# Appendix B: Opportunities to Apply the Standards for Mathematical Practice and the Science and Engineering Practices in the 2016 DLCS Curriculum Framework

|  | **Mathematics Practices** | **Science & Engineering Practices** |
| --- | --- | --- |
| **DLCS Strands** | **Application Opportunities** | **Practices Addressed** | **Application Opportunities** | **Practices Addressed** |
| Computing & Society | 28 | 3/8 | 64 | 5/8 |
| Digital Tools & Collaboration | 38 | 4/8 | 55 | 6/8 |
| Computing Systems | 42 | 4/8 | 50 | 5/8 |
| Computational Thinking | 139 | 8/8 | 222 | 8/8 |
| Total | 247 |  | 391 |  |

**Standards for Mathematical Practice**

1. Make sense of problems and persevere in solving them
2. Reason abstractly and quantitatively
3. Construct viable arguments and critique the reasoning of others
4. Model with mathematics
5. Use appropriate tools strategically
6. Attend to precision
7. Look for and make use of structure
8. Look for and express regularity in repeated reasoning

**Science and Engineering Practices for Grades 9-12**

1. Asking Questions and Defining Problems
2. Developing and Using Models
3. Planning and Carrying Out Investigations
4. Analyzing and Interpreting Data
5. Using Mathematics and Computational Thinking
6. Constructing Explanations and Designing Solutions
7. Engaging in Argument from Evidence
8. Obtaining, Evaluating, and Communicating Informatio