**April/May 2018 Next Generation Science Standards Correlations**

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| **Article** | **NGSS** |
| **The Protein Myth: Getting the Right Balance** | |  | | --- | | **HS-LS1-3**  Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis. |   **Disciplinary Core Ideas:**   * LS1.A: Structure and Function   **Crosscutting Concepts:**   * Energy and Matter * Structure and function   **Science and Engineering Practices:**   * Obtaining, evaluating, and communicating information   **Nature of Science:**   * Scientific knowledge assumes an order and consistency in natural systems | |
| **The Story Behind Defective Airbags** | **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.B: Chemical Reactions * ETS1.C: Optimizing the design solution   **Crosscutting Concepts:**   * Stability and Change * Energy and Matter   **Science and Engineering Practices:**   * Constructing explanations (for science) and designing solutions (for engineering)   **Nature of Science:**   * Scientific knowledge is based on empirical evidence | |
| **The Future of Water** | **HS-ETS1-1.**  Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.  **Disciplinary Core Ideas**:   * PS1.A: Structure and Properties of Matter * ETS1.B: Developing Possible Solutions   **Crosscutting Concepts:**   * Scale, Proportion, and Quantity * Systems and System Models * Energy and Matter   **Science and Engineering Practices:**   * Developing and using models * Planning and carrying out investigations   **Nature of Science:**   * Science addresses questions about the natural and material world. | |
| **Toxic Shorelines: The Science of Algal Blooms** | |  | | --- | | **HS-ESS3-4**.  Evaluate or refine a technological solution that reduces impacts of human activities on natural systems. |   **Disciplinary Core Ideas:**   * ESS3.C: Human Impacts on Earth Systems * ETS1.2: Optimizing the Design Solution   **Crosscutting Concepts:**   * Cause and Effect * Stability and Change * Systems and System Models   **Science and Engineering Practices:**   * Analyzing and interpreting data * Constructing explanations and designing solutions   **Nature of Science:**   * Science is a human endeavor. | |

***Note:*** **Common Core State Standards** Connections for all articles

**RST.9-10.1:** Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.

**RST.9-10.2:** Determine the central ideas or conclusions of a text; trace the text's explanation or depiction of a complex process, phenomenon, or concept; provide an accurate summary of the text.

**RST.9-10.8**: Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem.

**RST.11-12.1:** Cite specific textual evidence to support analysis of science and technical texts, attending to important distinctions the author makes and to any gaps or inconsistencies in the account.

**RST.11-12.2:** Determine the central ideas or conclusions of a text; summarize complex concepts, processes, or information presented in a text by paraphrasing them in simpler but still accurate terms.

**RST.11-12.6**: Analyze the author's purpose in providing an explanation, describing a procedure, or discussing an experiment in a text, identifying important issues that remain unresolved.

***In addition***, the teacher could assign writing to include the following **Common Core State Standards**:

**WHST.9-10.1B:** Develop claim(s) and counterclaims fairly, supplying data and evidence for each while pointing out the strengths and limitations of both claim(s) and **counterclaims** in a discipline-appropriate form and in a manner that anticipates the audience’s knowledge level and concerns.

**WHST.9-10.2:** Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

**WHST.9-10.2F**: Provide a concluding statement or section that follows from and supports the information or explanation presented (e.g., articulating implications or the significance of the topic).

**WHST.11-12.1.A:** Introduce precise, knowledgeable claim(s), establish the significance of the claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that logically sequences the claim(s), counterclaims, reasons, and evidence.

**WHST.11-12.2:**  Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.

**WHST.11-12.2E:** Provide a concluding statement or section that follows from or supports the argument presented.