

Essentials of Science 3: Earth and Space Science

EARTH'S PLACE IN THE UNIVERSE ESS1

- 1 Evaluate evidence of the past and current movements of continental and oceanic crust and the theory of plate tectonics to explain the ages of crustal rocks. E-ESS1-5

EARTH'S SYSTEMS ESS2

- 1 Use evidence to argue how Earth's internal and external processes operate to form and modify continental and ocean-floor features throughout Earth's history. E-ESS2-1
- 2 Analyze data to make the claim that one change to Earth's surface can create feedback that causes changes to other Earth systems. E-ESS2-2
- 3 Develop a model based on evidence of Earth's interior that describes cycling of matter through convection processes. E-ESS2-3
- 4 Use a model to describe how causes of short and long-term variations in the flow of energy into and out of Earth's systems result in changes to 86 climate. E-ESS2-4
- 5 Investigate the ways that water (given its unique physical and chemical properties) impacts various Earth systems. E-ESS2-5
- 6 Communicate scientific information that illustrates how Earth's systems and life on Earth change and influence each other over time. E-ESS2-7

EARTH AND HUMAN ACTIVITY ESS3

- 1 Construct an explanation based on evidence for how the availability of natural resources and occurrence of natural hazards have influenced human activity. E-ESS3-1
- 2 Use computational representation to illustrate the relationships among the management of Earth's resources, the sustainability of human populations, and biodiversity. E-ESS3-3
- 3 Analyze data and the results from global climate models to make an evidence-based forecast of the current rate of regional or global climate change and associated future impacts to Earth's systems. E-ESS3-5
- 4 Use a computational representation to illustrate the relationships among Earth systems and how those relationships are being modified due to human activity. E-ESS3-6

5 Create an argument, based on evidence, that describes how changes in climate on Earth have affected human activity. E-ESS3-7