


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 > [Agriculture and the Nitrogen Cycle](#)
- Classroom Resource > [AP Environmental Science Teacher's Guide](#)
- External Resource > [Environmental Literacy Council's AP Environmental Science Course Material](#)
- Classroom Resource > [Ecology](#)
- Classroom Resource > [Nitrogen Cycling in Ecosystems](#)
- The Exam > Chief Reader Report (2018, Q1, 2017, Q1)
- The Exam > Samples and Commentary (2018, Q1, 2017 Q1)

TOPIC 1.5

The Nitrogen Cycle

Required Course Content

ENDURING UNDERSTANDING

ERT-1

Ecosystems are the result of biotic and abiotic interactions.

LEARNING OBJECTIVE

ERT-1.E

Explain the steps and reservoir interactions in the nitrogen cycle.

ESSENTIAL KNOWLEDGE

ERT-1.E.1

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

ERT-1.E.2

Most of the reservoirs in which nitrogen compounds occur in the nitrogen cycle hold those compounds for relatively short periods of time.

ERT-1.E.3

Nitrogen fixation is the process in which atmospheric nitrogen is converted into a form of nitrogen (primarily ammonia) that is available for uptake by plants and that can be synthesized into plant tissue.

ERT-1.E.4

The atmosphere is the major reservoir of nitrogen.