**February/March 2019 Next Generation Science Standards Correlations**

|  |  |
| --- | --- |
| **Article** | **NGSS** |
| **Making Sense of Milk** |

|  |
| --- |
| **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.**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:*** LS1.A: Structure and Function
* ETS1.C: Optimizing the Design Solution

**Crosscutting Concepts:** * Structure and Function

**Science and Engineering Practices:** * Constructing explanations and designing solutions
* Asking questions (for science) and defining problems (for engineering)

**Nature of Science:** * Science addresses questions about the natural and material world
 |
| **What’s Sunless Tanner?** | **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 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**:* PS1.A: Structure and Properties of Matter
* ETS1.C: Optimizing the design solution

**Crosscutting Concepts:** * Cause and Effect
* Structure and Function
* Energy and Matter
* Stability and Change

**Science and Engineering Practices:** * Planning and carrying out investigations
* 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
 |
| **The Periodic Table Turns 150**  | **HS-PS1-1**Use the periodic table as a model to predict the relative properties of elements based on the patterns of electrons in the outermost energy level of atoms.**HS-PS1-2** Construct and revise an explanation for the outcome of a simple chemical reaction based on the outermost electron states of atoms, trends in the periodic table, and knowledge of the patterns of chemical properties.**Disciplinary Core Ideas**:* PS1.A: Structure and Properties of Matter

**Crosscutting Concepts:** * Patterns
* Stability and Change

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

**Nature of Science:** * Science addresses questions about the natural and material world.
 |
| **Clean & Green** |

|  |
| --- |
| **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-ESS3-4**Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. |

**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

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