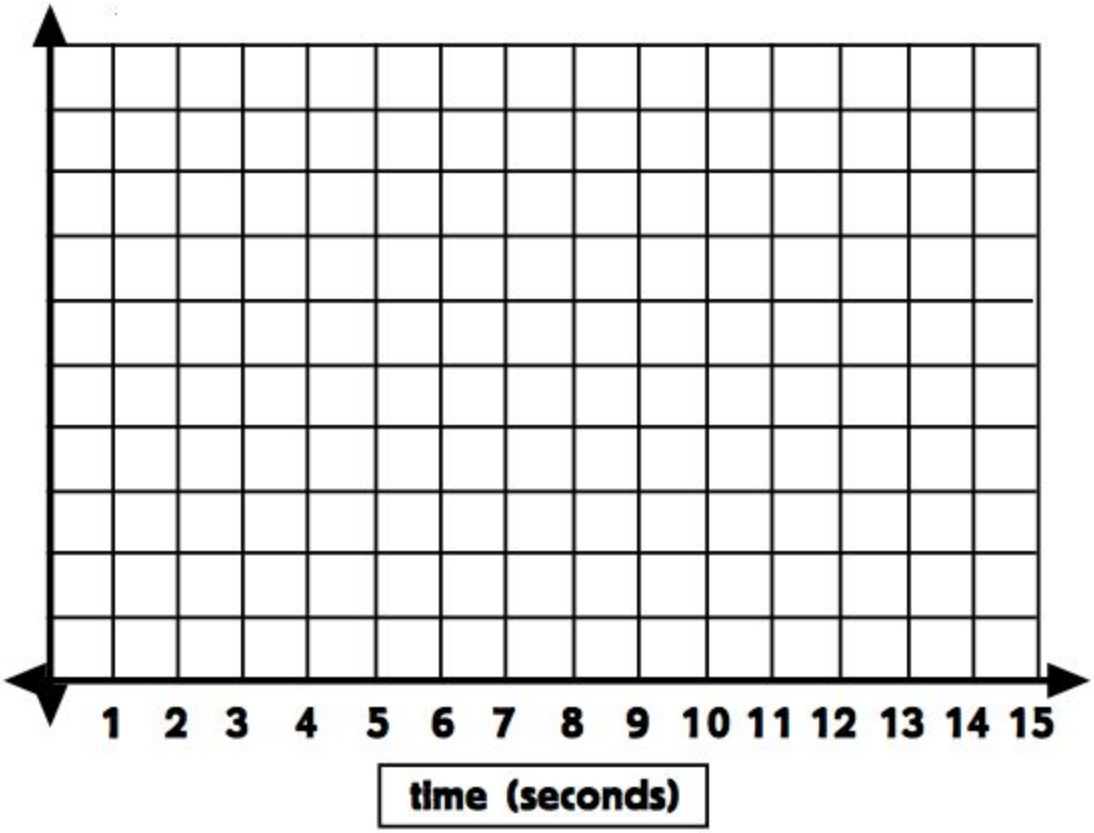
Practices in Mathematics, Science, and English Language Arts*

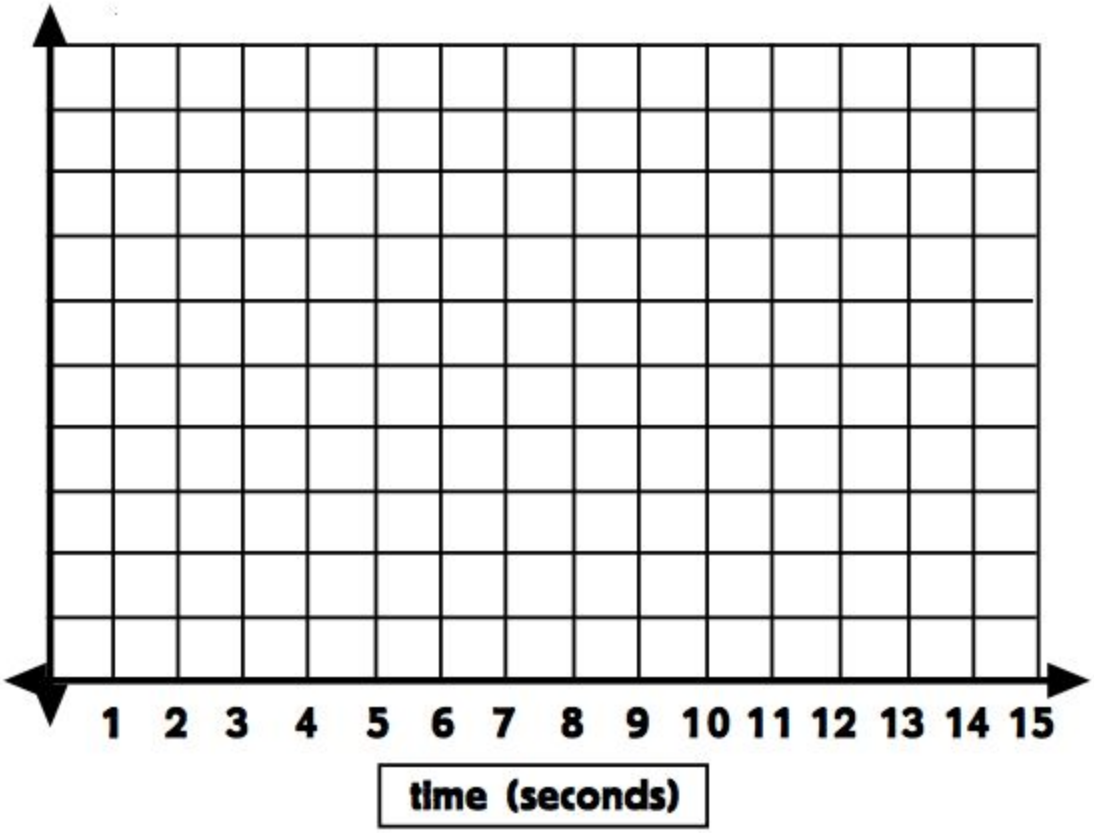
Math	Science	English Language Arts
M1. Make sense of problems and persevere in solving them.	**S1.** Asking questions (for science) and defining problems (for engineering).	**E1.** They demonstrate independence.
M2. Reason abstractly and quantitatively.	**S2.** Developing and using models.	**E2.** They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

* 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.

NGSS@NSTA
STEM STARTS HERE



Math or Science Practice	Evidence



Math or Science Practice	Evidence

	Students are:	Individual (1T-1S)	Evidence	Group (Peer-Peer)	Evidence
1a	Make sense of problems				
1b	Persevere in solving them				
2	Reason abstractly and quantitatively				
3a	Construct viable arguments				
3b	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				