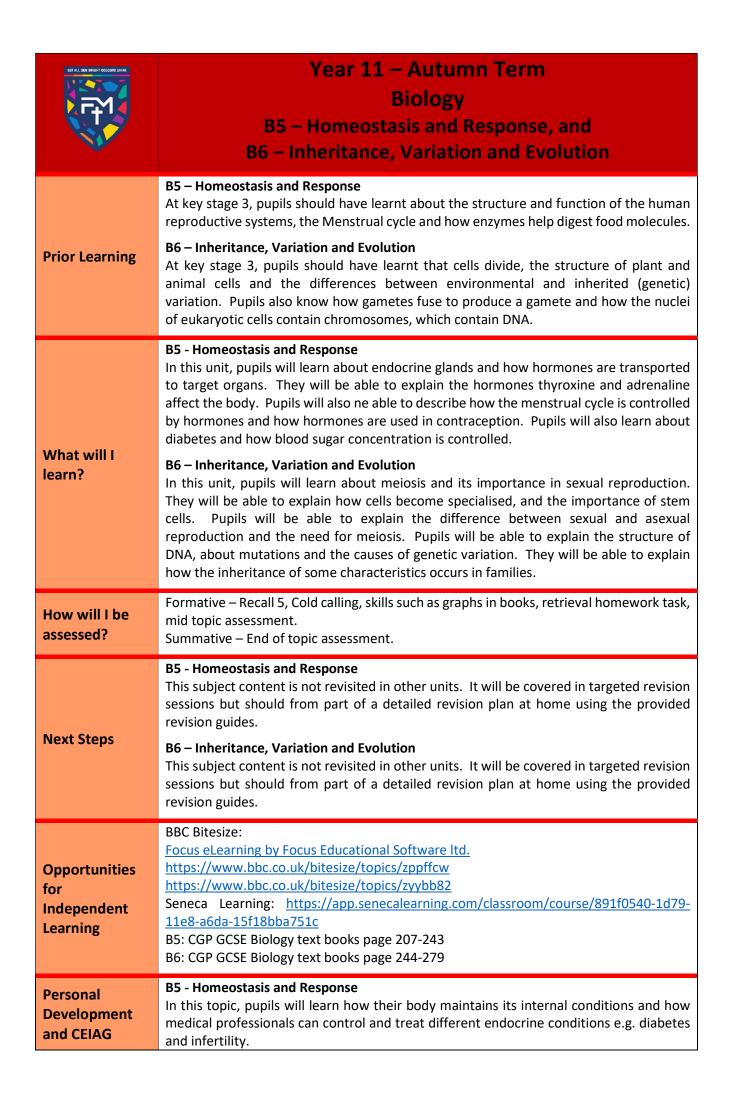


Science -Biology



Year 11 Curriculum Map





	Possible careers linked to this topic are clinician, diabetic nurse, charity work (diabetic society) fertility specialist. B6 – Inheritance, Variation and Evolution In this topic, pupils will develop an understanding of how different organisms grow and divide and the potential scientific benefits of studying cell growth. Pupils also understand how technology enables scientific advancements to take place e.g. microscopy. Possible careers linked to this topic are Genetic Counsellor, Genetic Engineering, health, diabetes, clinician,
Enrichment Opportunities (Cultural Capital)	B5 - Homeostasis and Response Understand the issues faced by some couples in terms of fertility. Develop an understanding of how to assist somebody who is suffering from low blood sugar. Research the difficulties faced by diabetics and infertile couples due to funding by NHS. B6 - Inheritance, Variation and Evolution Research opportunities into genetic disorders, building DNA models, considering inheritance probabilities. https://www.youtube.com/watch?v=c3kZQCi8Ng0 https://www.yourgenome.org/activities/origami-dna https://www.yourgenome.org/activities/extracting-dna-from-fruit https://www.yourgenome.org/activities/sequence-bracelets

LET ALL ONE REPORT COLORES SHEE	Year 11 – Spring Term Biology B7 - Ecology
Prior Learning	B7 - Ecology At key stage 3, pupils should have learnt about how almost all life on Earth depends on photosynthesis in plants and algae, and about the interdependence of organisms, including food webs and insect pollination. Pupils should be able to explain how organisms affect and are affected by their environment, including the accumulation of toxic materials
What will I learn?	B7 - Ecology In this unit, pupils will learn about how ecosystems are organised, and how communities are affected by abiotic and biotic factors. They will be able to explain how the abundance and distribution of organisms are measured and how energy is transferred through trophic levels. They should be able to explain parasitic and mutualistic relationships. Pupils will examine how humans affect ecosystems and the benefits of maintaining biodiversity, along with the importance of the carbon cycle, water cycle and nitrogen cycle. Pupils will learn about how indicator species can be used to assess pollution levels and why the rate of decomposition of food and compost can vary.
How will I be assessed?	B7 - Ecology Formative — Recall 5, Cold calling, skills such as graphs in books, retrieval homework task, mid topic assessment. Summative — End of topic assessment.
Next Steps	This subject content is not revisited in other units. It will be covered in targeted revision sessions but should from part of a detailed revision plan at home using the provided revision guides.
Opportunities for	B7 - Ecology Focus eLearning by Focus Educational Software ltd.

Independent Learning	https://www.bbc.co.uk/bitesize/topics/zxxhh39 https://app.senecalearning.com/classroom/course/891f0540-1d79-11e8-a6da- 15f18bba751c Focus eLearning by Focus Educational Software ltd.
Personal Development and CEIAG	B7 - Ecology In this unit, pupils will learn about the importance of careers in conservation such as environmental scientist, zoologist and wildlife biologist. Through the study of the world around them and environmental issues, pupils will develop an understanding of how to be responsible, respectful and active citizens who are able to play their part and become actively involved in public life as adults. Possible careers linked to this topic are environmental scientist and ecologist.
Enrichment Opportunities (Cultural Capital)	B7 - Ecology BBC Life series National Geographic WWF website The Carbon Cycle game Visit Blackpool Zoo Research non-indigenous or endangered species