



**4th Grade Science  
Year at a Glance (YAG)  
2020-2021**



First Semester	Second Semester
<p><b>1st Nine Weeks – 42 days</b> (August 17<sup>th</sup> – October 14<sup>th</sup>) <i>September 7<sup>th</sup> – Labor Day School Holiday</i> <i>October 12<sup>th</sup> – Staff Development Student Holiday</i></p>	<p><b>3rd Nine Weeks – 43 days</b> (January 4<sup>th</sup> – March 5<sup>th</sup>) <i>January 18<sup>th</sup> – MLK Day School Holiday</i> <i>February 15<sup>th</sup> – President’s Day Staff Dev./Student Holiday</i> <i>March 8<sup>th</sup> – 12<sup>th</sup> Spring Break</i></p>
<p><b>Intro: Processes for Scientific Investigations (2 days)</b> <a href="#">Introducción: Procesos para investigaciones científicas</a> This unit allows for the establishment of science procedures, including safety and notebooking. 4.1A, 4.1B, 4.2A B C D E F, 4.3A, 4.3B, 4.3C, 4.4A</p> <p><b>Unit 01: Investigating Physical Properties of Matter (15 days)</b> <a href="#">Investigando las propiedades físicas de la materia</a> <b>Scope 4.5A</b> Students examine measurable physical properties and how those properties determine how matter is classified, changed, and used. 4.1A, 4.2A, 4.2B, 4.2C, 4.2D, 4.2E, 4.2F, 4.3A, 4.4A, 4.5A</p> <p><b>Unit 02: Investigating Mixtures (7 days)</b> <a href="#">Investigando mezclas</a> <b>Scope 4.5B</b> Students implement descriptive investigations to compare and contrast a variety of mixtures and solutions. 4.1A, 4.1B, 4.2A, 4.2B, 4.2C, 4.2F, 4.3A, 4.4A, 4.5B</p> <p><b>Unit 03: Investigating Energy (14 days)</b> <a href="#">Investigando energía</a> <b>Scope 4.6ABC</b> Students engage in descriptive investigations to differentiate among different forms of energy, including mechanical, sound, electrical, light, and thermal energy. 4.1A, 4.2A B C D E F, 4.3A, 4.3C, 4.4A, 4.6A, 4.6B, 4.6C</p>	<p><b>Unit 06: Investigating the Changing Earth (10 days)</b> <a href="#">Investigando la tierra cambiante</a> <b>Scope 4.7BC</b> Students investigate, observe, and identify slow changes to Earth’s surface caused by weathering, erosion, and deposition from water, wind, and ice. Students consider environmentally appropriate and ethical practices with resources during investigations. 4.1A, 4.1B, 4.2A B C D E F, 4.3A, 4.3B, 4.3C, 4.4A, 4.7B</p> <p><b>Unit 07: Investigating Weather and the Water Cycle (15 days)</b> <a href="#">Investigando el clima y el ciclo del agua</a> <b>Scope 4.8AB</b> This unit addresses patterns in data to predict changes in weather and the continuous movement of water on and above the surface of the Earth. 4.1A, 4.2A B C D E, 4.3A, 4.3B, 4.3C, 4.4A, 4.8A, 4.8B</p> <p><b>Unit 08: Investigating Patterns of the Sun, Earth, and Moon System (10 days)</b> <a href="#">Investigando los patrones de los sistemas del sol, la tierra y la luna</a> <b>Scope 4.8C</b> Students collect and analyze data to identify sequences and predict patterns of change in shadows, seasons, and the observable appearance of the Moon over time. 4.1A, 4.2A B C D E F, 4.3A, 4.3B, 4.3C, 4.4A, 4.8C</p>
<p><b>2nd Nine Weeks – 41 days</b> (October 15<sup>th</sup> – December 18<sup>th</sup>) <i>November 13<sup>th</sup> – Holiday</i> <i>November 23<sup>rd</sup> – 27<sup>th</sup> Thanksgiving Break</i> <i>December 21<sup>st</sup> – January 1<sup>st</sup> Winter Break</i></p>	<p><b>4th Nine Weeks – 52 days</b> (March 15<sup>th</sup> – May 27<sup>rd</sup>) <i>April 2<sup>nd</sup> – Good Friday School Holiday</i> <i>April 23<sup>rd</sup> – Battle of Flowers School Holiday</i></p>
<p><b>Unit 04: Investigating Force and Motion (7 days)</b> <a href="#">Investigando fuerza y movimiento</a> <b>Scope 4.6D</b> Students design a descriptive investigation to explore the effect of force on an object such as a push or pull, gravity, friction, or magnetism. Additionally, students communicate and discuss their observations and record data in their notebooks. Furthermore, students consider environmentally appropriate and ethical practices with resources during investigations. 4.1A, 4.2A, 4.2B, 4.2C, 4.2D, 4.2E, 4.2F, 4.3A, 4.3C, 4.4A, 4.6D</p> <p><b>Unit 05: Investigating Natural Resources (21 days)</b> <a href="#">Investigando recursos naturales</a> <b>Scope 4.7A</b> Students engage in descriptive investigations to examine the various properties of soils including color, texture, their capacity to retain water, and their ability to support the growth of plants. Students also identify and classify Earth’s renewable and nonrenewable resources. 4.1A, 4.1B, 4.2A B C D E F, 4.3A, 4.3B, 4.3C, 4.4A, 4.7A, 4.7C</p>	<p><b>Unit 09: Investigating Energy Flow in Living Systems (15 days)</b> <a href="#">Investigar el flujo de energía en los sistemas vivos</a> <b>Scope 4.9AB</b> This unit addresses the basic needs of producers and consumers as well as the significance of the Sun in the flow of energy through food webs. Students investigate that most producers need sunlight, water, and carbon dioxide to make their own food, while consumers are dependent on other organisms for food. 4.1A, 4.2A B C D E, 4.3A, 4.3B, 4.3C, 4.4A, 4.9A, 4.9B</p> <p><b>Unit 10: Investigating Structure and Behaviors of Organisms (15 days)</b> <a href="#">Investigando estructura y comportamiento de organismos</a> <b>Scope 4.10AB</b> Students explore how structures and functions enable organisms to survive in their environment. Additionally, students explore and describe examples of traits that are inherited from parents to offspring. 4.1A, 4.2A B C D E, 4.3A, 4.3C, 4.4A, 4.10A, 4.10B</p> <p><b>Unit 11: Investigating Life Cycles (10 days)</b> <a href="#">Investigando ciclos de vida</a> <b>Scope 4.10C</b> Students explore and compare the life cycles of different living organisms. Students explore, illustrate, and compare life cycles in organisms such as beetles, crickets, radishes, lima beans. 4.1A, 4.2A, 4.2B, 4.2C, 4.2D, 4.2F, 4.3A, 4.3B, 4.4A, 4.10C</p>