Environmental Studies: **Living things and processes of Life**	Topic: **Grounds for Learning**

Attainment Outcomes:	Science Living Things Energy and Forces Earth and Space	**Social Subjects** People and Places People in the Past People in Society	**Technology** Understanding and Using Technology in Society Understanding and Using the Design Process

Strand / Level		Attainment target / Learning outcomes What will the learner achieve?	Learning Activities What will the learners do?	C / Gp / Ind	Assessment / Evidence Oral, Written, Practical What evidence will you have that the learner will have achieved the target?	Level

Interaction of Living things with their Environment
 	
Level C
 	
Level D
 	
Level E
	.	• Explain how living things and the environment can be protected and give examples
		
		• Describe examples of human impact on the environment that have brought about beneficial changes and examples that have detrimental effects
		
		• Be able to give examples of how plants and animals are suited to their Environment
		
		• Be able to explain how responses to changes in the Environment might increase the chances of survival.
		
		• Give examples of physical factors that affect the distribution of living things
			• Research an area of school grounds suitable for Butterfly garden.
			• Using the INTERNET investigate suitable plants and butterflies.
			• With help from Ranger Service investigate suitability of soil on site for particular plants.
			• With help from Scientist from PIPS project do a soil analysis test?
			• Using information found on web sites and from expertise of Ranger and biologist order plants.
			• Create garden with suitable plants for chosen butterflies.
			• Order butterfly eggs from breeders.
			• On receipt of eggs follow all instructions for safe development of butterflies 12 of two varieties, tortoiseshell and swallowtails.
			• At appropriate time put in garden.
			• Web page www.geocities.com/european butterflies/metamorph/
			• Page above allows pupils to watch the complete lifecycle from egg to butterfly
			  • Children will surf the net for various sites put into favourites
			  • Eg The children's Butterfly site www.mesc.usgs.gov/resources/education/butterfly/lifrcycle
			  • Visit to Butterfly Farm in Edinburgh will help them to build up a picture of butterfly
				Class
				
				I
				
				Gp
				
				At different times for different activities
					Children's knowledge assessed by asking questions, by children's enthusiasm for garden
					
					Various written work on topic
					
					Class displays
					
					Garden
					
					Feedback from all personnel involved
					
					Children's attitudes assessed by questioning and writing poetry on how they feel about the garden, butterfly in particular but whole geology garden in general
					Children will have an in-depth knowledge of butterflies assessed through facts test.	

Resources :	Evaluation:
Books Scientist from PIPS Rangers Class discussion Internet Resources from KEC personnel Visit to Edinburgh Butterfly farm	