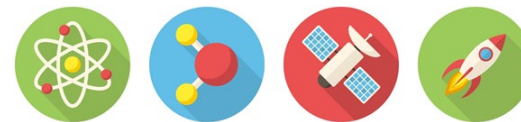


Prince William County Schools

Grade Five Science

Suggested Pacing Guide

2019 – 2020



FIRST QUARTER (47 DAYS)	SECOND QUARTER (43 DAYS)	THIRD QUARTER (43 DAYS)	FOURTH QUARTER (47 DAYS)
<p>August 26-November 1</p> <p>Unit 1 Living Systems (6 weeks) 5.5, 5.1</p> <ul style="list-style-type: none"> ➤ Basic cell structures and functions ➤ Classification of organisms according to physical characteristics, body structures, and behavior of the organism ➤ Survival of organisms in their environment ➤ Science process skills (<i>infused</i>) <p>Unit 2 Rocks & Fossils (2.5 weeks) 5.7a-c, 5.1</p> <ul style="list-style-type: none"> ➤ Identification of basic rock types ➤ The rock cycle and rock transformations ➤ Earth's history and fossil evidence ➤ Science process skills (<i>infused</i>) <p>Aug. 30, Sept. 2 – Labor Day: No School Oct. 14, Nov. 4 and 5 – In-service/Workdays</p>	<p>November 6-January 24</p> <p>Unit 3 Geologic Processes (2.5 weeks) 5.7d-g, 5.1</p> <ul style="list-style-type: none"> ➤ Structure of the earth's interior ➤ Plate tectonics ➤ Weathering, erosion, and deposition ➤ Human activity on earth's surface ➤ Science process skills (<i>infused</i>) <p>Unit 4 Oceanography (6 weeks) 5.6, 5.1</p> <ul style="list-style-type: none"> ➤ The ocean environment to include geological, physical and ecological characteristics. ➤ Science process skills (<i>infused</i>) <p>Nov. 11 – Veterans' Day: No School Nov. 27-29 – Thanksgiving Break Dec. 23-Jan 3 – Winter Break Jan 20 – Martin Luther King Birthday: No School Jan. 27 – In-service/Workday</p>	<p>January 28-March 27</p> <p>Unit 5 Matter (4 weeks) 5.4, 5.1</p> <ul style="list-style-type: none"> ➤ Properties and phases of each type of matter ➤ How temperature effects phases of matter ➤ Atoms and Elements ➤ Molecules and compounds ➤ Mixtures including solutions ➤ Science process skills (<i>infused</i>) <p>Unit 6 Sound (4 weeks) 5.2, 5.1</p> <ul style="list-style-type: none"> ➤ Compression waves ➤ Wave characteristics (wavelength, frequency, and amplitude) ➤ Ability of different media to transmit sound ➤ Application and uses of sound waves ➤ Science process skills (<i>infused</i>) <p>Feb. 17 – Presidents' Day: No School March 30 – In-service/Workday</p>	<p>March 31-June 12</p> <p>Unit 7 Light (4 weeks) 5.3, 5.1</p> <ul style="list-style-type: none"> ➤ Behavior of transverse waves ➤ Visible Spectrum ➤ Opaque, transparent, and translucent ➤ Reflection and refraction of light ➤ Science process skills (<i>infused</i>) <p><i>Conclude instruction one week prior to the scheduled testing window. Post-assessment instructional time should be used for Family Life Education, reinforcement/extension of course content, and STEM activities.</i></p> <p>Family Life Education (1.5 weeks)</p> <ul style="list-style-type: none"> ➤ <u>Physical, social, and emotional changes during puberty; hygiene</u> ➤ <u>Structures of the reproductive system and their functions (both sexes)</u> ➤ <u>Basics of human reproduction</u> ➤ <u>Gender stereotyping</u> <p><i>Note: FLE instruction must occur in gender-separate classrooms. Teachers must use the county-approved lessons; videos alone are not sufficient.</i></p> <p>April 6-10 – Spring Break April 13 – In-service/Workday May 25 – Memorial Day: No School June 15 – Workday</p>

Theme: Transforming Matter and Energy

Grade 5 science takes a deeper dive into the foundational concepts of physical science, and students begin to make connections between energy and matter. They apply an understanding of force, matter, and energy when they explore how the Earth's surface changes. Science and *Engineering* design practices (5.1) should be incorporated as a part of inquiry-based instruction and hands-on, classroom investigations. Mathematics and computational thinking gain importance as students advance in their scientific thinking. Student research involves identifying and asking an appropriate question; using the experimental design process to design and conduct an investigation; collecting evidence; drawing conclusions; and communicating and defending results. Students should be provided the opportunity to participate in STEM exhibitions or competitions at the school level to share their findings.

Note: To ensure consistency countywide, schools are highly encouraged to adhere to the *sequence* of science content outlined above.