

14 to 16	Study Modules	Brief Description	Equipment Includes:	Centre	WJEC GCSE Specification Units Covered
Biology	Ecosystems	Students examine how the relationships between vegetation, climate, topography and landscape create different habitats. They study a range of habitats, the differences between them and the interconnections of biotic and abiotic factors that make each one unique. Discussions include the impacts of land uses including farming, tourism and deer stalking.	Activity sheets, digital camera, Pocket PC, infiltration kit, soil thermometer, moisture meter, profiling kit, plant ID guides, Pocket ID books, anemometer.	Loch Ranza	WJEC GCSE Geography Specification A: Unit 2 A – Physical Options, Theme 9 Living Things: 1.1, 2.1, 2.2, 3.1, 3.2. Unit 2: B – Human Options: Theme 10 Tourism: 1, 2, 3. WJEC GCSE Geography Specification B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS, Weather and Climate Influences, 3. Changing ecosystems: 3.1, 3.2, 3.3, 3.4.
	Lithoseral and Haloseral Succession	By performing accurate and detailed line transects students can observe the changes in succession in relation to biotic and abiotic factors. They also begin to appreciate the importance of conservation and management of fragile ecosystems.	Activity sheets, digital cameras, Pocket PC, thermometer, profiling kit moisture meter, pH kit, quadrat, infiltration kit, plant ID sheets, identification books.	Osmington Bay only	WJEC GCSE Geography Specification A: Unit 2 A – Physical Options, Theme 9 Living Things 1.1, 2.1, 2.2, 3.1, 3.2. WJEC GCSE Geography Specification B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS Weather and Climate Influences 3. Changing ecosystems: 3.1, 3.2, 3.3, 3.4.
	Marine Zonation	At a chosen local beach pupils explore marine life. Starting in the splash zone and working through the upper and lower intertidal zones, pupils are encouraged to study and collect as many organisms as possible and also discuss their adaptations and the stress factors affecting these numbers, zone by zone.	Activity sheets, digital camera, Pocket PC, profiling equipment, quadrats, Identification sheets and books, trays, bug pots.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography Specification A: Unit 2 A – Physical Options Theme 9 Living things 1.1, 2.1, 2.2, 3.1, 3.2. WJEC GCSE Geography Specification B: Theme 2 People and the Natural World Interactions: Weather and Climate Influences: 3 Changing Ecosystems: 3.1, 3.2, 3.4.
	Psammoseral Succession	A transect of a sand dune system reveals trends in biotic and abiotic factors. Pupils can also investigate the human pressures on a delicate system and observe measures put in place to alleviate this human impact.	Activity sheets, digital camera, Pocket PC, infiltration kit, pH kit, soil thermometer, moisture meter, profiling kit, quadrat, plant ID guides, Pocket ID books, anemometer.	Barton Hall and Osmington Bay	WJEC GCSE Geography Specification A: Unit 2 A – Physical Options, Theme 9 Living Things 1.1, 2.1, 2.2, 3.1, 3.2. WJEC GCSE Geography Specification B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS Weather and Climate Influences 3. Changing ecosystems: 3.1, 3.2, 3.3, 3.4.
	Woodland Ecology	A comparative investigation of coniferous and deciduous or mixed woodland is undertaken. Expected changes in diversity within physical parameters are discussed, along with the role of woodland in the nitrogen and carbon cycles.	Activity sheets, digital camera, Pocket PC, infiltration kit, pH kit, soil auger, soil thermometer, moisture meter, profiling kit, 2 quadrats, plant ID guides, Pocket ID books, anemometer.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography Specification A: Unit 2 A – Physical Options, Theme 9 Living Things: 1.1, 2.1, 2.2, 3.1, 3.2. WJEC GCSE Geography Specification B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS, Weather and Climate Influences, 3. Changing ecosystems: 3.1, 3.2, 3.3, 3.4.
