

# Issues and Science Third Edition: Developed for the NGSS

## Projected Alignment for Units and Performance Expectations

### LIFE SCIENCE

Unit Title	Main Issue	Performance Expectations	Item Number
<b>Biomedical Engineering</b> (3 weeks)	<i>How can engineering be used to improve the lives of those living with medical conditions?</i>	ETS1-1, ETS1-2, ETS1-3, ETS1-4	SB: SMS-BIO-3SB Equip: SMS-BIO-3000
<b>Body Systems</b> (4 weeks)	<i>How do we know if a medicine is safe and effective?</i>	LS1-3, LS1-8, LS1-7	SB: SMS-BOD-3SB Equip: SMS-BOD-3000
<b>Ecology</b> (7 weeks)	<i>What are the effects of introduced species, and what can be done about them?</i>	LS2-1, LS2-2, LS2-3, LS2-4, LS2-5, LS1-6, LS1-7	SB: SMS-ECO-3SB Equip: SMS-ECO-3000
<b>Evolution</b> (5-6 weeks)	<i>How are people affected by and affecting evolution?</i>	LS3-1, LS4-1, LS4-2, LS4-3, LS4-4, LS4-5, LS4-6	SB: SMS-EVO-3SB Equip: SMS-EVO-3000
<b>From Cells to Organisms</b> (5-6 weeks)	<i>How should we prevent the spread of an infectious disease?</i>	LS1-1, LS1-2	SB: SMS-CEL-3SB Equip: SMS-CEL-3000
<b>Reproduction</b> (3-4 weeks)	<i>What are the ethical issues involved in using genetic information?</i>	LS1-4, LS1-5, LS3-1, LS3-2	SB: SMS-REP-3SB Equip: SMS-REP-3000

### EARTH SCIENCE

<b>Earth's Resources</b> (5 weeks)	<i>How is a growing human population affecting the availability of natural resources?</i>	ESS1-4, ESS3-1, ESS3-4	SB: SMS-RES-3SB Equip: SMS-RES-3000
<b>Geological Processes</b> (5-7 weeks)	<i>Where should we store nuclear waste?</i>	ESS2-1, ESS2-2, ESS2-3, ESS3-1, ESS3-2	SB: SMS-GEO-3SB Equip: SMS-GEO-3000
<b>Land, Water, and Human Interactions</b> (5-6 weeks)	<i>Which areas of Boomtown are the best choice for construction?</i>	ESS2-2, ESS2-4, ESS3-3, ETS1-1, ETS1-2	SB: SMS-IMP-3SB Equip: SMS-IMP-3000
<b>Solar System and Beyond</b> (5 weeks)	<i>What kind of future space missions should we fund and conduct?</i>	ESS1-1, ESS1-2, ESS1-3	SB: SMS-SPA-3SB Equip: SMS-SPA-3000
<b>Weather and Climate</b> (6-7 weeks)	<i>How does the weather affect people and how do people affect the climate?</i>	ESS2-5, ESS2-6, ESS3-5, ETS1-3, ETS1-4	SB: SMS-WEA-3SB Equip: SMS-WEA-3000

### PHYSICAL SCIENCE

<b>Chemical Reactions</b> (5-6 weeks)	<i>How do people use chemical reactions to solve problems?</i>	PS1-2, PS1-5, PS1-6	SB: SMS-REA-3SB Equip: SMS-REA-3000
<b>Chemistry of Materials</b> (6 weeks)	<i>What are the environmental impacts of producing, using, and disposing of materials?</i>	PS1-1, PS1-3, PS1-4	SB: SMS-MAT-3SB Equip: SMS-MAT-3000
<b>Energy</b> (6 weeks)	<i>How can people manipulate energy transfer and transformation to use energy more efficiently?</i>	PS3-3, PS3-4, PS3-5, MS-ETS1-4	SB: SMS-ENE-3SB Equip: SMS-ENE-3000
<b>Fields and Interactions</b> (5-6 weeks)	<i>How do different types of force fields help us design transportation?</i>	PS2-3, PS2-4, PS2-5, PS3-2, ETS1-1, ETS1-2, ETS1-3, ETS1-4*	SB: SMS-FIE-3SB Equip: SMS-FIE-3000
<b>Force and Motion</b> (5 weeks)	<i>How can we reduce the risk of motor vehicle accidents?</i>	PS2-1, PS2-2, PS3-1, ETS1-3, ETS1-4	SB: SMS-FOR-3SB Equip: SMS-FOR-3000
<b>Waves</b> (5 weeks)	<i>How are waves both helpful and harmful?</i>	PS4-1, PS4-2, PS4-3	SB: SMS-WAV-3SB Equip: SMS-WAV-3000

\* Expected release in 2019. Subject to change.