Instructional Unit Title: Matter and Energy in an Ecosystem

Science
High School – Environmental Science

PERFORMANCE ASSESSMENT: You are a consultant with an Environmental Firm asked to make a recommendation to a community stakeholder panel about land-use practices (cattle production versus chicken production versus corn production, etc.) in a least disruptive location. You must make a data-based argument for land-use with regards to transfer of energy within a local ecosystem which serves a community’s food-production needs. You will argue a preferred location and food-production practice, reference efficiency of energy between trophic levels, and discuss potential consequences of your choice. You must determine what data will be needed, collected and analyzed, to provide evidence for your reasoning, and report your findings using text, graphs and data tables. You can present your findings in a mode of your choice (video, formal written report, Public Service Announcement, etc.)

This unit was authored by a team of Colorado educators. The unit is intended to support teachers, schools, and districts as they make their own local decisions around the best instructional plans and practices for all students. To see the entire instructional unit sample with possible learning experiences, resources, differentiation, and assessments visit [http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples](http://www.cde.state.co.us/standardsandinstruction/instructionalunitsamples).