Geography Department

Year 10

Topic: The Living World

Learning Journey

Prior learning: *This is the second topic for paper 1 of the GCSE geography course. Students will have some understanding of ecosystems and how they function from their KS3 studies, notably their unit on Africa in year 8. This unit introduced the idea of ecosystems at a macro scale (biomes) and considered how nutrient cycles, food chains and food webs help to shape the way they operate. There is a particular focus on savanna, deserts and Jungles which give students a solid foundation for the GCSE case studies on the Malaysian rainforest and the Thar Desert.*

The previous unit on Natural Hazards also provided an introduction to atmospheric circulation which is a key idea in understanding the location of different ecosystems around the World.

	Learning sequence – topic title					Endpoint
Main learning steps	Students are introduced to what ecosystems are, the scales at which they operate and how biotic and abiotic components are interdependent through concepts such as food webs and the nutrient cycle. These ideas are then applied to examples of different	Students develop their understanding of a variety of different human and physical factors which can affect an ecosystem. These ideas are then explored further by examining how the reintroduction of Wolves to Yellowstone has affected the area.	Students develop their knowledge of the key characteristics of different Biomes around the World, exploring the location, climatic conditions and associated flora and fauna. They also start to consider the key factors which determine the climatic conditions of biomes i.e. latitude, altitude,	Students spend several lessons looking at rainforests and how they operate. They will consider their characteristics, biotic adaptations, value, threats to existence and how they can be managed more sustainably. This is then applied to a case study on the	Students spend several lessons looking at deserts and how they operate. They will consider their characteristics, biotic adaptations, the opportunities and challenges these environments present and finally the threat of desertification and how this can be managed.	Students will be able to demonstrate the extent to which they have understood how ecosystems operate and the ways in which the components within a given ecosystem are interdependent. They will also be able to demonstrate

	ecosystems i.e. a pond and Epping Forest.		distance from ocean, ocean currents etc.	Malaysian rainforest.	This is then applied to a case study on the Thar Desert.	where they are in terms of exam technique by answering GCSE style questions.
Assessment					Prior to completing their end of unit test, students will complete a 9 mark essay assessing the extent to which the Thar desert presents both economic opportunities and challenges. They will supported in completing this through the use of a structure strip and then their answers will be self assessed with the support of a modelled answer written by staff.	End of unit test – 30 minutes completed under formal exam conditions on section B of paper 1. This will be marked by teacher and then reviewed in subsequent lesson with an opportunity to improve on answers with purple pen.

Where will we use these ideas again:
The ideas of ecology which are developed in this unit will be revisted in year 11, particularly through the unit of "The Challenge of resource management." This will require students to consider the issues we face as our supplies of water, food and energy are placed under increasing strain and how trying to meet the demand of these resources can put additional pressure on different ecosystems.