**December 2018/January 2019 Next Generation Science Standards Correlations**

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| **Article** | **NGSS** |
| **What’s Artificial Snow, and How is it Made?** |

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| **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. |

**Disciplinary Core Ideas:*** ETS1.A: Defining and Delimiting Engineering Problems
* PS1.A: Structure and Properties of Matter

**Crosscutting Concepts:** * Systems and System Models
* Structure and Function

**Science and Engineering Practices:** * Developing and using models
* 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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| **Rocking Shades in the Winter** | **HS-PS2-6**. Communicate scientific and technical information about why the molecular-level structure is important in the functioning of designed materials.**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
* Energy and Matter
* Stability and Change

**Science and Engineering Practices:** * Developing and using models
* Constructing explanations (for science) and designing solutions (for engineering)

**Nature of Science:** * Science models, laws, mechanisms, and theories explain natural phenomena
* Scientific knowledge assumes an order and consistency in natural systems
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| **‘Beeting’ Icy Roads**  | **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
* ETS1.C: Optimizing the Design Solution

**Crosscutting Concepts:** * Scale, Proportion, and Quantity
* Systems and System Models

**Science and Engineering Practices:** * Planning and carrying out investigations
* Constructing explanations (for science) and designing solutions (for engineering)

**Nature of Science:** * Science addresses questions about the natural and material world.
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| **Cupping: Harmless Fad or Sound Science?** |

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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
* ETS1.C: Optimizing the Design Solution

**Crosscutting Concepts:** * Patterns
* Structure and Function

**Science and Engineering Practices:** * Constructing explanations and designing solutions

**Nature of Science:** * Scientific knowledge assumes an order and consistency in natural systems.
* Science is a human endeavor.
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