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 |  |  |