**December 2017/January 2018 Next Generation Science Standards Correlations**

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| **Article** | **NGSS** |
| **Got Vitamin D?** |

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| **HS-LS1-4** Use a model to illustrate the role of cellular division (mitosis) and differentiation in producing and maintaining complex organisms. |

**Disciplinary Core Ideas:*** LS1.A: Structure and Function

**Crosscutting Concepts:** * Cause and effect: Mechanism and explanation
* Systems and system models
* Structure and function

**Science and Engineering Practices:** * Constructing explanations and designing solutions
* Obtaining, evaluating, and communicating information

**Nature of Science:** * Scientific knowledge assumes an order and consistency in natural systems
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| **Cheesy Science!** | **HS-PS1-5.**Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.**Disciplinary Core Ideas**:* PS1.A: Structure and properties of matter
* PS1.B: Chemical reactions

**Crosscutting Concepts:** * Scale, proportion, and quantity

**Science and Engineering Practices:** * Asking questions (for science) and defining problems (for engineering)
* Analyzing and interpreting data

**Nature of Science:** * Scientific knowledge assumes an order and consistency in natural systems
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| **Drained: The Search for Long Lasting Batteries** |

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| **HS-PS1-5.**Apply scientific principles and evidence to provide an explanation about the effects of changing the temperature or concentration of the reacting particles on the rate at which a reaction occurs.**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.B: Chemical reactions
* ETS1.C: Optimizing the design solution

**Crosscutting Concepts:** * Cause and Effect
* Systems and System Models
* Energy and Matter

**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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| **Teens and Depression** |

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| **HS-LS1-2** Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms. |

**Disciplinary Core Ideas:*** LS1.A: Structure and Function

**Crosscutting Concepts:** * Cause and effect: Mechanism and explanation
* Structure and function
* Stability and change

**Science and Engineering Practices:** * Constructing explanations and designing solutions
* Obtaining, evaluating, and communicating information

**Nature of Science:** * Scientific knowledge is based on empirical evidence
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| **The Write Stuff: The Fascinating Chemistry of Pencils** | **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
* Structure and function

**Science and Engineering Practices**: * Developing and using models
* Obtaining, evaluating, and communicating information

**Nature of Science**: * Science addresses questions about the natural and material world
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