

## **Questions of Sustainability: Paper vs Plastic, Meat vs Plant-Based Diets, and Gas-Powered vs Electric Cars**

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Sustainability is a term students hear quite often, yet they may not know exactly what it means for something to be sustainable. This is because the definition of sustainability is inherently subject to an individual's or culture's value system. What is sustainable in the US may not be sustainable in Costa Rica. However, quantitative data can be used to cut through the subjectivity of sustainability and provide hard evidence for the sustainable choice. In this unit designed for AP Environmental Science (APES), students attempt to answer three major questions in environmental science: 1) is it more sustainable to use paper or plastic? 2) is it more sustainable to eat a meat or plant-based diet? and 3) is it more sustainable to drive a gas-powered or electric car? Students obtain, evaluate, and communicate information related to these questions. They analyze and interpret relevant data and think mathematically to begin answering these questions. Finally, they write evidence-based arguments on which choice is the more sustainable one. This unit covers portions of the following APES topics: Land and Water Use, Energy Resources and Consumption, Aquatic and Terrestrial Pollution, and Global Change.