Science at Cavendish Rd SHS

What does science at Cav Rd offer?
Science is the best way of understanding and changing the world in which we live.
In SCIENCE we focus at developing a range of valuable skills in our students:

- Critical thinking and problem solving
- Decision making
- Investigative skills and hypothesis testing
- Communication skills – oral and written
- Analytical and research skills
- Computer literacy
- Team work
- Appreciation of your world

Science is useful in everyday living, being able to understand/debate scientific issues and ethics.
Pathways from year 7-9

Year 7

Year 8

Year 9 (general)

Year 9 (academy)

Year 10 subjects
- General science (SCG) - all students study this
- Elective Subjects
  - Life Sciences (SCL)
  - Physical Sciences (SCP)
  - Academy of Science (SCA)
Biology:
• Diversity of life (looks at organisms)
• Interactions between organisms (food webs and human impacts)

Physical Science:
• Motion & unbalanced forces
• Gravity

Earth & Space:
• Seasons, eclipses & moon phases are caused by the position of sun, earth & moon.
• Resources- some are renewable, some are not.
• Water cycle.

Chemistry:
• Pure substances, mixtures and separation techniques
What’s in Year 8?

Term 1:
- Nature of science
- Rocks and their formation
- Fossils

Term 2:
- Particle theory of matter
- Atoms, elements, compounds, mixtures
- Chemical changes/reactions

Term 3:
- Energy comes in different forms
- Energy can change from one form to another but never disappears

Term 4:
- Cells are the building blocks of life
- Multi-cellular organisms have organ systems with specialised functions
Pathways from year 10

SCP → Chemistry
SCP → Physics
SCP → Science21

SCL → Biology
SCL → Science21

SCA → University Biology

SCG → Science21

SCG → Science in Practice

Post Year 12 PATHWAYS

Engineering, architecture
Industry, construction
Environmental sciences
Sports and exercise science
Marine biologist, vet zoologist, biosciences
Scientific research
Journalist, Lawyer
Forensics
Agricultural science
Medical professionals
Assessment

- short and extended experiments
- field work
- research
- reports
- oral and written presentations
- exams

4-5 assessment items each year 11 & 12 (formative and summative)

Students must be prepared to spend a minimum of 30 min per night studying and constantly reviewing work covered in class.