8th Grade Science Timeline

 Macon County Junior High

1st  9 Weeks

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| Standard | Learning Target | Resources | T | M |
|  0807.Inq.1 | I can design a simple experiment. (P)I can define the terms “control” and “variable”. (K)I can identify the control and variables in an experiment. (K) | Chapter 1 |  |  |
| 0807.Inq.2 | I can match laboratory tools with their appropriate function. (K)I can choose the appropriate tools and procedures for an experiment. | Chapter 1 |  |  |
| 0807.Inq.3 | I can define the words “interpret” and “translate”. (K)I can construct a graph when given a set of data. (P)I can answer questions using a graph as text evidence. (R,S) | Chapter 1 |  |  |
| 0807.Inq.4 | I can define the terms “conclusion” and “cause and effect”. )K)I can use evidence to draw a conclusion. (S)I can use evidence to identify the cause and effect. (K,R,S) | Chapter 1 |  |  |
| 0807.Inq.5 | I can define the term “bias”. (K)I can analyze data and identify bias and experimental error. (K,R,S) | Chapter 1 |  |  |
| 0807.T/E.1 | I can define the term “prototype”. (K)I can match laboratory tools with their appropriate function. (K)I can build, test, and evaluate a working prototype. (R,S,P) | Chapter 1 |  |  |
| 0807.T/E.2 | I can identify and explain the steps of the Engineering Design Process. (K,R)I can define the term “protocol”. (K)I can evaluate a protocol to determine if the engineering design process was successfully applied. (R)  | Chapter 1 |  |  |
| 0807.T/E.3 | I can define the terms “intended benefit” and “unintended consequence”. (K)I can identify examples of intended benefits/unintended consequences of a technology. (K,R,S) | Chapter 1 |  |  |
| 0807.T/E.4 | I can define the term “differentiate”. (K)I can define the terms “adaptive” and “assistive”. (K)I can differentiate between adaptive and assistive engineered products. (R) I can classify a technology as an example of bioengineering. (R,S) | Chapter 1 |  |  |
| 0807.9.7 | I can define density, mass, and volume. (K)I can explain the relationship between density, mass, and volume. (R) I can apply the density formula to solve for density of an object. (S) | Chapter 1 & 7 |  |  |
| 0807.9.8 | I can describe a physical and chemical change. (K)I can interpret whether a physical or chemical change has occurred in a scientific investigation. (R)  | Chapter 7 & 13) |  |  |
| 0807.12.4 | I can define the terms “mass” and “weight”. (K)I can use the appropriate tools and units to determine mass and weight. (S)I can compare and contrast mass and weight. (R) | Chapter 1 & 7 |  |  |
| **Bench Mark 2** |
| 0807.9.3 | I can define the terms “elements”, “compounds”, “symbols”, and “formulas”. (K)I can classify common substances as elements or compounds based on their symbols or formulas. (R) | Chapter 9 |  |  |
| 0807.9.4 | I can define a mixture and compound based on their chemical composition. (K)I can differentiate between a mixture and a compound using their chemical composition. (R)  | Chapter 9 |  |  |
| 0807.9.6 | I can identify the states of matter. (K)I can compare/contrast the particle arrangement and motion in the states of matter. (R)I can create a drawing representing the states of matter. (P) | Chapter 8 |  |  |

2nd 9 Weeks

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| **Bench Mark 3** |
| Standard | Learning Target | Resources | T | M |
|  0807.9.1 | I can define what an atom is. (K)I can recognize that all matter is made of atoms. (K) | Chapter 10 |  |  |
| 0807.9.2 | I can define chemical change. (K)I can identify outcomes of all chemical changes. (New substances/ property changes) (K) | Chapter 13 |  |  |
| 0807.9.8 | I can describe a physical and chemical change. (K)I can interpret whether a physical or chemical change has occurred in a scientific investigation. (R) | Chapter 13 |  |  |
| 0807.9.9 | I can use the periodic table to determine an elements atomic number, atomic mass, atomic weight, symbol, name, period and group. (S)I can determine an elements properties based on its arrangement on the periodic table. | Chapter 11 |  |  |
| 0807.9.10 | I can define “reactants” and “products” |  |  |  |
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3rd 9 Weeks

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| Standard | Learning Target | Resources | T | M |
|  0807.5.1 | I can explain how a simple classification key is used. (R) I can use a simple classification key (S) | Chapter 2 |  |  |
| 0807.5.2 | I can identify structural, behavioral, and physiological adaptations in organisms. (K)I can use structural, behavioral, and physiological adaptations to predict which organisms are most likely to survive in a particular environment. (R)  | Chapter 3 |  |  |
| 0807.5.3 | I can analyze data on populations of organisms and make predictions about survival in certain environments. (R)  | Chapter 3 |  |  |
| 0807.5.4 | I can describe the earth’s biodiversity. (K)I can identify the reasons of importance of biodiversity. (K)I can illustrate or create a poster/model representing the biodiversity of an ecosystem. (R/P) | Chapter 6 |  |  |
| 0807.5.5 | I can define fossils and sedimentary rock. (K)I can define relative age. (K)I can use a geologic and fossil record to determine and compare relative age of a fossil in sedimentary rock. (S,R) | Chapter 5 |  |  |

4th 9 Weeks

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| Standard | Learning Target | Resources | T | M |
|  0807.5.2 |  I can identify structural, behavioral, and physiological adaptations in organisms. (K)I can use structural, behavioral, and physiological adaptations to predict which organisms are most likely to survive in a particular environment. (R) | Chapter 4 |  |  |
| 0807.5.3 | I can analyze data on populations of organisms and make predictions about survival in certain environments. (R) | Chapter 4 |  |  |