

Year at a glance

Units per year

K-2 **3** 3-5 **4**

Unit types

Although every Amplify Science unit provides a three-dimensional learning experience, each unit emphasizes one of the following specific science and engineering practices.

Investigation

Investigation units focus on the process of strategically developing investigations and gathering data to answer questions. Students are first asked to consider questions about what happens in the natural world and why, and are then involved in designing and conducting investigations that produce data to help answer those questions.

Modeling

These Amplify Science units provide extra support to students engaging in the practice of modeling. Students use physical models, investigate with computer models, and create their own diagrams to help them visualize what might be happening on the nanoscale.

Engineering design

Engineering design solves complex problems by applying science principles to the design of functional solutions, and iteratively testing those solutions to determine how well they meet pre-set criteria. All Amplify Science engineering design units are structured to make the development of such solutions the central focus.

Argumentation (grades 3–5)

These Amplify Science units provide extra support to students engaging in the practice of argumentation. As students move up the K–5 grades, they focus on important aspects of argumentation in an intentional sequence.

Course structure

Key

- | | |
|------------------------|-----------------------------|
| A Argumentation | E Engineering design |
| I Investigation | M Modeling |

Kindergarten (66 lessons)

Needs of Plants and Animals 22 lessons **I**

Pushes and Pulls 22 lessons **E**

Sunlight and Weather 22 lessons **M**

Grade 1 (66 lessons)

Animal and Plant Defenses 22 lessons **M**

Light and Sound 22 lessons **E**

Spinning Earth 22 lessons **I**

Grade 2 (66 lessons)

Plant and Animal Relationships 22 lessons **I**

Properties of Materials 22 lessons **E**

Changing Landforms 22 lessons **M**

Grade 3 (88 lessons)

Balancing Forces 22 lessons **M**

Inheritance and Traits 22 lessons **I**

Environments and Survival 22 lessons **E**

Weather and Climate 22 lessons **A**

Grade 4 (88 lessons)

Energy Conversions 22 lessons **E**

Vision and Light 22 lessons **I**

Earth's Features 22 lessons **A**

Waves, Energy, and Information 22 lessons **M**

Grade 5 (88 lessons)

Patterns of Earth and Sky 22 lessons **I**

Modeling Matter 22 lessons **M**

The Earth System 26 lessons **E**

Ecosystem Restoration 22 lessons **A**