

TOPIC 1.4

The Carbon Cycle

Required Course Content

ENDURING UNDERSTANDING

ERT-1

Ecosystems are the result of biotic and abiotic interactions.

LEARNING OBJECTIVE

ERT-1.D

Explain the steps and reservoir interactions in the carbon cycle.

ESSENTIAL KNOWLEDGE

ERT-1.D.1

The carbon cycle is the movement of atoms and molecules containing the element carbon between sources and sinks.

ERT-1.D.2

Some of the reservoirs in which carbon compounds occur in the carbon cycle hold those compounds for long periods of time, while some hold them for relatively short periods of time.

ERT-1.D.3

Carbon cycles between photosynthesis and cellular respiration in living things.

ERT-1.D.4

Plant and animal decomposition have led to the storage of carbon over millions of years. The burning of fossil fuels quickly moves that stored carbon into atmospheric carbon, in the form of carbon dioxide.

SUGGESTED SKILL

 *Visual Representations*

2.B

Explain relationships between different characteristics of environmental concepts, processes, or models represented visually:

- In theoretical contexts
- In applied contexts



AVAILABLE RESOURCES

- Classroom Resource > [AP Environmental Science Teacher's Guide](#)
- External Resource > [Environmental Literacy Council's AP Environmental Science Course Material](#)
- Classroom Resource > [Outdoor Education Experiences and AP Environmental Science](#)
- The Exam > [Chief Reader Report 2018, Q1](#)
- The Exam > [Student Performance Q&A 2014, Q4](#)
- The Exam > [Samples and Commentary \(2018, Q1, 2014, Q4\)](#)