Campbell County Schools
Fifth Grade- Science
3rd Nine Weeks-at-a-Glance

The following skills should be the focus for this Nine Weeks:

Ongoing	
Embedded Inquiry	GLE 0507.Inq.1 Explore different scientific phenomena by asking questions, making logical predictions, planning investigations, and recording data. • SPI 0507.Inq.1 Select an investigation that could be used to answer a specific question. GLE 0507.Inq.2 Select and use appropriate tools and simple equipment to conduct an investigation. GLE 0507.Inq.3 Organize data into appropriate tables, graphs, drawings, or diagrams. GLE 0507.Inq.4 Identify and interpret simple patterns of evidence to communicate the findings of multiple investigations. GLE 0507.Inq.5 Recognize that people may interpret the same results in different ways. GLE 0507.Inq.6 Compare the results of an investigation with what scientists already accept about this question.
Embedded Technology and Engineering	GLE 0507.T/E.1 Describe how tools, technology, and inventions help to answer questions and solve problems. • SPI 0507.T/E.1 Select a tool, technology, or invention that was used to solve a human problem. GLE 0507.T/E.2 Recognize that new tools, technology, and inventions are always being developed. • SPI 0507.T/E.2 Recognize the connection between a scientific advance and the development of a new tool or technology. GLE 0507.T/E.3 Identify appropriate materials, tools, and machines that can extend or enhance the ability to solve a specified problem. GLE 0507.T/E.4 Recognize the connection between scientific advances, new knowledge, and the availability of new tools and technologies. GLE 0507.T/E.5 Apply a creative design strategy to solve a particular problem generated by societal needs and wants.

Standard 6: The Universe	
Outer Space	GLE 0507.6.1 Compare planets based on their known characteristics. • SPI 0507.6.1 Distinguish among the planets according to their known characteristics such as appearance, location, composition, and apparent motion. • SPI 0507.6.2 Select information from a complex data representation to draw conclusions about the planets. GLE 0507.6.2 Recognize that charts can be used to locate and identify star patterns. • SPI 0507.6.3 Identify methods and tools for identifying star patterns.

Standard 7: The Earth	
Geologic Change	GLE 0507.7.1 Compare geologic events responsible for the earth's major geological features. • SPI 0507.7.1 Describe internal forces such as volcanoes, earthquakes, faulting, and plate movements that are responsible for the earth's major geological features such as mountains, valleys, etc.

Standard 8: The Atmosphere	
Atmosphere	GLE 0507.8.1 Analyze and predict how major landforms and bodies of water affect atmospheric conditions. • SPI 0507.8.1 Describe the effects of the oceans on weather and climate. • SPI 0507.8.2 Explain how mountains affect weather and climate.

Embedded Inquiry Checks for Understanding

- ✓ **0507.Inq.1** Identify specific investigations that could be used to answer a particular question and identify reasons for this choice.
- ✓ **0507.Inq.2** Identify tools needed to investigate specific questions.
- ✓ **0507.Inq.3** Maintain a science notebook that includes observations, data, diagrams, and explanations.
- ✓ **0507.Inq.4** Analyze and communicate findings from multiple investigations of similar phenomena to reach a conclusion.

Embedded Technology & Engineering Checks for Understanding

- ✓ **0507.T/E.1** Explain how different inventions and technologies impact people and other living organisms.
- ✓ **0507.T/E.2** Design a tool or a process that addresses an identified problem caused by human activity.
- ✓ **0507.T/E.3** Determine criteria to evaluate the effectiveness of a solution to a specified problem.
- ✓ **0507.T/E.4** Evaluate an invention that solves a problem and determine ways to improve the design.

Standard 1 – Cells Checks for Understanding

- ✓ **0507.1.1** Label drawings of plant and animals cells.
- ✓ **0507.1.2** Compare and contrast the basic structures and functions of plant and animal cells.

