**PHASE 2 INSTRUCTIONAL CONTINUITY PLAN**

**Beginning April 16, 2020**

# Physical Science
# Physical Science Honors

**<u>TEXTBOOK CHECKOUT</u>: Florida *Physical Science* – Mc Graw**

**SCHOOL NAME: _____**

**STUDENT NAME: _____**

**TEACHER NAME: _____**

| Topic: Unit 9: Molecules and Chemical Reactions (continued) | | |
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| **Lesson** | **Assignment** | **Date Completed** |
| Unit 9<br>Lesson 4 | **Read** pages 590-593<br><br>**Task 1**: Explain a reaction as:<br>a. Synthesis<br>b. Single replacement (displacement)<br>c. Double replacement<br>d. Decomposition<br>e. Combustion<br><br>**Task 2**: What is oxidation? What is reduction?<br><br>Assessment: Page 593 Review Questions 12, 14, | |
| Unit 9,<br>Lesson 5 | **Read** pages 595-601<br><br>**Task 1:** Define exergonic change.<br><br>**Task 2:** Describe an exergonic reaction.<br><br>**Task 3: Explain how the rate of a chemical reaction is affected by:**<br>a. Concentration<br>b. Surface area<br>c. Temperature<br>d. catalysts<br><br>**Assessment:** Complete questions 26-28 in Section 4 Review page 604 | |
| **Topic: Unit 10: Energy 2 Molecules and Chemical Reactions (continued)** | | |
| | | **Date Completed** |
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| Unit 10,<br>Lesson 1 | **Read** pages 114-115 **which may be a review**<br><br>**Task 1**: What is the difference between potential and kinetic energy?<br><br>**Task 2**: What are some different forms of potential energy?<br><br>**Task 3**: List several examples of how you use different forms of energy every day. | |

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| | **Assessment**: Do Section 1 Review page 143 Questions 4, 5 and 7<br><br>**Honors Physical Science Additional work**:<br>1. Compare the processes of the following nuclear reactions, the energy changes associated with them and their associated safety issues:<br>A. radioactive decay<br>B. fission<br>C. fusion<br>2. Explain how the law of conservation of matter and energy apply to chemical reactions. | |

# Physical Science Review

| Review Topics for Physical Science and Honors Physical Science | | |
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| **Lesson** | **Assignment** | **Date Completed** |
| Review Unit 2 | **Read pages 80-92, 44-60.**<br><br>**Task 1**: What are Newton's three laws of motion?<br><br>**Task 2:** Apply Newton's laws to a car crash**.**<br><br>**Task 2**: Define position, velocity and acceleration.<br><br>**Assessment:** Answer Review 3 question 23, Chapter Review page 66 questions 49, 50, and 52 | |
| Review Unit 3 | **Read** pages 76-79<br><br>**Task 1:** Define Gravity.<br><br>**Task 2:** Explain how a change in the mass or the distance of two objects will impact the gravitational attraction between them. | |

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| | **Task 3:** What is the difference between weight and mass**?**<br><br>**Assessment**: Do Review questions page 79 question 4. | |
| **Topic: Review Topics for Physical and Honors Physical Science** | | |
| | | **Date Completed** |
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| Review Unit 4a | **Read page 120-127**<br>**Task 1**: What is mechanical energy?<br><br>**Task 2**: Why is mechanical energy not always conserved?<br><br>**Task 3**: How are power and energy related?<br><br>**Assessment**: Review 29 page 127 do question 29, and 30. | |
| Review 4b | **Read pages 104-108, 109-112**<br>**Task 1:** Use the formulas for work and power to compare and contrast the concepts of work and power.<br><br>**Assessment**: Do question 10 on page 112 Section 1 Review. | |
| Review Unit 5 | **Read pages 345-351, pages 340-343, 315-316**<br><br>**Task 1:** What are the main divisions of the electromagnetic spectrum?<br><br>**Task 2**: Describe how electromagnetic waves transfer energy to matter?<br><br>**Task 3:** Do the vocabulary questions on page 362 20-25<br><br>**Task 4:** What is the Doppler Effect?<br><br>**Task 5**: What are two uses of the Doppler Effect?<br><br>**Assessment**: Do Chapter Review page 362 questions 26, 27 and 29 | |
| Review Unit 6 | **Read pages 173-174, page 749, pages 178-183, page 185-189**<br>**Task 1:** Explain the difference between conductors, semiconductors and insulators<br><br>**Task 2**: Define current, voltage, and resistance | |

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| | **Task 3:** Draw figure 17 picture of circuit on page 185<br><br>**Assessment:** Chapter 6 Review do questions 38, 44 and 45 on page 196 | |
| Review Unit 7 | **Read pages** 432-436,469-474, 464-465, 465-468**,** 139, 449<br><br>**Task 1**: Differentiate between the four states of matter in terms of:<br>a. Volume<br>b. Particle motion<br><br>**Task 2**: What is the difference between a physical and a chemical property of a substance?<br><br>**Task 3**: Explain a physical change in water.<br><br>**Task 4**: What is mixture? What is the difference between a homogeneous and heterogeneous mixture?<br><br>**Task 5**: As temperature increases does the average kinetic energy increase or decrease?<br><br>**Task 6:** As pressure on a gas increases does the volume of a gas increase or decrease?<br><br>**Assessment**: page 482 Chapter 15 Review do questions 16, 18, 20, and 26 | |
| Review Unit 8 | **Read pages 489, 502-504**<br><br>**Task 1:** What are the proton's, neutron's, and electron's?:<br>a. Charges<br>b. Locations in the atom<br>**Task 2**: Identify patterns in the periodic table according to:<br>a. Mass<br>b. Number of protons<br>c. Atomic radius<br>d. Chemical properties<br><br>**Assessment**: Chapter 16 Review page 512 do questions 24, 29, and 31 | |
| Review Unit 9 | **Read pages 678-681, 686**<br><br>**Task 1:** What common acid is used in a car battery? | |

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| | **Task 2:** If the pH is 9, is the chemical an acid or a base?<br><br>**Task 3:** Why does blood maintain a pH between 7.0 and 7.8?<br><br>**Assessment:** Chapter 22 Review on page 700 do questions 28 and 29. | |