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

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| **Article** | **NGSS** |
| **The Cool Chemistry of Dry Ice** |

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| **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
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| **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
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| **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
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| **Eat the Wrapper—An Edible Solution for Wasteful Packaging** |

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| **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
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| **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
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