



GCE A LEVEL

GEOLOGY

A480QS

Summer 2022 examinations

Component 1	Geological Investigations	Monday, 6 June 2022
Component 2	Geological Principles and Processes	Tuesday, 14 June 2022
Component 3	Geological Applications	Tuesday, 21 June 2022

Advance Information

General information for students and teachers

This advance information provides the focus of the content of the summer 2022 examination papers.

It does not apply to any other examination series.

It is intended to support revision.

It may be used at any time from the date of release.

It must not be taken into the examination.

Subject information for students and teachers

A guidance document on advance information has been produced by The Joint Council for Qualifications (JCQ) on behalf of all awarding organisations. It can be found [here](#).

This advance information covers Component 1, Component 2 and Component 3. There is no advance information for the Practical Endorsement (NEA).

The following areas of content are suggested as key areas of focus for revision and final preparation, in relation to the Summer 2022 examinations.

The aim should still be to cover all specification content in teaching and learning.

The list shows the major focus of each paper; the topic areas are listed in rank order, with the areas carrying the highest mark allocations at the top of each list.

Topics **not** included on the list below **may** still appear across the assessment, for instance in multiple-choice items, questions with a low tariff, or via synopticity.

Assessment of practical skills (Appendix A parts 1 and 3 of the specification) and mathematical skills (Appendix C of the specification) will occur throughout the three papers.

Component 1

- Topic F2 Key Idea 3 (including required practical techniques)
Deformation results when rocks undergo permanent strain in response to applied tectonic stresses and can be interpreted using geological maps.
- Topic F2 Key Idea 1 (including required practical techniques)
The mineralogy and texture of sedimentary rocks are the result of the surface process part of the rock cycle, driven by external energy sources.
- Topic F2 Key Idea 2 (including required practical techniques)
The formation and alteration of igneous and metamorphic rocks result from the Earth's internal energy.
- Topic G4 Key Idea 3
A wide range of prospecting techniques can be employed to explore for mineral resources.

Component 2

- Topic F2 Key Idea 1
The mineralogy and texture of sedimentary rocks are the result of the surface process part of the rock cycle, driven by external energy sources.
- Topic F2 Key Idea 2
The formation and alteration of igneous and metamorphic rocks result from the Earth's internal energy.
- Topic F3 Key Idea 1
Study of present day processes and organisms enables understanding of changes in the geological past.

Component 2 (continued)

- Topic F4 Key Idea 2
The Earth's internal heat is the underlying cause of lithospheric plate motions that control global geological processes.
- Topic G3 Key Idea 3
Evidence for global climate change is interpreted from the geological record and the geochemistry of rocks.
- Topic G3 Key Idea 1
Fossils provide evidence for the increasing diversity of life through geological time.

Component 3

- Topic T2 Key Idea 2
Geological maps contain information relevant to a wide range of geological applications.
- Topic T1 Key Idea 1
Natural geohazards have a worldwide impact on human populations including in the British Isles.
- Topic T2 Key Idea 1
Outcrop patterns on geological maps can be used to identify and interpret structural elements.
- Topic T1 Key Idea 3
Engineering activities can have a major impact on the natural environment.

and **one** of the options

Quaternary Geology

or

Geological Evolution of Britain

or

Geology of the Lithosphere

End of advance information