Geology	Geology and Landscapes	Visiting a number of sedimentary rock localities pupils will discover how geology as a natural resource can have a massive impact on the environment and character of an area. Geological features can generate income but can also produce areas of natural beauty and scientific importance, thereby introducing conflict over a variety of issues.	Activity sheets, rock guides, compass clinometer, metre ruler, digital camera.	Osmington Bay, Little Canada	WJEC Geology GCSE: Key Idea 1: Rock exposures contain evidence of how the rocks were formed and subsequently deformed: 1.1, 1.2, 1.3, 1.6, 1.7 (both centres), Key Idea 2: The character of the landscape contains evidence of the relationship between past and present processes and the underlying geology: 2.1, 2.3, 2.4, 2.4 (OSM only).
	Geology, Rocks and Fossils	Pupils are offered the chance to examine rock formation under a range of environmental conditions. Pupils then have the opportunity to hunt for fossils and learn about the tectonic events that have shaped the land.	Activity sheets, sample fossils, fossil and rock guides, digital camera.	Osmington Bay, Little Canada	WJEC Geology GCSE: Key Idea 1: Rock exposures contain evidence of how the rocks were formed and subsequently deformed: 1.1, 1.3, 1.7. Key Idea 2: The character of the landscape contains evidence of the relationship between past and present processes and the underlying geology: 2.1, 2.3. Key Idea 4: Major geological events fit into a timeline, beginning with the formation of the Earth: 4.1, 4.2.
	People, Rocks and Landscapes	Visiting a number of igneous rock localities pupils will see how geology as a natural resource can have a massive impact on the environment and character of an area. Geological features can generate income but can also produce areas of natural beauty and scientific importance, thereby introducing conflict over a variety of issues.	Activity sheets, rock guides, digital camera.	Barton Hall	WJEC Geology GCSE: Key Idea 1: Rock exposures contain evidence of how the rocks were formed and subsequently deformed: 1.1, 1.2, 1.4. Key Idea 2: The character of the landscape contains evidence of the relationship between past and present processes and the underlying geology 2.1, 2.2, 2.3, 2.4, 2.5
	Coastal Management	Pupils examine the conflicts that arise from coastal erosion and the options for coastal management. They investigate different types of coastal defences and management systems and discuss how the coastal area should be managed in the future.	Activity sheets, digital camera.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography A (2009 Specification): Unit 2 A – Physical Options: Theme 7 Our Changing Coastline: 1.1, 1.2, 1.3, 2.1, 3.1, 3.2. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions (must be studied with specific reference to rivers and coasts): 8. Landform development: 8.1, 8.2; 9. Landforms and people: 9.1, 9.2, 9.3, 9.4.
	Coastal Processes, Features and Management	Coastal erosion and deposition are studied as part of a coastal walk. The influence of rock types on the coastal environment and the formation of simple igneous features can be observed. An area of sand dunes backed by a golf course provides a case study of human impact on the coastal environment and the successes and failures of management techniques.	Activity sheets, digital camera, profiling kit.	Loch Ranza	WJEC GCSE Geography A (2009 Specification): Unit 2 A – Physical Options: Theme 7 Our Changing Coastline: 1.1, 1.2, 1.3, 2.1, 3.1, 3.2. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions (must be studied with specific reference to rivers and coasts): 8 Landform development: 8.1, 8.2; 9. Landforms and people: 9.1, 9.2, 9.3, 9.4.

Human Geography	Human Impact and Conservation	Pupils are asked to redevelop a local brown-field site or area through the eyes of characters with differing views. Pupils organise and present their ideas to the group in poster, discussion or role-play form.	Activity sheets, Digital Camera	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography B (2009 Specification): THEME 3: PEOPLE, WORK AND DEVELOPMENT: ECONOMIC ACTIVITY AND SUSTAINABLE ENVIRONMENTS: 7. Economic activity and the environment: 7.1, 7.2, 7.3.
	Population and Settlement in a Rural Area	This option focuses on the impact of changing population on a rural area and the positive and negative impact of tourism. Students take the role of consultants for a developer who wishes to build a visitor attraction. Gathering information they build up a picture of villages as they are today. A cost/benefit analysis exercise will allow them to select the best site.	Activity sheets, digital cameras, questionnaires, land use maps.	Loch Ranza	WJEC GCSE Geography A: Unit 2: B – Human Options: Theme 10 Tourism: 1, 2, 3. WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 3. Changing ecosystems: 3.1, 3.3, 3.4.
