

	Brief Description	Equipment Includes	Centres		Curriculum Information - AQA
			PGL Little Canada	PGL Osmington Bay	
Human Geography					
Coastal Management	Students examine the conflicts that arise from coastal erosion and the options for coastal management. They investigate different types of coastal defences through field sketches and discuss how they should be managed in the future through a decision matrix. Each option is examined through cost benefit analysis and all relevant economic, social, educational and industrial impacts are investigated and discussed.	Activity sheets, clipboards, questionnaires, digital camera			AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.4; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: The Physical Options: Coastal environments; Unit 2 GEOG2 Geographical Skills; Unit 3 GEOG3 Contemporary Geographical Issues: The Human Options: Contemporary conflicts and challenges; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Geography GCE AS/A Level: 3.1.3 Coastal systems and landscapes / 3.3.1 Fieldwork requirements / 3.3.2 Investigation Requirements.
Impacts of Tourism	Students examine the reasons for the historical development of a tourist resort. Effects of recreational pressure on local employment, land use conflicts, the physical environment and traffic congestion are considered. Data is collected through land use mapping, pedestrian surveys and traffic counts. Information collected is analysed through classification of land use maps and collation of questionnaires. A report can be written and a management plan produced for future work.	Activity sheets, digital cameras, questionnaires, land use maps			AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.4; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: Core Human Section: Population Change; Unit 2 GEOG2 Geographical Skills; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Travel and Tourism AS/A level: AS Unit 6 Tourism in the UK: Factors affecting the popularity of tourism in the UK, Statistics on tourism, Tourism in a local tourist board region; A2 Unit 11 Impacts of Tourism: Environmental impacts, Economic impacts, Social/cultural impacts, Impacts on tourism planning. AQA Geography GCE AS/A Level: 3.2.2 Changing Places / 3.2.3 Contemporary urban environments / 3.3.1 Fieldwork requirements / 3.3.2 Investigation requirements.

Brief Description	Equipment Includes	Centres		Curriculum Information - AQA
		PGL Little Canada	PGL Osmington Bay	
Human Geography				
<p>Rural and Urban Issues</p> <p>For rural issues, students investigate the changing function of a village over time and the issues associated with rural settlements. Geographical techniques are used to illustrate how an area has changed over time. Evidence of the impact of other settlements and the rural employment levels and type are discussed. For urban issues, producing land use classification maps of town centres allows students to investigate patterns in retail settlements and settlement function. Development of towns over time can be demonstrated through a study of building type and the CBD can be mapped.</p>	<p>Activity sheets, digital cameras, questionnaires, land use maps</p>			<p>AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: Core Human Section: Population Change; Unit 2 GEOG2 Geographical Skills; Unit 3 GEOG3 Contemporary Geographical Issues: The Human Options: Contemporary conflicts and challenges; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Geography GCE AS/A Level: 3.2.2 Changing Places / 3.2.3 Contemporary urban environments / 3.3.1 Fieldwork requirements / 3.3.2 Investigation requirements.</p>
<p>Tourism and Environments</p> <p>Students examine the development of a tourist location. Landscape features and local history are considered alongside the effects of recreational pressure on local employment, land use conflicts, the physical environment and traffic congestion. Data can be collected through land use mapping, pedestrian surveys and traffic counts. Information collected can be analysed through classification of land use maps and collation of questionnaires and then included in a written report.</p>	<p>Activity sheets, digital cameras, questionnaires, land use maps</p>	 	 	<p>AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.4; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: Core Human Section: Population Change; Unit 2 GEOG2 Geographical Skills; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Travel and Tourism AS/A level: AS Unit 6 Tourism in the UK: Factors affecting the popularity of tourism in the UK, Statistics on tourism, Tourism in a local tourist board region; A2 Unit 11 Impacts of Tourism: Environmental impacts, Economic impacts, Social/cultural impacts, Impacts on tourism planning. AQA Geography GCE AS/A Level: 3.2.2 Changing Places / 3.2.3 Contemporary urban environments / 3.3.1 Fieldwork requirements / 3.3.2 Investigation requirements.</p>








