



GEOLOGY

HEAD OF DEPARTMENT: MISS HOPE EXAMINATION BOARD: EDUQAS

SPECIFICATION: GEOLOGY
QUALIFICATION: AS AND A-LEVEL



Our students reached the final of the 2023 School Geology Challenge hosted by the Geological Society of London.

By studying Geology, you can study Earth's fascinating 4.5 billion year history to predict and protect its future. In A-Level Geology we ask the important questions in society today, including how to find Earth's resources and use them sustainably, how life on Earth has responded to climate change and how to mitigate natural hazards such as earthquakes, volcanic eruptions, landslides and tsunamis.

The course is designed to reflect the geologists in the world today. There is a strong focus on developing practical skills through field trips. The course is about applying your knowledge to more than just the completion of an exam paper.



WHAT YOU WILL STUDY IN LOWER SIXTH

The Lower Sixth Geology course begins with a study of the Earth, its structures, evolution and dynamics. You learn about the materials that make up the Earth including minerals, a range of sedimentary, igneous and metamorphic rocks and some of the more common fossils found worldwide.

The course then goes on to build upon that knowledge, investigating the structure of the Earth and how it is affected by both surface and internal processes which shape the Earth as we know it. You will investigate sedimentary rocks and study fossils, developing your understanding of changes in the geological past. You will

then study how the deformation of rocks result in response to lithospheric plate motions and delve into the study of global tectonics.

VALUE ADDED

In 2023 and 2024
The Geology departmen

Grade 1

which places the department in the top 5% in the country

WHERE WILL AN A-LEVEL IN GEOLOGY TAKE YOU?

There is currently a world-wide shortage of well-qualified Geology graduates and employment opportunities in mining, engineering, geophysics, geotechnics, exploration, petroleum and environmental geology are widespread, offering considerable opportunity for world travel. Geology is a subject highly regarded by Universities for entrance to any science-based degree course.

EXTENSIONS AND OPPORTUNITIES

The Geology department has strong links with many universities and benefits from visiting lecturers who challenge and stretch our students.

TRIPS, VISITS AND FIELD WORK

Students spend a minimum of four days completing fieldwork in Cornwall (a key component of the course), studying some of the finest Geology in the world. In the Upper Sixth there is a three-day residential trip to North Somerset. In addition, there is the opportunity to explore the aweinspiring volcanic landscapes of Iceland with a residential field trip.

Students in the Lower Sixth have the opportunity to participate in the Geological Society's Geology Schools Competition. This involves researching a topic and presenting to other schools in the regional competition. In 2019, Truro School reached the national finals and were commended for their work.

In 2023, the Geology department achieved a grade 1 for value added which places the department in the top 5% in the country.

Studying A-Level Geology has been the best experience I've had at Truro School, hands down! Studying Geology in Cornwall is very special with such varied and spectacular field locations as Millook Haven, Kennack Sands, Godrevy, Megiliggar and Rinsey Cove enabling students to develop their practical skills.

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The level of course detail builds in the Upper Sixth. You will further your knowledge in the study of rock forming processes and rock deformation, both particularly relevant to the geology of Cornwall. You will study fossils in more depth, understanding the context of geological time.

The topic of natural geohazards features in the Upper Sixth with an investigation on their worldwide impact on human populations. Using this knowledge, you then learn about modern-day geohazard management techniques, including attempts to predict and manage hazardous geological events. During this significant aspect of the course you will also learn how engineering activities such as the quarrying and mining, waste disposal and contamination interfere with the environment and how civil engineering projects such as dams, tunnels and buildings should take into account geological factors.



TOP-LEVEL FACILITIES

Practical work is an intrinsic part of the course, and here at Truro School the Geology department is well stocked with hundreds of museum-quality teaching specimens including the minerals, rocks and fossils found in the specification along with many others that contribute to the quality and depth of learning, enriching the subject.

In the geological map section of the course you will apply your knowledge and understanding from the Lower Sixth to 'real' geological maps. The study of geological maps is essential as it provides a database for the design of construction projects, geohazards and the location of resources such as ground water, fossil fuels and alternative energy sources.