	Retail Settlements Today	Pupils investigate the function and layout of a retail settlement, using various geographical techniques. Pupils investigate the location of services in relation to each other. The history of the area is investigated and discussed to demonstrate the changing function of the town over time.	Activity sheets, digital cameras, questionnaires, land use maps	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography Specification A (2009 Specification): Unit 2 B – Human Options: Theme 11 Retail and Urban Change: 1.1, 2.1, 2.2, 3.1.
	Rural Settlements	Pupils investigate the changing function of a village over time and the issues associated with rural settlements. Geographical techniques are used to formulate an image of how an area has changed over time. Evidence of the impact of other settlements and the rural employment levels and type are discussed.	Activity sheets, digital cameras, , land use maps.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography A (2009 Specification): UNIT 1 – The Core B – A Global World: Theme 4 Changing Populations: 1.1, 1.2. WJEC GCSE Geography B (2009 Specification): THEME 1: CHALLENGES OF LIVING IN A BUILT ENVIRONMENT: Living in Residential Places: 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 6.1, 6.2, 6.3, 7.1, 7.2, 7.3.
	Tourism Investigation	Pupils examine the reasons for the historical development of a tourist resort, using a variety of data collection techniques. Effects of recreational pressure on local employment, land use conflicts, the physical environment and traffic congestion are considered.	Activity sheets, digital cameras, questionnaires, land use maps.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography Specification A: Unit 2 B – Human Options: Theme 10 Tourism: 1.1, 1.2, 2.1, 3.1.
	Tourism, Changing the Rural Landscape	Students discuss the history and development of the tourist industry and its environmental impact in a rural area where it has become the dominant industry. This is followed by a fieldwork study of footpath erosion and the issues surrounding the management of visitors in an area of outstanding natural beauty. Half or full-day option.	Activity sheets, digital cameras, questionnaires, land use maps.	Loch Ranza	WJEC GCSE Geography A: Unit 2: B – Human Options: Theme 10 Tourism: 1, 2, 3. WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 3. Changing ecosystems: 3.1, 3.3, 3.4.
	Urban Settlements	Producing land use classification maps of town centres allows pupils to recognise patterns in retail settlements and settlement function. Development of towns over time can be demonstrated through a range of data collection techniques.	Activity sheets, digital cameras, questionnaires, land use maps.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography Specification A: Unit 2 B – Human Options: Theme 11 Retail and Urban Change: 1.1, 2.1, 2.2. WJEC GCSE Geography Specification B: THEME 1: CHALLENGES OF LIVING IN A BUILT ENVIRONMENT: Living in Residential Places: 1.1, 1.2, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 6.1, 6.2, 6.3.

Physical Geography	Coastal Management	Pupils examine the conflicts that arise from coastal erosion and the options for coastal management. They investigate different types of coastal defences and management systems and discuss how the coastal area should be managed in the future.	Activity sheets, digital camera.	Barton Hall, Little Canada, Osmington Bay	WJEC GCSE Geography A (2009 Specification): Unit 2 A – Physical Options: Theme 7 Our Changing Coastline: 1.1, 1.2, 1.3, 2.1, 3.1, 3.2. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions (must be studied with specific reference to rivers and coasts): 8. Landform development: 8.1, 8.2; 9. Landforms and people: 9.1, 9.2, 9.3, 9.4.
	Coastal Processes and Features	The formation of coastal features and their evolution over time is discussed using local examples. Stacks, stumps, wave-cut platforms and caves are examined and if desired a beach profile can be constructed.	Activity sheets, digital camera, Pocket PC, profiling kit.	Barton Hall, Little Canada, Osmington Bay.	WJEC GCSE Geography A (2009 Specification): Unit 2 A – Physical Options: Theme 7 Our Changing Coastline: 1.1, 1.2, 1.3. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions (must be studied with specific reference to rivers and coasts): 8 Landform development: 8.1, 8.2.
	Investigation Skills and Data Collection Techniques	Students are introduced to the stage-by-stage process required to create a high quality field studies based geographical investigation. They will look at a variety of different methods of surveying an area and select the best techniques and the right amount of data.	Activity sheets, digital cameras, questionnaires, land use maps.	Loch Ranza	WJEC GCSE Geography A: Skills for controlled assessment. WJEC GCSE Geography B: Skills for Task Taking (A) Research/data collection.