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			PGL Little Canada	PGL Osmington Bay	
Physical Geography					
Coastal Processes and Features	By working as part of a team students profile a beach, taking accurate measurements which are entered onto a pocket computer. Students discuss beach formation and the reasons why beaches differ in shape and sediment size. They then discuss the results obtained and suggest why sediment size varies in relation to its position on the beach. Simple experiments allow observations of long shore drift and wave refraction.	Activity sheets, profiling kit, digital cameras			AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: The Physical Options: Coastal environments; Unit 2 GEOG2 Geographical Skills; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Geography GCE AS/A Level: 3.1.3 Coastal systems and landscapes / 3.3.1 Fieldwork requirements / 3.3.2 Investigation Requirements.
Rivers	The form and function of rivers are studied from source to mouth in this river investigation, including width, depth, velocity, hydraulic radius, wetted perimeter, land use, surface run off, sediment size and common fluvial formations such as point bars, meanders, river cliffs and braided channels. Students can relate their findings to the human influence upon the sample sites. The data gathered in the field and digital photos taken can be used to write-up the day's findings.	Activity sheets, Pocket PC, digital camera, clinometer, channel profile kit, flow meters, callipers, sediment roundness chart, ranging poles			AQA Environmental Studies GCE AS/A level: Unit 2 ENVS2 The Physical Environment: 3.2.2; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 1 GEOG1 Physical and Human Geography: Core Physical Section: Rivers, floods and management; Unit 2 GEOG2 Geographical Skills; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Geogrpahy GCE AS/A Level: 3.1.1 Water and carbon cycles / 3.3.1 Fieldwork requirements / 3.3.2 Investigation Requirements.



Curriculum Links

AS and A level Field Studies

	Brief Description	Equipment Includes	Centres		Curriculum Information - AQA
			PGL Little Canada	PGL Osmington Bay	
Biology					
Haloseral Succession	This is a study of the colonization in a salt marsh environment. By carrying out random sampling and performing accurate and detailed line transects, students observe the changes in succession and begin to appreciate the importance of conservation and management of fragile ecosystems. Students can also test their hypotheses using Spearman's Rank Coefficient calculation to determine if there is a relationship between different environmental factors, e.g. between the pH of the soil and species number. Remaining time can be spent writing up the methodology and discussing the day's findings.	Activity sheets, digital cameras, Pocket PC, thermometer, profiling kit, moisture meter, pH kit, quadrat, infiltration kit, stopwatch, plant ID sheets, identification books		×	AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment. AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1, 3.4.7; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.4, 3.1.5; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 3 GEOG3 Contemporary Geographical Issues: The Physical Options: Ecosystems: Change and Challenge; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.5 Energy transfers in and between organisms 3.5.4 / 3.7 Genetics, populations, evolution and ecosystems 3.7.
Heathland Ecology and Management	An investigation of open heathland is undertaken. Line transects are made and measurements taken including pH, light levels and soil type. Quadrats are used to examine plant species along the transect. Expected changes in diversity within physical parameters are discussed, along with the role of heathland in the nitrogen and carbon cycles. In addition, the management and land uses of the area are discussed. Data analysis and statistical tests can be used to complete a report on the investigation.	Activity sheets, digital camera, Pocket PC, infiltration kit, soil thermometer, moisture meter, pH kit, profiling kit, quadrat, plant ID guides, pocket ID books, anemometer	×		AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment, Environmental change and damage (BHA only), Managing conservation (BHA only). AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1, 3.4.7; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.4, 3.1.5; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 3 GEOG3 Contemporary Geographical Issues: The Physical Options: Ecosystems: Change and Challenge; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.5 Energy transfers in and between organisms 3.5.4 / 3.7 Genetics, populations, evolution and ecosystems 3.7.
Investigations and Sampling Techniques	This unit provides students with an introduction to a variety of different data collection techniques, both in theory and practically as part of an investigation. Techniques covered include belt transects, line transects, random sampling, quadrats and 'mark, release and recapture'. Students' work will have an emphasis on experimental design, accurate and consistent data collection, hypothesis testing and statistical analysis.	Activity sheets, digital camera, Pocket PC, infiltration kit, pH kit, soil thermometer, moisture meter, profiling kit, quadrat, plant ID guides, pocket ID books, anemometer			AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment. AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1, 3.4.7; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.3, 3.1.5; 3.5 How Science Works AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.7 Genetics, populations, evolution and ecosystems 3.7.

