

Math

Science

- 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

- M4:** Models with mathematics
- S2:** Develop & use models
- S5:** Use mathematics & computational thinking

- S1:** Ask questions and define problems
- S3:** Plan & carry out investigations
- S4:** Analyze & interpret data
- S6:** Construct explanations & design solutions

- E6:** Use technology & digital media strategically & capably
- M5:** Use appropriate tools strategically

- E2:** Build a strong base of knowledge through content rich texts
- E5:** Read, write, and speak grounded in evidence
- M3 & E4:** Construct viable arguments and critique reasoning of others
- S7:** Engage in argument from evidence

- S8:** Obtain, evaluate, & communicate information
- E3:** Obtain, synthesize, and report findings clearly and effectively in response to task and purpose

- E1:** Demonstrate independence in reading complex texts, and writing and speaking about them
- E7:** Come to understand other perspectives and cultures through reading, listening, and collaborations

ELA

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

Based on work by Tina Chuek ell.stanford.edu

Practices in Mathematics, Science, and English Language Arts*

Math	Science	English Language Arts
<p>M1. Make sense of problems and persevere in solving them.</p> <p>M2. Reason abstractly and quantitatively.</p> <p>M3. Construct viable arguments and critique the reasoning of others.</p> <p>M4. Model with mathematics.</p> <p>M5. Use appropriate tools strategically.</p> <p>M6. Attend to precision.</p> <p>M7. Look for and make use of structure.</p> <p>M8. Look for and express regularity in repeated reasoning.</p>	<p>S1. Asking questions (for science) and defining problems (for engineering).</p> <p>S2. Developing and using models.</p> <p>S3. Planning and carrying out investigations.</p> <p>S4. Analyzing and interpreting data.</p> <p>S5. Using mathematics, information and computer technology, and computational thinking.</p> <p>S6. Constructing explanations (for science) and designing solutions (for engineering).</p> <p>S7. Engaging in argument from evidence.</p> <p>S8. Obtaining, evaluating, and communicating information.</p>	<p>E1. They demonstrate independence.</p> <p>E2. They build strong content knowledge.</p> <p>E3. They respond to the varying demands of audience, task, purpose, and discipline.</p> <p>E4. They comprehend as well as critique.</p> <p>E5. They value evidence.</p> <p>E6. They use technology and digital media strategically and capably.</p> <p>E7. They come to understanding other perspectives and cultures.</p>

* 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.