

**April/May 2014 Next Generation Science Standards Correlations**

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| **Article** | **NGSS** |
| **(Under)Arm Yourself with Chemistry!**  |

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| **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. |

**Crosscutting Concepts:** * Patterns
* Structure & Function

**Science and Engineering Practices:** * Constructing Explanations and Designing Solutions

**Nature of Science:** Scientific knowledge is based on empirical evidence. |
| **A Solar Future** |

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| **HS-PS3-3**Design, build, and refine a device that works within given constraints to convert one form of energy into another form of energy.**HS-ETS1-3.**Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.**Crosscutting Concepts:** * Energy & Matter

**Science and Engineering Practices**: * Constructing Explanations and Designing Solutions

**Nature of Science**: Many decisions are **not** made using science alone, but rely o social and cultural contexts to resolve issues. |

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| **Skin Color: A Question of Chemistry**  |

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| **HS-LS4-4.** Construct an explanation based on evidence for how natural selection leads to adaptation of populations. |

**Crosscutting Concepts:** * Cause and Effect
* Structure and Function

**Science and Engineering Practices:** * Constructing Explanations and Designing Solutions

**Nature of Science:** Scientific knowledge has a history that includes refinement of, and changes to, theories, ideas, and beliefs over time. |
| **Sinkholes: Chemistry Goes Deep** |

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| **HS-ESS2-2.**Analyze geoscience data to make the claim that one change to Earth’s surface can create feedbacks that cause changes to other Earth systems.**Crosscutting Concepts:** * Cause and Effect
* Stability and Change

**Science and Engineering Practices:** * Analyzing and Interpreting Data
* Constructing Explanations and Designing Solutions

**Nature of Science**: Scientific knowledge is based on the assumption that natural laws operate today as they did in the past and will continue to do so in the future. |

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| **Nail Polish: Cross-Linked Color on the Move**  |

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| **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. |
| **Crosscutting Concept:** * Patterns
* Structure & Function

**Science and Engineering Practices**: * Constructing Explanations and Designing Solutions

**Nature of Science**: New technologies advance scientific knowledge. |

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