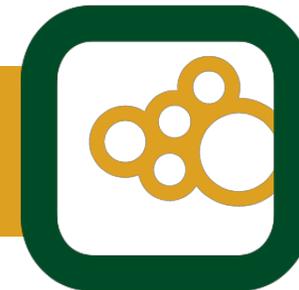
- **6 examination papers** (2 for each science)
- 1 hours and 15 minutes each
- **70 marks per paper – 420 in total**
- 16 required practicals
- **2 paired GCSE grades: 9-9, 9-8, 8-8 etc.**

**100% terminal exams**  
**No coursework component**

## SEPARATE SCIENCES

- **6 examination papers** (2 for each science)
- **Same content** as combined Trilogy+ **separates only content**
- **1 hour and 45 minutes each**
- 100 marks per paper – 200 in total
- **8 required practicals per GCSE**
- **3 separate GCSE grades**

# LINKS TO CAREERS AND FUTURE



## **Science is key to understanding the world around you.**

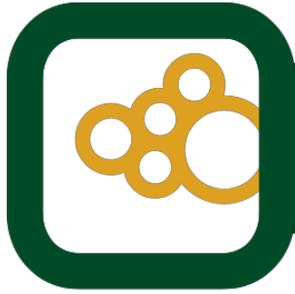
We ensure that students are prepared to tackle global issues such as climate change, plastic pollution and stem cell research. Our students are our future and it is important that we equip them for the challenges of the 21<sup>st</sup> century.

But it's not just the big things that we show students that are important, students will learn how to change the fuse in a plug and how it protects you to the importance of a balanced diet for your health.

In the near future, your child will be considering moving on to sixth form or college. GCSE Science prepares them by developing a wide range of transferable skills such data analysis and forming valid conclusions.

**No matter which pathway students choose, they will be prepared to move on to studying A Level Sciences.**

A level Sciences are highly desirable for a wide range of degrees and apprenticeships. It's not just about medicine, it opens doorways to chemical engineering, astrophysics and even law!



# HOW DO I CHOOSE MY

## **It's not about ability or grades, it's about passion!**

With the changes to the new specification, Combined Science: Trilogy is just as challenging as Separate Science. Students will cover the same topics but Separate Science will cover those same topics in further detail.

If your child loves Science and enjoys learning about Science, then they should consider opting for the Separate Science pathway.

Students on the Separate Science pathway have 12 lessons of Science per fortnight, Combined Science:Trilogy 8 hours per fortnight.

Choosing the Combined Science: Trilogy route does not disadvantage your child for their options beyond GCSE.

**Students can progress to A level Sciences no matter which pathway they follow.**

If you or your child are unsure about which pathway, please speak to your child's Science teacher who will be able to help you.