

Recommended Amplify Science sequence for Iowa Science Standards 6–8

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Grade 6

- Microbiome
- Metabolism
- Metabolism
Engineering Internship
- Traits & Reproduction
- Thermal Energy
- Chemical Reactions
- Plate Motion
- Plate Motion
Engineering Internship
- Rock Transformations

Grade 7

- Harnessing Human Energy
- Force & Motion
- Force & Motion
Engineering Internship
- Magnetic Fields
- Phase Change
- Phase Change
Engineering Internship
- Populations & Resources
- Matter & Energy in Ecosystems
- Earth, Moon, & Sun

Grade 8

- Geology on Mars
- Weather Patterns
- Ocean, Atmosphere & Climate
- Earth's Changing Climate
- Earth's Changing Climate
Engineering Internship
- Light Waves
- Natural Selection
- Natural Selection
Engineering Internship
- Evolutionary History

Notes from Suzy Loper:

- Because of the way the Lawrence Hall of Science grouped the Performance Expectations into units for Amplify Science, the strictest adherence to the Iowa sequence would result in too many units at 8th grade and too few at 7th grade. It would also inhibit a balance of having two Engineering Internships per grade. I therefore recommend moving Force and Motion and the Force and Motion Engineering Internship units to 7th grade, despite the fact that the standards they address are listed as 8th grade content in Iowa. This would enable a balanced number of units per grade level, and both Force and Motion and its Engineering Internship pair quite nicely with other units at that the 7th grade level (i.e. Harnessing Human Energy and Magnetic Fields).
- Note that this is a suggested sequence; the exact order of units in each respective grade level can be adjusted if desired.

Grade 6

PS1-1 Chemical Reactions
PS1-2 Chemical Reactions
PS1-4 Phase Change and Phase Change Engineering Internship **7**
PS1-5 Chemical Reactions
PS1-6 Chemical Reactions
ESS2-1 Rock Transformations
ESS2-2 Plate Motion
ESS2-3 Plate Motion
ESS3-1 Rock Transformations
ESS3-2 Plate Motion Engineering Internship
LS1-1 Microbiome, Metabolism and Traits & Reproduction
LS1-2 Metabolism and Traits & Reproduction
LS1-3 Metabolism
LS1-8 Metabolism
LS3-2 Traits & Reproduction
ETS1-1,1-2,1-3,1-4 Plate Motion Engineering Internship and Metabolism Engineering Internship

Key:

6
7
8

Denotes where a standard would be taught at a different grade than in the Iowa sequence.

Grade 7

PS2-3 Magnetic Fields
PS2-4 Magnetic Fields
PS2-5 Magnetic Fields
PS3-2 Harnessing Human Energy
PS3-4 Thermal Energy **6** and Phase Change
PS3-5 Harnessing Human Energy and Magnetic Fields
ESS1-1 Earth, Moon, & Sun
ESS1-2 Earth, Moon, & Sun
ESS1-3 Geology on Mars, Earth, Moon, & Sun
ESS1-4 Plate Motion **6**
LS1-4 Populations & Resources
LS1-5 Metabolism and Metabolism Engineering Internship **6**
LS1-6 Matter & Energy in Ecosystems
LS1-7 Metabolism **6** and Matter & Energy in Ecosystems
LS2-1 Populations & Resources
LS2-2 Populations & Resources
LS2-3 Matter & Energy in Ecosystems
LS2-4 Populations & Resources and Matter & Energy in Ecosystems
LS3-1 Traits & Reproduction **6**
ETS1-1,1-2,1-3,1-4 Force and Motion Engineering Internship and Phase Change Engineering Internship

Grade 8

PS1-3 Chemical Reactions **6**
PS2-1 Force and Motion **7**
PS2-2 Force and Motion **7**
PS3-1 Harnessing Human Energy **7**
PS3-3 Thermal Energy **6** and Phase Change Engineering Internship **7**
PS4-1 Light Waves
PS4-2 Light Waves
PS4-3 Light Waves
ESS2-4 Geology on Mars, Weather Patterns and Ocean, Atmosphere & Climate
ESS2-5 Weather Patterns
ESS2-6 Ocean, Atmosphere & Climate
ESS3-3 Earth's Changing Climate and Earth's Changing Climate Engineering Internship
ESS3-4 Earth's Changing Climate
ESS3-5 Earth's Changing Climate, Light Waves
LS2-5 Populations & Resources, Matter & Energy in Ecosystems
LS4-1 Evolutionary History
LS4-2 Evolutionary History
LS4-3 Evolutionary History
LS4-4 Natural Selection and Natural Selection Engineering Internship
LS4-5 Traits & Reproduction **6**
LS4-6 Natural Selection
ETS1-1,1-2,1-3,1-4 Earth's Changing Climate Engineering Internship and Natural Selection Engineering Internship