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Biology					
Marine Zonation	Horizontal succession is studied using line transects across the littoral zone to measure the percentage and/or frequency cover of the organisms. Vertical zonation studies can also be carried out, using a 10cm quadrat - vertically on the rocks - to examine changes in species number and diversity on a small scale. Both methods are ideal for students undertaking projects with an emphasis on experimental design, accurate and consistent data collection, hypothesis testing and statistical analysis alongside concepts such as Ballantine's scale of exposure.	Activity sheets, digital camera, Pocket PC, profiling equipment, 100cm quadrat, 10cm quadrat, identification sheets and books, bug pots	 	 	AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment. AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11. 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.5; 3.5 How Science Works AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.7 Genetics, populations, evolution and ecosystems 3.7.
Psammoseral Succession	A Nature Reserve system is an ideal location for studying the abiotic and biotic factors of succession over sand and the factors that affect this process. Opportunities are provided to study different approaches to sustainable development and how humans impact upon succession. Data analysis and statistical tests can be used to complete a report on the investigation.	Activity sheets, digital camera, Pocket PC, infiltration kit, pH kit, soil thermometer, moisture meter, profiling kit, quadrat, plant ID guides, pocket ID books, anemometer	×		AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment. AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1, 3.4.7; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.4, 3.1.5; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 3 GEOG3 Contemporary Geographical Issues: The Physical Options: Ecosystems: Change and Challenge; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.5 Energy transfers in and between organisms 3.5.4 / 3.7 Genetics, populations, evolution and ecosystems 3.7.
Stream Ecology	Students investigate how a river changes along its course from source to mouth, focusing on the change in invertebrate communities. Kick and sweep sampling is employed alongside identification keys, and students record their findings on pocket computers. Digital photographs help to identify sample sites, and the reasons for changes along the river, pollution levels, land use and management are examined fully.	Activity sheets, Pocket PC, digital camera, channel profile kit, flow meters, sediment roundness chart, pH meters, sweep nets, bug pots, identification books and sheets			AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.5; Unit 3 ENVS3 Energy Resources and Environmental Pollution: 3.3.2; 3.5 How Science Works AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.7 Genetics, populations, evolution and ecosystems 3.7.

	Brief Description	Equipment Includes	Centres		Curriculum Information - AQA
			PGL Little Canada	PGL Osmington Bay	
Biology					
Woodland Ecology	Students conduct a comparative investigation of coniferous and deciduous woodland. Line transects are made and measurements taken, including pH, light levels and soil type. Students use quadrats to examine plant species in different layers of woodland. 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, quadrats, plant ID guides, pocket ID books, anemometer, light meter			AQA Applied Science GCE AS/A2: A2 Unit 16 Ecology, Conservation and Recycling: The type and populations of organisms that live in a habitat, The relationships of organisms with their physical and biological environment. AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1, 3.4.7; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.4, 3.1.5; 3.5 How Science Works. AQA Geography GCE AS/A level: Unit 3 GEOG3 Contemporary Geographical Issues: The Physical Options: Ecosystems: Change and Challenge; Unit 4A GEO4A Geography Fieldwork Investigation. AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.5 Energy transfers in and between organisms 3.5.4 / 3.7 Genetics, populations, evolution and ecosystems 3.7.
Environmental Science					
Freshwater Pollution	Students investigate pollution levels in a freshwater system, using biotic and abiotic factors. Moving between sample sites, they focus primarily on the change in invertebrate communities. In addition, factors such as nitrate levels are measured. Students use sweep sampling and identification keys, recording their findings on pocket computers. Digital photographs help to identify sample sites and the reasons for changes between the sample sites are examined fully, including pollution levels and land use and management.	Activity sheets, digital camera, pocket PC, bug pots, tray, flexible net, identification guides and sheets, BMWP index, pH kit, nitrate test kits			AQA Biology GCE AS/A level: 3.2 Unit 2: BIOL2 The variety of living organisms: 3.2.11; 3.4 Unit 4 BIOL4 Populations and environment: 3.4.1; 3.6 Unit 6 Investigative and Practical Skills in A2 Biology: 3.6.1, 3.6.2, 3.6.3, 3.6.4; 3.7 How Science Works: A, B, C, D, E, F, G, H. AQA Environmental Studies GCE AS/A level: Unit 1 ENVS1 The Living Environment: 3.1.2, 3.1.3, 3.1.4, 3.1.5; Unit 2 ENVS2 The Physical Environment: 3.2.2. Unit 3 ENVS3 Energy Resources and Environmental Pollution: 3.3.2; 3.5 How Science Works AQA Biology GCE AS/A Level: 3.4 Genetic information, variation and relationships between organisms 3.4.6 / 3.5 Energy transfers in and between organisms 3.5.4 / 3.7 Genetics, populations, evolution and ecosystems 3.7.