

K-12 Conceptual Vertical Articulation of the Crosscutting Concepts Overview

<b>Cross Cutting Concepts</b>	<b>K</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>B</b>	<b>C</b>	<b>P</b>	<b>E</b>
Patterns	•	•	•	•	•	•	•	•	•	•	•	•	•
Cause and Effect	•	•	•	•	•	•	•	•	•	•	•	•	•
Scale, Proportion, and Quantity				•		•	•	•	•	•			•
Systems and System Models	•	•	•	•	•	•	•	•	•	•	•	•	•
Energy and Matter		•			•	•	•	•		•	•	•	•
Structure and Function		•	•				•	•	•	•	•	•	
Stability and Change		•						•	•	•	•	•	•

Adapted from *The Framework for K-12 Science Education* and the *Next Generation Science Standards*.

**References:**

National Research Council. (2012). *A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas*. Washington, DC: The National Academies Press.

NGSS Lead States. (2013). *Next Generation Science Standards: For States, By States (Appendix G: Crosscutting Concepts)*. Retrieved from <https://www.nextgenscience.org/>