# **Grade Two**

The CA NGSS performance expectations for grade two organize themselves well around a unifying theme of California landscapes. The year introduces the shapes of the mountains, valleys, and coasts; plants and animals that live in them; the properties of the rocks and materials that make them up; and the forces that cause them to change. Table 3.5 shows an outline of four possible instructional segments to organize the year.

Table 3.5. Overview of Instructional Segments for Grade Two



# Landscape Shapes

Students represent landscapes with 3-D physical models and 2-D maps. They recognize patterns in the shapes and locations of landforms and water bodies. They ask questions about how these features formed.

# Landscape Materials

Students learn to describe differences in material properties. They explain how material properties can change, especially focusing on changes caused by changing temperature. Some of these changes can be reversed while others cannot. Students relate the properties of materials to how they can be used. Properties important to landscapes and landforms include the strength of materials and their ability to absorb water.



### **Landscape Changes**

Some changes on Earth occur quickly while others occur slowly. Students investigate several processes that sculpt landforms and then create engineering solutions that slow down those changes.



# Biodiversity in Landscapes

Different landscapes support different types and quantities of life. Students investigate the needs of plants and engineer models that mimic their pollination and seed dispersal structures. They then ask questions about how plant needs are met in the physical conditions of different habitats.

Source: M. d'Alessio; Giel 2007; Woelber 2012; Abbe 2005