

WHSB **GEOLOGY** MIDDLE SCHOOL CURRICULUM MAP

LOWER SCHOOL PRIOR LEARNING INFORMS

YEAR 10

1

CONTENT
Minerals, Rock Cycle and Sedimentary rocks

SKILLS
Use appropriate tests of the physical properties of minerals and analyse mineral data sheets
Interpret Rock Cycle diagrams
Identify sedimentary rocks based on texture and mineralogy and further use to evaluate environments of deposition



Living World test and past paper questions

2

CONTENT
Deformational Structures
Igneous Rocks and Processes

SKILLS
Measure dip and strike in the field
Interpret characteristic features of folding, faulting and unconformities in field exposures, diagrams, photographs, simplified geological maps and cross sections
Identify igneous rocks, volcanoes and characteristics of igneous bodies



Resources test and past paper questions

3

CONTENT
Revision
Metamorphic rocks and processes

SKILLS
Revision of all skills for component 1 and 2
Identify metamorphic rocks and their mode of formation
Identify the characteristic features of a metamorphic aureole



Coasts and rivers followed by the End of Year Examination

YEAR 11

1

CONTENT
Plate Tectonics
Geochronological Principles

SKILLS
Analyse evidence for plate tectonics
Interpret the relative movement of plates from their plate boundary and map use of distribution of volcanoes and earthquakes
Apply the principles of uniformitarianism and relative dating to interpret rock exposures
Carry out a simple analysis of the age of a radioactive mineral based on the half-life concept



Formative test and past paper questions

2

CONTENT
Sedimentary Rocks and Fossil content
The Origin & Development of Life on Earth
Planetary Geology
Global Climate and Sea Level Change

SKILLS
Use simple evolutionary trees diagrams to demonstrate evolutionary trends
Identify the following fossil groups on the basis of their morphology
Use the named fossils, as seen in specimens and diagrams/photographs to interpret the geological history of a rock sequence



Trial Examination and past paper examination questions

3

CONTENT
Earth Hazards and their Mitigation
Earth Resources and Engineering

SKILLS
Use examples to contrast the risk of naturally occurring hazards in areas of contrasting development
Interpret data from maps, cross-sections and seismic surveys to identify possible gas/oilfields
Revision of all skills for components 1 and 2



Revision for GCSE Examinations

GCSE EXAMINATION BOARD:
EDUCAS

LINKS TO A LEVEL STUDY:

Taster days to discuss A level course

Talks by visiting academics at the Geology Conference

A variety of field work at different locations in both Years 10 and 11

ENRICHMENT OPPORTUNITIES:

Dorset field trip in Year 10

Earth Galleries trip Year 11

Folkestone trip in Year 11

Natural History Museum Year 11

Geology Conference Years 10 and 11

WHSB GEOLOGY SIXTH FORM CURRICULUM MAP

MIDDLE SCHOOL PRIOR LEARNING INFORMS

LOWER SIXTH

1

CONTENT
Elements minerals and rocks
Earth structure and global tectonics

SKILLS
Develop skills through specified practicals
1,2,3,4 ,18 and 19



Past paper examination
questions

2

CONTENT
Surface and internal processes of the rock cycle
F3 Time and change

SKILLS
Develop skills through specified practicals
5,6,7,8 and 9



Formative Examination and
past paper questions

3

CONTENT
AS Metamorphism
G1 Rock forming processes
G2 Rock deformation

SKILLS
Develop skills through specified practicals, 20
Revision of all skills for EOY examination



End of Year Examination and
past paper examination
questions

UPPER SIXTH

1

CONTENT
G3 Past life and past climates
G4 Earth materials and natural resources
T1 Geohazards KI1 and 2

SKILLS
Use knowledge and understanding to pose
scientific questions, define
geological problems, present scientific
arguments and geological ideas



Formative Examination and past
paper examination questions

2

CONTENT
Geohazards KI3
T2 Geological map applications Option
Key Idea 1

SKILLS
Use knowledge and understanding to pose
scientific questions, define
geological problems, present scientific
arguments and geological ideas
Revision of skills for components 1 and 2



Trial Examination and past
paper examination questions

3

CONTENT
T4 Geological Evolution of Britain
Revision of all content covered

SKILLS
Revision of skills for components 1,2 and 3



Revision for A level
Examinations

A LEVEL EXAMINATION BOARD:
EDUCAS

PREPARATION FOR
UNIVERSITY AND
DESTINATIONS:

Guest speakers (Old Westcliffians)
working in the geological sector

Contact with old Westcliffians offering
advice on courses and universities

ENRICHMENT OPPORTUNITIES:

Isle of Arran fieldtrip in Lower Sixth
Geology Conference Lower and
Upper Sixth