

Biology	Year 8 Biology content – Autumn Term	How to support students' learning
	Impacts on the Environment • Define biodiversity & use quadrats to sample ecosystems • Discuss conservation & measures to improve biodiversity • Look at human land use & population growth • Explain the effects of global warming and climate change on biodiversity. Variation and inheritance • The variation between individuals within a species being continuous or discontinuous, to include measurement and graphical representation of variation • The variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection • Heredity as the process by which genetic information is transmitted from one generation to the next • A simple model of chromosomes, genes and DNA in heredity, including the part played by Watson, Crick, Wilkins and Franklin in the development of the DNA model • Selective breeding and natural selection • Understand the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material • State that the variation between species and between individuals of the same species means some organisms compete more successfully, which can drive natural selection • Describe how changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction Selective breeding and natural selection • Understand the importance of maintaining biodiversity and the use of gene banks to preserve hereditary material	Encourage your child to look through the following information: Definitions - Biodiversity and distribution - 3rd level Science Revision - BBC Bitesize Impact of the increasing human population - Food production and fertilisers - 3rd level Science Revision - BBC Bitesize Encourage your child to read the information and watch the videos available here: Inheritance and genetics - KS3 Biology - BBC Bitesize Encourage your child to watch the video here: Selective Breeding Evolution Biology FuseSchool (youtube.com)

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