

SEVEN SISTERS SCHOOLS PROGRAMMES: KEY STAGE 3

GEOGRAPHY & BIOLOGY

❖ **Coastal Processes** (*full day*)

Cuckmere Haven is an ideal site for students to see coastal processes in action. Students can examine the topography of the site and suggest ideas to explain the formation of the beach and the origins of the beach material. The students can then produce a detailed annotated field sketch of the study site. Ideas about the action of waves and longshore drift are then considered. Clinometers and tape measures can be used to collect data for a beach profile. Pebbles can be collected and measured. Back at the Pump Barn students can consider ways to present the data collected in meaningful ways.

❖ **Rocky shore organisms** (*full day*)

Nestled beneath the chalk cliffs, the rocky shore at Cuckmere Haven is teeming with life. Students begin the day exploring the rocky shore, identifying the organisms that live there using keys. Students can use quadrats and tape measures to sample the plants and animals that live there. Adaptations to life on the rock shore, food chains and food webs are considered.

❖ **Seven Sisters Country Park Tourism and Management** (*half day*)

Students are taken on a guided tour of the Seven Sisters Country Park and are asked to consider the management issues and conflicts at various sites. Promoting the site without increasing car traffic and the 'Tourism without Traffic Project' will be discussed. The present management structure and funding for the park together with future schemes such as the valley restoration project are also covered. The final part of the walk takes in Friston Forest to look at how the plantation has been adapted for leisure purposes. There is an opportunity at the end of the walk for students to ask a ranger specific questions about management issues.

❖ **Map Skills** (*full day*)

The high vantage points around Cuckmere Haven make this site an ideal location for students to relate the topography of the landscape with the features on an OS map. Students will learn how to write four and six figure grid references and there will also be plenty of opportunity to learn and practice field sketching. The students will be instructed on how to use a compass and follow a bearing before putting their map reading skills into practice orienteering around the Friston Forest.



SEVEN SISTERS SCHOOLS PROGRAMMES: KEY STAGE 4

GEOGRAPHY & BIOLOGY

❖ **Coastal Processes** (*full day*)

Cuckmere Haven is an ideal site for students to see coastal processes in action. Students can examine the topography of the site and suggest ideas to explain the formation of the beach and the origins of the beach material. The students can then produce a detailed annotated field sketch of the study site. Ideas about the action of waves and longshore drift are then considered. Students can carry out an investigation into the deposition of beach material and the formation of berms. Students can collect data for drawing beach profiles and pebble analysis back at the Pump Barn. More able groups of students can use the t-test to analyse their data.

❖ **Habitat Adaptation & Ecological Techniques** (*full day*)

Students consider the idea of sampling to understand, assess and monitor particular habitats. For example, on the rocky shore students can use quadrats and abundance scales to examine changes up the shore. In Friston Forest the students have the opportunity to evaluate techniques such as tree beating, pootering, small mammal traps and pit-fall traps. On the chalk grassland they will be able to use quadrats for a vegetation study. There will also be a range of equipment for the students to gain experience of measuring abiotic factors such as light intensity, temperature, soil temperature, pH and wind speed. At each of the habitats the students will have an opportunity to discuss adaptations to the particular environment.

❖ **Woodland Management** (*full day*)

Students consider all aspects of woodland management as they walk towards the main study sites. Within the forest certain areas have been cleared to form glades. Students will examine what effect the extra light reaching the forest floor has on determining the plants and animals found there. Students will gain experience of using equipment such as light meters and soil temperature probes and will sample the environment using quadrats. Data presentation takes place back at the Pump Barn.



❖ **Seven Sisters Country Park Tourism and Management** (*half day*)

Students are taken on a guided tour of the Seven Sisters Country Park and are asked to consider the management issues and conflicts at various sites. Promoting the site without increasing car traffic and the 'Tourism without Traffic Project' will be discussed. The present management structure and funding for the park together with future schemes such as the valley restoration project are also covered. Data is available on visitor numbers for the students to use for their own analysis. The final part of the walk takes in Friston Forest to look at how the plantation has been adapted for leisure purposes. There is an opportunity at the end of the walk for students to ask a ranger specific questions about management issues.

❖ **Footpaths and Management** (*full day*)

Students are taken on a tour of the Country Park and consider the various groups that need access. On the way the students practice field sketching and writing six figure grid reference numbers.

To assess the impact of users on the quality of footpaths, students set up transects across a range of footpaths and measure factors such as vegetation type and cover, soil density and vegetation height. At the Pump Barn students use the data to produce site profiles.