Standard 2 – Interdependence Checks for Understanding

- ✓ **0507.2.1** Evaluate producer/consumer, predator/prey, and parasite/host relationships.
- ✓ **0507.2.2** Classify interspecific relationships within an ecosystem as mutualism, commensalism, or parasitism.
- ✓ **0507.2.3** Create a simple model illustrating the interspecific relationships within an ecosystem.
- ✓ **0507.2.4** Analyze basic information from a body of text to identify key issues or assumptions about the relationships among organisms in an ecosystem.
- ✓ **0507.2.5** Create a poster to illustrate how human activities and natural disasters affect the environment.

Standard 3 – Flow of Matter and Energy Checks for Understanding

- ✓ **0507.3.1** Identify the cell structures that enable plants to conduct photosynthesis.
- ✓ **0507.3.2** Design a graphic organizer that illustrates the difference between plants and animals in the movement of food energy through an ecosystem.

Standard 4 – Heredity Checks for Understanding

- ✓ **0507.4.1** Explain how genetic information is transmitted from parents to offspring.
- ✓ **0507.4.2** Create a chart that compares hereditary and environmental traits.
- ✓ **0507.4.3** Distinguish between a scar and a birthmark in terms of their origins.

Standard 5 – Biodiversity and Change Checks for Understanding

- ✓ 9**0507.5.1** Classify animals according to their physical characteristics.
- ✓ 9**0507.5.2** Design a model to illustrate how an animal's physical characteristics enable it to survive in a particular environment.
- ✓ 9**0507.5.3** Identify the processes associated with fossil formation.
- ✓ 9**0507.5.4** Use fossil evidence to describe an environment from the past.
- ✓ 9**0507.5.5** Use fossils to match a previously existing organism with one that exists today.

Standard 6 – The Universe Checks for Understanding

- ✓ **0507.6.1** Develop a chart that communicates the major characteristics of each planet.
- ✓ **0507.6.2** Use images of the night sky to identify different seasonal star patterns.
- ✓ **0507.6.3** Research a star pattern using a chart.

Standard 7 – The Earth Checks for Understanding

- ✓ **0507.7.1** Create a model to illustrate geologic events responsible for changes in the earth's crust.
- ✓ **0507.7.2** Prepare a chart to compare how volcanoes, earthquakes, faulting, and plate movements affect the earth's surface features.

Standard 8 – The Atmosphere Checks for Understanding

- ✓ **0507.8.1** Compare the climates of coastal and inland areas at similar latitudes to demonstrate the ocean's impact on weather and climate.
- ✓ **0507.8.2** Use land maps to demonstrate how mountain ranges affect weather and climate.
- ✓ **0507.8.3** Use weather maps of the United States to graph temperature and precipitation for inland and coastal regions.
- ✓ **0507.8.4** Use local environmental information to analyze how weather and climate are affected by landforms and bodies of water.

Standard 9 – Matter Checks for Understanding

- ✓ **0507.9.1** Compare the simple chemical properties of common substances.
- ✓ **0507.9.2** Investigate how different types of materials freeze, melt, evaporate, or dissipate.
- ✓ **0507.9.3** Use data from a simple investigation to determine how temperature change affects the rate of evaporation and condensation.

Standard 10 – Energy Checks for Understanding

- ✓ **0507.10.1** Design and conduct an investigation to demonstrate the difference between potential and kinetic energy.
- ✓ **0507.10.2** Create a graphic organizer that illustrates different types of potential and kinetic energy.
- ✓ **0507.10.3** Describe the differences among conduction, convection, and radiation.
- ✓ **0507.10.4** Create a poster to illustrate the major forms of energy.
- ✓ **0507.10.5** Demonstrate different ways that energy can be transferred from one object to another.

Standard 11 – Motion Checks for Understanding

- ✓ **0507.11.1** Predict how the amount of mass affects the distance traveled given the same amount of applied force.
- ✓ **0507.11.2** Prepare statements about the relationship among mass, applied force, and distance traveled.
- ✓ **0507.11.3** Design and conduct experiments using a simple experimental design to demonstrate the relationship among mass, force, and distance traveled.

Standard 12 – Forces in Nature Checks for Understanding

- ✓ **0507.12.1** Explain and give examples of how forces act at a distance.
- ✓ **0507.12.2** Demonstrate how the shape of an object affects how it falls toward the earth.
- ✓ **0507.12.3** Design and explain an investigation exploring the earth's pull on objects.