

Year 8:

Year	Term	Units of work	Core Knowledge	Core Skills
8	3	Inheritance 2 Weeks Work (6 Lessons)	<ul style="list-style-type: none">• Define 'species', 'biodiversity' and 'heredity'• State that all organisms show variation, both within a species and between species• State that all genetic information is inherited• Describe how variation is caused by inherited and environmental factors• State that, due to variation, some organisms can compete more successfully• Describe how more successful competition can result in extinction• Describe how gene banks may be used to maintain biodiversity• Describe the structure of DNA• Describe, in detail, the role of DNA, genes and chromosomes in heredity• Discuss the roles of Watson & Crick, Wilkins and Franklin in the discovery and development of the DNA model• Explain the difference between continuous and discontinuous variation• Explain how environmental pressures can drive natural selection and lead to evolution	

Route 99	State that all organisms show variation, both within and between species	State that all genetic information is inherited	Define 'species', 'biodiversity' and 'heredity'	Describe how variation is caused by inherited and environmental factors	State that, due to variation, some organisms compete more successfully	Describe how more successful competition can result in extinction	Describe how gene banks may be used to maintain biodiversity	Describe the structure of DNA	Describe the role of DNA, genes and chromosomes in heredity	Discuss the roles of Watson & Crick, Wilkins and Franklin in the discovery and development of the DNA model	Explain the difference between continuous and discontinuous variation	Explain how environmental pressures can drive natural selection and lead to evolution
Route 87	State that all organisms show variation, both within and between species	State that all genetic information is inherited	Define 'species', 'biodiversity' and 'heredity'	Describe how variation is caused by inherited and environmental factors	State that, due to variation, some organisms compete more successfully	Describe how more successful competition can result in extinction	Describe how gene banks may be used to maintain biodiversity	Describe the structure of DNA	Describe the role of DNA, genes and chromosomes in heredity	Discuss the roles of Watson & Crick, Wilkins and Franklin in the discovery and development of the DNA model	Explain the difference between continuous and discontinuous variation	Explain how environmental pressures can drive natural selection and lead to evolution
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