SUGGESTED SKILL

Concept Explanation

1.B

Explain environmental concepts and processes.

AVAILABLE RESOURCES

- Classroom Resource > **AP Environmental Science Teacher's Guide**
- External Resource > **Environmental Literacy Council's AP Environmental Science Course Material**
- Classroom Resource > **An Energy Primer for the AP Environmental Science**
- Classroom Resource > **Outdoor Education Experiences and AP Environmental Science**
- The Exam > Chief Reader Report (**2018, Q3**, **2017, Q1**)
- The Exam > Samples and Commentary (**2018, Q3**, **2017, Q1**)

TOPIC 1.9
Trophic Levels

Required Course Content

ENDURING UNDERSTANDING

ENG-1

Energy can be converted from one form to another.

LEARNING OBJECTIVE

ENG-1.B

Explain how energy flows and matter cycles through trophic levels.

ESSENTIAL KNOWLEDGE

ENG-1.B.1

All ecosystems depend on a continuous inflow of high-quality energy in order to maintain their structure and function of transferring matter between the environment and organisms via biogeochemical cycles.

ENG-1.B.2

Biogeochemical cycles are essential for life and each cycle demonstrates the conservation of matter.

ENG-1.B.3

In terrestrial and near-surface marine communities, energy flows from the sun to producers in the lowest trophic levels and then upward to higher trophic levels.