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Evolution of the Virus: Teaching Macroevolution through Microevolution

Guide for Curriculum Unit 09.05.04
by Paul M. Jones

This unit is for high-school biology students; its main objective is to teach evolution, using viruses and pathogens as the model. As many students are reluctant to accept human evolution given their religious beliefs, this unit focuses on evolution and natural selection while using viruses as the main example of an organism undergoing change. By using viruses as the target organism, this unit attempts to disarm reluctant learners by showing evolution happening over the short term as a demonstration for how more complex organisms evolved over time. Student lessons focus on various viral structures, geologic time scale, and a hands-on activity to enforce the mechanism of natural selection on micro-organisms. The overview offers a synopsis of evolution and virology concepts.

(Recommended for Biology, grades 9-11)

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