**April/May 2015 Correlations to the Next-Generation Science Standards**

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| **Article** | **NGSS** |
| **Left Life? Right Life? Chirality in Action** | |  | | --- | | **HS-LS1-6.**  Construct and revise an explanation based on evidence for how carbon, hydrogen, and oxygen from sugar molecules may combine with other elements to form amino acids and/or other large carbon-based molecules. |   **Crosscutting Concepts:**   * Cause and effect: Mechanism and explanation * Structure and Function * Systems and system models   **Science and Engineering Practices:**   * Developing and using models * Constructing explanations (for science) and designing solutions (for engineering)   **Nature of Science:**   * Scientific knowledge is based on empirical evidence. * Scientific knowledge assumes an order and consistency in natural systems. * Science addresses questions about the natural and material world. |
| **Parabens: A Source of Concern?** | |  | | --- | | **HS-ETS1-3.**  Evaluate a solution to a complex real-world problem based on prioritized criteria and tradeoffs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.  **Crosscutting Concepts:**   * Structure and Function * Stability and Change * Scale, proportion, and quantity   **Science and Engineering Practices**:   * Asking questions (for science) and defining problems (for engineering) * Constructing evidence (for science) and designing solutions (for engineering)   **Nature of Science**:   * Scientific knowledge is based on empirical evidence. * Scientific knowledge is open to revision in light of new evidence. | |
| **Smartphones, Smart Chemistry** | |  | | --- | | **HS-PS2-6.** Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.  **HS-ETS1-3.**  Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts. |   **Crosscutting Concepts:**   * Structure and Function * Systems and System Models   **Science and Engineering Practices:**   * Constructing evidence (for science) and designing solutions (for engineering)   **Nature of Science:**   * Science addresses questions about the natural and material world. |
| **Venoms: From Lethal to Life-Saving** | |  | | --- | | **HS-PS2-6.** Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.  **Crosscutting Concepts:**   * Cause and Effect * Structure and Function   **Science and Engineering Practices:**   * Developing and using models * Constructing evidence (for science) and designing solutions (for engineering)   **Nature of Science**:   * Science addresses questions about the natural and material world. | |
| **The Skinny on Fats** | |  | | --- | | **HS-LS1-2.**  Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. | | **Crosscutting Concepts:**   * Cause and effect: mechanism and explanation * Structure & Function   **Science and Engineering Practices**:   * Asking questions (for science) and defining problems (for engineering) * Analyzing and interpreting data * Using mathematics and computational thinking * Obtaining, evaluating, and communicating information   **Nature of Science**:   * Scientific knowledge is open to revision in light of new evidence. * Science addresses questions about the natural and material world. | |