

Name: _____

California and the Next Generation Science Standards (info from: <http://www.nextgenscience.org/get-to-know>)

California recently adopted a new set of science standards called the Next Generation Science Standards (**NGSS**), along with 25 other states. NGSS approaches science as a process for making sense of the natural world (as opposed to simply relaying science information), and treats learning as a progression so that children will receive a science foundation starting in kindergarten and then build upon that through all the grade bands. Each standard combines three dimensions: **Practices**, **Cross-Cutting Concepts**, and **Disciplinary Core Ideas**. The sense-making processes of science are embedded in the NGSS Practices, the Cross-Cutting Concepts link all the science domains, and the Disciplinary Core Ideas embody key concepts related to Physical Science, Life Science, Earth & Space Science, and Engineering, Technology, & Application of Science.

In today's lab you did activities related to the history of planet earth. The chart below shows the NGSS vision of how student ideas around this core idea would progress through the grade bands.

		→	→	→	→
Core Idea		K-2	3-5	6-8	9-12
ESS1.C	The history of planet Earth	Some events on Earth occur very quickly; others can occur very slowly.	Certain features on Earth can be used to order events that have occurred in a landscape	Rock strata and fossil record can be used as evidence to organize the relative occurrence of major historical events in Earth's history.	The rock record resulting from tectonic and other geoscience processes as well as objects from the solar system can provide evidence of Earth's early history and the relative ages of major geologic formations.

	Activity	Grade Band	Reasoning
1. Fill out the table to the right. At what level of student thinking was this core idea treated in each of today's activities?	Relative Time		
	Deep Time		

2. Let's say we want to use elements from the metaphor activity that you just completed (Deep Time) for a K-2 science lesson (DCI: **Some events on Earth occur very quickly; others can occur very slowly**). Look at the list of events on p.173. Find at least two events that would have occurred very quickly:

What about very slow events; does this activity deal with any slow events? Explain your thinking.