

Suggestion grid for studies and activities for schools based on Cemlyn Nature Reserve			Key to symbols: G = Geography Sc = Science E = English H = History RE = Religious Education NWWT = North Wales Wildlife Trust
Programme of study	Purpose of session	Activity	Resources Needed
Where is the site and how does it link with other localities (G)	To set Cemlyn in its geographical context	Find out how far and in what direction Cemlyn is from the school, the route to get there, and obvious surrounding landscape features. Orient on site using Wylfa Power Station, the Skerries islands, wind farms, National Trust buildings etc.	Location map and aerial photo
Why is the locality like this (G)	To understand Cemlyn as a geographical unit	Describe the sequence of events which led to the formation of Cemlyn, e.g. glaciation (explain about the drumlins), long-shore drift, effects of wind and waves, land management, construction of lagoon dam etc. (see H)	Series of diagrams and location map.
What processes are contributing to its development (G)	To look at what NWWT is doing to manage the site, preserve the habitat and increase value to visitors. To discuss access and information issues.	Describe conservation work and access issues (including those relating to disability), look at interpretive panels and public notices. Discuss ideas for improvement of Cemlyn for the public and schools	Copies of NWWT Cemlyn leaflet and National Trust leaflet on walks around Cemlyn
What can be learned about habitats and how they change (Sc)	To observe the range of habitats and understand the differences between one area and another. To demonstrate spatial change in a habitat, e.g. along a given line (zonation). To explain how habitat changes over time (succession).	Pupils to do a transect of vegetation and animals from either a) the middle of Trwyn Cemlyn to the shore; b) the edge of the lagoon over the ridge to the sea; or c) the top of the beach at Traeth y Trwyn to the sea. Pupils need to identify and write down what they find in each sample (hula-hoop) along a paced-out or tape-measured transect line. Habitats can be compared and the development of vegetation discussed	Hula-hoops, tape-measure / string, i.d. charts, worksheets and clipboards

<p>What plants and animals can be found in different habitats (Sc)</p>	<p>To identify key species living in some of the characteristic habitats at Cemlyn e.g.: shingle ridge saline lagoon sea shore To give examples of species adapted to their environment</p>	<p>Point out main plant and animal species spotted. Mention sea kale as a species that thrives in harsh shingle environment. Collect samples of water from the sea and the lagoon to compare the species that live in them. Use i.d. charts to identify invertebrates. Visit the tern viewing area (during Summer months) and observe the colonies. Ask NWWT wardens, if present, to point out different species, and give no.s of nests etc.. Record what is found in each habitat and make drawings of different species.</p>	<p>Identification charts produced by the Field Studies Council, worksheets and clipboards, magnifying glasses, binoculars, nets and trays for collecting invertebrates</p>
<p>What are ecosystems and food chains (Sc)</p>	<p>To understand the inter – relationships between species living at Cemlyn</p>	<p>Demonstrate a food chain at Cemlyn by using pupils to physically represent particular species. Show what happens to the food chain if one species is removed by removing one pupil. Explain ecosystem as a community of food chains</p>	<p>Example of a food chain at Cemlyn (eg. Peregrine – Terns – Sandeels – Plankton). Ball of wool or string</p>
<p>What stories are there to be told at Cemlyn (E) (H)</p>	<p>To observe features and objects along a walk and relate them to the history of Cemlyn. To involve pupils' imagination in creating a story.</p>	<p>Create a story line, using a stick of wood onto which different toys can be tied representing different things observed in the course of the walk / visit. As a group, make up a story that connects all the toys together. In class, can be extended to include acting out the story</p>	<p>Monopoly game toys and other toys / objects to represent things that may be seen on the journey. Sticks of wood. Paper to draw what is found and to write down stories.</p>
<p>What was life like for people who lived in Cemlyn in the past Who was Captain Hewitt (H) (E)</p>	<p>To learn about the history of the area by imagining the daily life of local people. To learn about Captain Hewitt and how he affected the landscape of Cemlyn.</p>	<p>Point out features on site like the double wall and the weir at Bryn Aber, the coalsheds on the Trwyn, and the farm buildings at Plas Cemlyn. Explain how and why the lagoon was created. In class, pupils to write an imaginative diary entry – a day in the life of either a farming/fishing</p>	<p>Paper and pencils</p>

		family or the household of Captain Hewitt.	
Who works at Cemlyn now and what do they do Who visits the area and why (Sc)	To learn about the local community, and understand the work of the Reserve and the local area. To see the importance of conservation in action.	If possible, introduce NWWT and National Trust warden(s) on site, and invite pupils to ask questions about their work, daily routine. Observe other visitors (e.g. dog-walkers, birdwatchers), or people working in the adjacent farmland	
What importance could it have for different people (E) (RE)	To introduce the idea of a place being special to people for different reasons, in particular a source of peace or inspiration.	Discuss way people relate to nature. Share examples of creative work that link natural beauty and spirituality.	Examples used included the poem <i>Sea-watching*</i> by R.S. Thomas (who often visited Cemlyn), and a piece of string music composed by Bethan Roberts called <i>Trwyn Cemlyn</i> , inspired by the area <i>*Birdsong</i> , compiled by Dewi Roberts contains this and many other bird-related pieces by Welsh writers (published by Seren).
How else can a place like Cemlyn be experienced (E)	To use the five senses to experience the place and encourage pupils to think about how it makes them feel.	On site exercises e.g. sit for 60 seconds with eyes closed registering sounds, smells & sensations; slow 360° turn observing landscape features, colours and weather as well as wildlife. Repeat exercises in class using memory and imagination. Written or verbal descriptions and expression to follow.	Worksheets and pencils