



Science Grade 6

TERM 1

Term 1 Dates	MS College and Career Readiness Standards
WK 1: Aug 6-16	SCIENCE and ENGINEERING PRACTICES <ul style="list-style-type: none"> Ask Question and Define Problems Develop and Use Models Analyze and Interpret Data Plan and Conduct Investigations Use Mathematical and Computational Thinking Engage in Scientific Argument from Evidence Construct Explanations and Design Solutions Obtain, Evaluate, and Communicate Information
<i>Unit Assessment 1</i>	
WK 2: Aug 19-23	Living & Non-Living L.6.1.1 Use argument supported by evidence in order to distinguish between living and non-living things, <u>*including viruses and bacteria.</u> *(Incorporate this portion of the standard as outlined below.) -Identify the characteristics of living things, then compare & contrast living vs. non-living. -Describe how plants and animals meet the characteristics for living things. - Explain that living things can be microscopic, like bacteria. - Debate, using scientific evidence, if a virus is living or nonliving.
WK 3: Aug 26-30	Cells & Cell Theory L.6.1.2 Obtain and communicate evidence to support the cell theory. L.6.1.5 Provide evidence that organisms are unicellular or multicellular. L.6.1.3 Develop and use models to explain how specific cellular components (cell wall, cell membrane, nucleus, chloroplast, vacuole, and mitochondria) function together to support the life of prokaryotic and eukaryotic organisms to include plants, animals, fungi, protists, and bacteria (not to include biochemical function of cells or cell part).
WK 4: Sept 2-6	L.6.1.4 Compare and contrast different cells in order to classify them as a protist, fungus, plant, or animal. Organization of Living Things L.6.1.6 Develop and use models to show relationships among the increasing complexity of multicellular organisms (cells, tissues, organs, organ systems, organisms) and how they serve the needs of the organism.
<i>Mid-term OR Unit Assessment 2 (WK 4.5/ WK 5)</i>	

WK 5: Sept 9-13	Ecological Interdependence L.6.3.1 Use scientific reasoning to explain differences between biotic and abiotic factors that demonstrate what living organisms need to survive. L.6.3.2 Develop and use models to describe the levels of organization within ecosystems (species, populations, communities, ecosystems, and biomes).
WK 6: Sept 16-20	L.6.3.5 Develop and use food chains, webs, and pyramids to analyze how energy is transferred through an ecosystem from producers (autotrophs) to consumers (heterotrophs, including humans) to decomposers.
WK 7: Sept 23-27	Ecological Relationships and Change L.6.3.4 Investigate organism interactions in a competitive or mutually beneficial relationship (predation, competition, cooperation, or symbiotic relationships). L.6.3.3 Analyze cause and effect relationships to explore how changes in the physical environment (limiting factors, natural disasters) can lead to population changes within an ecosystem.
<i>Unit Assessment 3 optional due to BMA</i>	
WK 8: Sept 30- Oct 4	Review for Benchmark
WK 9: Oct 7-11	<i>Benchmark OR Unit Assessment</i>

TERM 1

Recurring Standards

Standards taught the first 4-5 weeks; the mid-term data will indicate the remediation needed.

WK 5: Sept 9-13	Science & Engineering Practices
WK 6: Sept 16-20	L.6.1.1, L.6.1.2, L.6.1.5
WK 7: Sept 23-27	L.6.1.3, L.6.1.4, L.6.1.6



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TERM 2

Term 2 Dates	MS College and Career Readiness Standards
WK 1: Oct 14-18	<p>Classification of Living Things Supports BIO I *MINOR STANDARD(S)</p> <p>L.6.4.1 Compare and contrast modern classification techniques (e.g., analyzing genetic material) to the historical practices used by scientists such as Aristotle and Carolus Linnaeus.</p> <p>L.6.4.2 Use classification methods to explore the diversity of organisms in kingdoms (animals, plants, fungi, protists, bacteria). Support claims that organisms have shared structural and behavioral characteristics.</p> <hr style="width: 20%; margin-left: 0;"/> <p>*MINOR STANDARD(S)</p>
WK 2: Oct 21-25	<p>L.6.4.3 Analyze and interpret data from observations to describe how fungi obtain energy and respond to stimuli (e.g., bread mold, rotting plant material).</p> <p>L.6.4.4 Conduct investigations using a microscope or multimedia source to compare the characteristics of protists (euglena, paramecium, amoeba) and the methods they use to obtain energy and move through their environment (e.g., pond water).</p> <p>L.6.4.5 Engage in scientific arguments to support claims that bacteria (Archaeobacteria and Eubacteria) and viruses can be both helpful and harmful to other organisms and the environment.</p>
Unit Assessment 1	
WK 3: Oct 28- Nov 1	<p>E.6.8.1 Obtain, evaluate, and summarize past and present theories and evidence to explain the formation and composition of the universe.</p> <p>E.6.8.2 Use graphical displays or models to explain the hierarchical structure (stars, galaxies, galactic clusters) of the universe.</p> <p>E.6.8.3 Evaluate modern techniques used to explore our solar system’s position in the universe.</p> <p>E.6.8.4 Obtain and evaluate information to model and compare the characteristics and movements of objects in the solar system (including planets, moons, asteroids, comets, and meteors).</p>
WK 4: Nov 4-8	
WK 5: Nov 11-15	
Mid-term OR Unit Assessment 2 (WK 4.5/ WK 5)	
WK 6: Nov 18-22	<p>E.6.8.5 Construct explanations for how gravity affects the motion of objects in the solar system and tides on Earth.</p> <p>E.6.8.6 Design models representing motions within the Sun-Earth-Moon system to explain phenomena observed from the Earth’s surface (positions of celestial bodies, day and year, moon phases, solar and lunar eclipses, and tides).</p> <p>E.6.8.7 Analyze and interpret data from the surface features of the Sun (e.g., photosphere,</p>
WK 7: Dec 2-6	
WK 8:	

