Commonalities Among the Practices in Science, Mathematics, and English Language Arts

**Math**
- M1: Make sense of problems and persevere in solving them
- M2: Reason abstractly & quantitatively
- M6: Attend to precision
- M7: Look for & make use of structure
- M8: Look for & make use of regularity in repeated reasoning

**Science**
- S1: Ask questions and define problems
- S2: Develop & use models
- S3: Plan & carry out investigations
- S4: Analyze & interpret data
- S5: Use mathematics & computational thinking
- S6: Construct explanations & design solutions

**ELA**
- E1: Demonstrate independence in reading complex texts, and writing and speaking about them
- E2: Build a strong base of knowledge through content rich texts
- E3: Obtain, synthesize, and report findings clearly and effectively in response to task and purpose
- E4: Construct viable arguments and critique reasoning of others
- E5: Read, write, and speak grounded in evidence
- E6: Use technology & digital media strategically & capably
- E7: Come to understand other perspectives and cultures through reading, listening, and collaborations
- E8: Obtain, evaluate, & communicate information

Based on work by Tina Chuek ell.stanford.edu
### Practices in Mathematics, Science, and English Language Arts*

<table>
<thead>
<tr>
<th>Math</th>
<th>Science</th>
<th>English Language Arts</th>
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<tbody>
<tr>
<td>M1.  Make sense of problems and persevere in solving them.</td>
<td>S1.  Asking questions (for science) and defining problems (for engineering).</td>
<td>E1.  They demonstrate independence.</td>
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<tr>
<td>M3.  Construct viable arguments and critique the reasoning of others.</td>
<td>S3.  Planning and carrying out investigations.</td>
<td>E3.  They respond to the varying demands of audience, task, purpose, and discipline.</td>
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* The Common Core English Language Arts uses the term “student capacities” rather than the term “practices” used in Common Core Mathematics and the Next Generation Science Standards.