	Rivers and Fluvial Systems	The form and functions of rivers can be studied from source to mouth in this river investigation, including meanders, floodplains and smaller formations such as point bars and river cliffs. A number of measurements such as width, depth, velocity and sediment size can be collected at a variety of sample sites.	Activity sheets, Pocket PC, digital camera, channel profile kit, flow meters, callipers, clinometer, sediment roundness chart, ranging poles.	Barton Hall, Little Canada, Osmington Bay.	WJEC GCSE Geography A (2009 Specification): UNIT 1 – The Core, A – The Physical World. Theme 1 Water: 1.1, 1.2, 1.3, 2.1, 2.2. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions: 8 Landform development 8.1, 8.2; 9 Landforms and people: 9.1, 9.2, 9.3, 9.4. The Hydrosphere: 6 Water surplus: 6.1, 6.2, 6.3.
	Rocks, Resources and Scenery	The impact of geology on the shape of the landscape and its influence on our use of the land is considered using practical examples. A wide variety of rock types can be seen on a guided walk through a fantastic, remote landscape. There are examples of current and historical uses of rocks and minerals as a resource.	Activity sheets, rock guides, compass clinometer, metre ruler, spirit level, digital camera.	Loch Ranza	WJEC GCSE Geography A: UNIT 1 – The Core: A – The Physical World: Theme 3 Living in an Active Zone: 1.1, (1.2 if do follow up). WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 8. Landform development: 8.1, 8.2.
	The Challenges of Weather and Climate	An introductory talk describes weather and climate in a UK context, including methods of data collection and display. A practical fieldwork exercise focuses on microclimates created by a variety of habitats. Students use a variety of ICT and GIS resources both outside and classroom based, as part of this study.	Activity sheets, digital camera, PC, digital anemometer, light meters, hygrometers, weather stations.	Loch Ranza	WJEC GCSE Geography A: Unit 2: A – Physical Options: Theme 8 Weather and Climate: 1, 2. WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Weather And Climate Influences: 1.1, 1.5, 1.3.

The Coastal Zone	Active coastal processes and resulting landforms are studied with specific focus on long shore drift contributing to the formation of a spit. Data is later presented, analysed and interpreted. This option provides a good introduction to fieldwork sampling techniques and data handling.	Activity sheets, digital camera, profiling kit.	Loch Ranza	WJEC GCSE Geography A (2009 Specification): Unit 2 A – Physical Options: Theme 7 Our Changing Coastline: 1.1, 1.2, 1.3. WJEC GCSE Geography B (2009 Specification): THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: Landform Interactions (must be studied with specific reference to rivers and coasts): 8 Landform development:8.1, 8.2.
The Impacts of Ice on the Landscape, Glacial Scenery	Classic features of glacial landscapes will be observed, discussed and sketched in a series of field talks. The history of glaciations within the UK and its association with global climate change will be discussed. A practical exercise analyses the content of a sediment deposit to consider its origins.	Activity sheets, rock guides, compass clinometer, metre ruler, spirit level, sediment chart, digital camera.	Loch Ranza	WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 8. Landform development: 8.1, 8.2.
The Mountain Environment	A full day guided walk into a mountain environment. This option includes discussion of landscape features, vegetation types, risk assessment, preparation, equipment, map skills, climate, challenges to people, natural hazards, human impact and management issues.	Activity sheets, rock guides, digital camera, compass and maps	Loch Ranza	WJEC GCSE Geography A: UNIT 1 – The Core: A – The Physical World: Theme 3 Living in an Active Zone: 1.1, (1.2 if do follow up). WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 8. Landform development: 8.1, 8.2.
The Restless Earth	This option introduces students to features along a stretch of coastline resulting from the influence of volcanic activity and plate tectonics. The influence of different rock types on coastal landforms will also be considered.	Activity sheets, rock guides, digital camera.	Loch Ranza	WJEC GCSE Geography A: UNIT 1 – The Core: A – The Physical World: Theme 3 Living in an Active Zone: 1.1, (1.2 if do follow up). WJEC GCSE Geography B: THEME 2: PEOPLE AND THE NATURAL WORLD INTERACTIONS: 8. Landform development: 8.1, 8.2.

