CHECKLIST FOR FIFTH GRADE SCIENCE CHECKS FOR UNDERSTANDING

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

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Standard 6 - The Universe
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
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
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
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
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
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
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.