**February/March 2018 Next Generation Science Standards Correlations**

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| **Article** | **NGSS** |
| **The Cool Chemistry of Dry Ice** | |  | | --- | | **HS-PS1-3.**  Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles. |   **Disciplinary Core Ideas:**   * PS1.A: Structure and Properties of Matter. * PS2.B Types of Interactions   **Crosscutting Concepts:**   * Patterns * Cause and effect: Mechanism and explanation * Structure and function   **Science and Engineering Practices:**   * Planning and Carrying Out Investigations * Obtaining, evaluating, and communicating information   **Nature of Science:**   * Scientific knowledge assumes an order and consistency in natural systems | |
| **Pathway to Pain Relief** | **HS-LS1-3**  Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.  **Disciplinary Core Ideas**:   * LS1.A: Structure and Function * PS1.B: Chemical reactions * ETS1.C: Optimizing the design solution   **Crosscutting Concepts:**   * Structure and Function * Stability and Change   **Science and Engineering Practices:**   * Asking questions (for science) and defining problems (for engineering)   **Nature of Science:**   * Scientific knowledge assumes an order and consistency in natural systems | |
| **Acidic Seas: How Carbon Dioxide is Changing the Oceans** | **HS-PS1-6.**  Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.  **Disciplinary Core Ideas**:   * PS1.A: Structure and Properties of Matter * PS1.B: Chemical reactions   **Crosscutting Concepts:**   * Cause and Effect * Systems and System Models * Stability and Change   **Science and Engineering Practices:**   * Planning and carrying out investigations * Constructing explanations and designing solutions   **Nature of Science:**   * Science models, laws, mechanisms, and theories explain natural phenomena | |
| **Eat the Wrapper—An Edible Solution for Wasteful Packaging** | |  | | --- | | **HS-ETS1-2.**  Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering. |   **Disciplinary Core Ideas:**   * PS1.A: Structure and Properties of Matter * ETS1.2: Optimizing the Design Solution   **Crosscutting Concepts:**   * Structure and function * Systems and System Models   **Science and Engineering Practices:**   * Asking Questions and Defining Problems   **Nature of Science:**   * Scientific knowledge is based on empirical evidence | |
| **Indigo: The “Blue” in Blue Jeans** | **HS-PS1-3.**  Plan and conduct an investigation to gather evidence to compare the structure of substances at the bulk scale to infer the strength of electrical forces between particles.  **HS-PS1-6.**  Refine the design of a chemical system by specifying a change in conditions that would produce increased amounts of products at equilibrium.  **Disciplinary Core Ideas**:   * PS1.A: Structure and Properties of Matter * ETS1.C: Optimizing the Design Solution   **Crosscutting Concepts:**   * Structure and function * Stability and Change   **Science and Engineering Practices**:   * Planning and Carrying Out Investigations * Constructing explanations and Designing Solutions   **Nature of Science**:   * Science investigations use a variety of methods | |