Gwinnett County Public Schools Science Grade 5 – Instructional Calendar 2020-2021				
1st Nine Weeks		2nd Nine Weeks		
Cells **4.5 weeks**	**Classification of Animals and Plants** **4.5 weeks**	**Learned Behaviors vs. Inherited Traits** **2 weeks**	**Harmful/Beneficial Microorganisms** **2.5 weeks**	**Matter: Physical & Chemical Changes** **4.5 weeks**
7. obtain, evaluate, and communicate information to compare and contrast the parts of plant and animal cells (GSE S5L3) 7a. gather evidence by utilizing magnification tools to construct an explanation that plants and animals are comprised of cells too small to be seen without magnification (GSE S5L3a) 7b: develop a model to identify and label parts of a plant cell (i.e., membrane, wall, cytoplasm, nucleus, chloroplasts) and of an animal cell (i.e., membrane, cytoplasm, and nucleus) (GSE S5L3b) 7c. construct an explanation that differentiates between the structure of plant and animal cells (GSE S5L3c) 7d. construct an explanation to explain the function of plant and animal organelles (i.e., cell membrane, cell wall, cytoplasm, nucleus, and chloroplasts)	**6. obtain, evaluate, and communicate information to group organisms using scientific classification procedures** (GSE S5L1) 6a. develop a model that illustrates how animals are sorted into groups (i.e., vertebrate and invertebrate) and how vertebrates are further sorted into groups (i.e., fish, amphibians, reptile, bird, and mammal) using data from multiple sources (GSE S5L1a) 6b. develop a model that illustrates how plants are sorted into groups (i.e., vascular and nonvascular) and how vascular plants are further sorted into groups (i.e., seed producers and non-seed producers) using data from multiple sources (GSE S5L1b)	**8. obtain, evaluate, and communicate information showing that some characteristics of organisms are inherited and other characteristics are acquired** (GSE S5L2) 8a. ask questions to compare and contrast the characteristics of instincts and learned behaviors (GSE S5L2a) 8b. ask questions to compare and contrast inherited and acquired physical traits *(Clarification statement: Punnett squares and genetics are taught in future grades.)* (GSE S5L2b) 8c. construct an explanation to compare and contrast inherited and acquired physical traits	**5. obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms** *(Clarification statement: Possible microorganisms could include Tardigrades, Lactobacillus, Probiotics, Rotifers, Salmonella, Clostridium botulinum (Botox), E-coli, Algae, etc. Students are not expected to know these specific microorganisms. The list is provided to give teachers examples.)* (GSE S5L4) 5a. construct an argument using scientific evidence to support an argument that some microorganisms are beneficial (GSE S5L4a) 5b. construct an argument using scientific evidence to support an argument that some microorganisms are harmful (GSE S5L4a)	**4. obtain, evaluate, and communicate information to explain the differences between a physical change and a chemical change** (GSE S5P1) 4a. plan and carry out investigations by manipulating, separating, and mixing dry and liquid materials and communicate collected data to demonstrate examples of physical change (GSE S5P1a) 4b. construct an argument based on observations that the physical changes in the state of water are due to temperature changes, which cause small particles that cannot be seen to move differently (GSE S5P1b) 4c. plan and carry out an investigation to determine if a chemical change occurred based on observable evidence (e.g., color, gas, temperature change, odor, and/or new substances produced) (GSE S5P1c) 4d. analyze and interpret data to support whether a change is physical or chemical

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Gwinnett County Public Schools Science 5th Grade – Instructional Calendar 2018-2019			
3rd Nine Weeks	4th Nine Weeks		
Changes in the Earth's Surface 9 weeks	**Electricity 3 weeks**	**Magnetism 3 weeks**	**Post Milestones Testing 3 weeks**
1. obtain, evaluate, and communicate information to identify surface features on Earth caused by constructive and/or destructive processes (GSE S5E1) 1a. construct an argument supported by scientific evidence to identify surface features (e.g., deltas, sea arches, sand dunes, mountains, canyons, and volcanoes) as being caused by constructive and/or destructive processes (e.g., plate movement, deposition, weathering, erosion, impact of organisms) (GSE S5E1a) 1b. develop simple, interactive models to collect data that illustrate how changes in surface features are/were caused by constructive and/or destructive processes (GSE S5E1b) 1c. ask questions to obtain information on how technology is used to limit the impact of constructive and destructive processes *(Clarification statement: Examples could include flood control (dams, levees, and seawalls), urban planning (storm drains and vegetation replacement), engineering methods (contour plowing and terraces), construction methods and materials, and beach preservation (jetties).)* (GSE S5E1c) 1d. ask questions to obtain information on how technology is used to predict the impact of constructive and destructive processes *(Clarification statement: Examples could include flood forecasting (Geographic Information Systems (GIS) maps), infrared/satellite imagery, and seismological studies.)* (GSE S5E1c)	**2. obtain, evaluate, and communicate information to investigate electricity** (GSE S5P2) 2a. obtain and combine information from multiple sources to explain the difference between static electricity (i.e., naturally occurring) and current electricity (i.e., human-harnessed) (GSE S5P2a) 2b. design a complete, simple electric circuit, and explain all necessary components (GSE S5P2b) 2c. plan and carry out an investigation to test common materials to determine if they are insulators or conductors of electricity (GSE S5P2c)	**3. obtain, evaluate, and communicate information about magnetism and its relationship to electricity** (GSE S5P3) 3a. construct an argument based on experimental evidence to communicate the differences in function (how) and purpose (why) of an electromagnet and magnet *(Clarification statement: Function is limited to understanding temporary and permanent magnetism.)* (GSE S5P3a) 3b. plan and carry out an investigation to observe the interaction between a magnet and a magnetic object on opposite sides of various materials such as wood, paper, glass, metal, and rocks *(Clarification statement: Students should discover through investigation that magnetic forces cannot be blocked because magnets produce magnetic fields.)* (GSE S5P3b)	● Review 5th grade Science AKS through a STEM lesson or PBL unit. ● Reteach 5th grade AKS that were not previously mastered by students.

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