

# STEM 101 - Physics 101

## NGSS/NM STEM Ready

Domain	Disciplinary Core Ideas	Performance Expectation
Physics	Motion and Stability: Forces and Interactions	3-PS2-1,3-PS2-2, MS-PS2-1,MS-PS2-2
Engineering, Technology, and Application of Science	Engineering Design	3-5-ETS1-1,3-5-ETS1-2,3-5-ETS1-3, MS-ETS1-3, MS-ETS1-4

## NGSS Crosscutting Concepts

Patterns of change can be used to make predictions.	3-PS2-2
Cause and effect relationships are routinely identified.	3-PS2-1
Explanations of stability and change in natural or designed systems can be constructed by examining the changes over time and forces at different scales.	MS-PS2-2
Influence of Engineering, Technology, and Science on Society and the Natural World—People’s needs and wants change over time, as do their demands for new and improved technologies.	3-5-ETS1-1
Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands.	3-5-ETS1-2

## Common Core Math

Domain	Standard
Operations and Algebraic Thinking	CCSS.Math.Content.3.OA.A.2,CCSS.Math.Content.3.OA.A.3,CCSS.Math.Content.3.OA.C.7, CCSS.Math.Content.4.OA.A.2
Numbers and Operations in Base Ten	CCSS.Math.Content.3.NBT.A.2,CCSS.Math.Content.3.NBT.A.3,CCSS.Math.Content.4.NBT.B.5,CCSS.Math.Content.4.NBT.B.6,CCSS.Math.Content.5.NBT.B.6
Numbers and Operations- Fraction	CCSS.Math.Content.3.NF.A.1,CCSS.Math.Content.5.NF.B.3,CCSS.Math.Content.5.NF.B.6
Measurement and Data	CCSS.Math.Content.4.MD.A.2
Ratios and Proportional Relationships	CCSS.Math.Content.6.RP.A.3.d,CCSS.Math.Content.7.RP.A.2.c
The Number System	CCSS.Math.Content.6.EE.A.2, CCSS.Math.Content.6.EE.B.5,CCSS.Math.Content.6.EE.B.6,CCSS.Math.Content.6.EE.B.7, CCSS.Math.Content.7.EE.B.4
Expressions and Equations	CCSS.Math.Content.7.EE.B.3,CCSS.Math.Content.7.EE.B.4
Statistics and Probability	CCSS.Math.Content.6.SP.B.5

**Common Core English Language Arts**

<b>Strand</b>	<b>Standard</b>
Writing	CCSS.ELA-Literacy.W.3.2,CCSS.ELA-Literacy.W.3.6,CCSS.ELA-Literacy.W.3.7,CCSS.ELA-Literacy.W.4.2,CCSS.ELA-Literacy.W.4.6,CCSS.ELA-Literacy.W.4.7,CCSS.ELA-Literacy.W.5.6,CCSS.ELA-Literacy.W.5.7, CCSS.ELA-Literacy.W.6.1,CCSS.ELA-Literacy.W.6.6,CCSS.ELA-
History/Social Studies Science in Technical Subjects	CCSS.ELA-Literacy.RST.6-8.3,CCSS.ELA-Literacy.RST.6-8.4

