Promoting Interdisciplinary Education-***Giving Our Students a Piece of the PIE***

**Horizontal Alignment between science and math practices and reading and writing targets**

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| Science  Practices | Math  Standards for mathematical practice | English Language Arts  Claim 1& 2 Targets (SBAC) |
| **S1. Asking questions and defining problems** | **M1. Make sense of problems and persevere in solving them** | **Key details, Central Ideas, Word Meanings, Reasoning & Evaluation, Analysis within and Across text** |
| **S2. Developing and using models** | **M4. Model with mathematics** | **Text Structures (description, sequence, cause & effect, proposition & support) and features (tables, charts, diagrams…)**  **Analysis within and Across text** |
| **S3. Planning and carrying out investigations** | **M3. Construct viable arguments and critique the reasoning of others**  **M1. Make sense of problems and persevere in solving them** | **Central Ideas, Word Meanings, Reasoning & Evaluation, and Text Structures (description, sequence, problem/solution)** |
| **S4. Analyzing and interpreting data** | **M2. Reason abstractly and quantitatively** | **Analysis within and Across text, Reasoning & Evaluation**  **Text Structures (compare/contrast, cause/effect, sequence) and Features (tables, charts, graphs, diagrams…)** |
| **S5. Using Mathematics and computational thinking** | **M2. Reason abstractly and quantitatively**  **M4. Model with mathematics**  **M5. Use appropriate tools strategically**  **M6. Attend to precision**  **M7. Look for and make use of structure**  **M8. Look for and express regularity in repeated reasoning** | **Reasoning and Evaluation**  **Text Structures (description, sequencing, compare/contrast, proposition/support) and features (tables, charts, graphs, diagrams, maps)** |
| **S6. Constructing explanations and designing solutions** | **M3. Construct viable arguments and critique the reasoning of others** | **Word Meanings, Reasoning and Evaluation, Language Use (point of view, critique text), Text Structures (description sequence, cause/effect, proposition/support, compare/contrast)**  **Informative/Explanatory Writing** |
| **S7. Engaging in argument from evidence** | **M3. Construct viable arguments and critique the reasoning of others** | **Key Details, Central Ideas, Word Meanings**  **Reasoning & Evaluation**  **Analysis within and across text, language use (point of view, critique text), Text Structures (proposition/support)**  **Opinion/Argumentative writing** |
| **S8. Obtaining, evaluating, and communicating information** | **M2. Reason abstractly and quantitatively**  **M3. Construct viable arguments and critique the reasoning of others** | **Key Ideas and & details, Central Ideas, Word Meanings, Language Use (point of view, critique text), Text Structure (Compare/Contrast, proposition/support) and features (tables, charts, graphs…) Reasoning and Evaluating, Analysis within and across text**  **Informative/Explanatory Writing** |

**(Source: A Framework for K-12 Science Education: Practices, Crosscutting Concepts and Core Ideas (NRC 2011, CCSSs 2010) 2017-Collaborative work by Bloomfield High School’s ELA, Math, Social Studies, World Language, CTE, & Visual Arts Departments and Director of Literacy**