Dec 9-13	corona, sunspots, prominences, and solar flares) to predict how these features may affect Earth.
Unit Assessment 3 optional due to BMA	
WK 9: Dec 16-20	Benchmark OR Unit Assessment

TERM 2	
Recurring Standards	
Standards taught the first 4-5 weeks; the mid-term data will indicate the remediation needed.	
WK 5: Nov 11-15	L.6.4.1 & L.6.4.2
WK 6: Nov 18-22	E.6.8.1 & E.6.8.2
WK 7: Dec 2-6	E.6.8.3 & E.6.8.4



Science Grade 6

TERM 3

Term 3 Dates	MS College and Career Readiness Standards
WK 1: Jan 6-10	Force & Motion P.6.6.5 Conduct investigations to predict and explain the motion of an object according to its position, direction, speed, and acceleration. (Include Newton’s Laws of Motion) P.6.6.2 Use mathematical computation and diagrams to calculate the sum of forces acting on various objects.
WK 2: Jan 13-17	P.6.6.4 Compare and contrast magnetic, electric, frictional, and gravitational forces. P.6.6.6 Investigate forces (gravity, friction, drag, lift, thrust) acting on objects (e.g., airplane, bicycle helmets). Use data to explain the differences between the forces in various environments.
Unit Assessment 1	
WK 3: Jan 20-24	Newton’s Laws of Motion & Our World P.6.6.1 Use an engineering design process to create or improve safety devices (e.g., seat belts, car seats, helmets) by applying Newton’s Laws of motion. Use an engineering design process to define the problem, design, construct, evaluate, and improve the safety device.* P.6.6.3 Investigate and communicate ways to manipulate applied/frictional forces to improve movement of objects on various surfaces (e.g., athletic shoes, wheels on cars).
WK 4: Jan 27-31	
Mid-term OR Unit Assessment 2 (WK 4.5/ WK 5)	
WK 5: Feb 3-7	Energy P.6.6.7 Determine the relationships between the concepts of potential, kinetic, and thermal energy.
WK 6: Feb 10-14	
Unit Assessment 3 optional due to benchmark	
WK 7: Feb 17-21	Review for Benchmark
WK 8: Feb 24-28	
WK 9: March 3-7	Benchmark OR Unit Assessment

TERM 3

Recurring Standards

Standards taught the first 4-5 weeks; the mid-term data will indicate the remediation needed.

WK 5: Feb 3-7	P.6.6.5 & P.6.6.2
WK 6: Feb 10-14	P.6.6.4 & P.6.6.6
WK 7: Feb 17-21	P.6.6.1 & P.6.6.3



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TERM 4

Term 4 Dates	MS College and Career Readiness Standards
WK 1: March 17-21	<i>TBD using Benchmark/ Unit Assessment data and/or remediation time needed for other grade level tested areas</i>
Checkpoint 1	
WK 2: March 24-28	<i>TBD using Benchmark/ Unit Assessment data and/or remediation time needed for other grade level tested areas</i>
Checkpoint 2	
WK 3: March 31- April 4	<i>TBD using Benchmark/ Unit Assessment data and/ or remediation time needed for other grade level tested areas</i>
Checkpoint 3	
WK 4: April 7-11	<i>TBD using Benchmark/ Unit Assessment data and/ or remediation time needed for other grade level tested areas</i>
Checkpoint 4	
WK 5: April 14-18	<i>N/A; benchmark testing</i>
WK 6: April 21-25	<i>N/A; benchmark testing</i>
WK 7: April 28- May 2	<i>N/A; benchmark testing</i>
WK 8: May 5-9	<i>N/A; benchmark testing</i>
WK 9: May 12-21	Review & EOY Assessment

TERM 4

Recurring Standards	
Standards taught the first 4-5 weeks; the mid-term data will indicate the remediation needed.	
WK 5: April 14-18	<i>N/A; benchmark testing</i>
WK 6: April 21-25	<i>N/A; benchmark testing</i>
WK 7: April 28- May 2	<i>N/A; benchmark testing</i>