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Physical Science Curriculum Guide Q2

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| TN Ready | Learning Target | Resources  Supplemental |
| Elements and Their Properties, Ch. 19 | | |
| 3202.1.3 Characterize and classify elements based on their atomic structure. | Determine the composition of an atom and the characteristics of its subatomic particles.  Compare the properties of metals, metalloids, and nonmetals.  Create a classification system using the properties of selected elements and compare it to the periodic table.  Identify the number of protons, neutrons, and electrons in an atom of an isotope based on its atomic number and atomic mass. | Ch. 19 ppt and notes  Ch. 19 review and test  Element Poster Project  Periodic Table Video  Martian periodic table challenge |
| TN Ready | Learning Target | Resources  Supplemental |
| Chemical Bonds, Ch. 20 | | |
| 3202.1.3 Characterize and classify elements based on their atomic structure.  3202.1.7 Construct chemical formulas for common compounds. | Use information about an element’s position in the periodic table to determine the charge of its ions.  Construct the chemical formula of a compound using the periodic table.  Balance simple chemical equations, identifying the reactants, products, and proper coefficients.  Predict the products of common chemical reactions. | 20-1 and 2 ppt and notes  20-3 ppt and notes  Chemical Bonding Quiz  Ch. 20 Review and Test  Bonds foldable  Compound Cut and Paste  Bonding Basics ppt and worksheet  Atomic Bonding Song  Bonding Buddies Activity |
| TN Ready | Learning Target | Resources  Supplemental |
| Chemical Reactions, Ch. 21 | | |
| 3202.1.9 Apply the Laws of Conservation of Mass/Energy to balance chemical equations.  3202.1.8 Investigate relationships among the pressure, temperature, and volume of gases and liquids. | Design and conduct an experiment to determine what happens to mass during a chemical change.  Explain the Law of Conservation of Mass/Energy in terms of a balanced chemical equation.  Distinguish among synthesis, decomposition, single- replacement, double- replacement, and combustion reactions.  Distinguish between endothermic and exothermic reactions.  Describe how chemical symbols and balanced chemical equations illustrate the Law of Conservation of Mass/Energy. | 21-1 and 2 ppt and notes  21-3 and 4 ppt and notes  Ch. 21 and 22 Review and Test  Balancing Equations practice  Types of Reactions checklist  Chemical Reactions ppt and worksheet |
| TN Ready | Learning Target | Resources  Supplemental |
| Solutions, Ch. 22 | | |
| 3202.1.1 Explore matter in terms of its physical and chemical properties | Examine the factors that affect solubility.  List and define three types of solutions.  Explain how solvents work in terms of polarity. | 22-1 and 2 ppt and notes  22-3 and 4 ppt and notes  Ch. 21-22 Review and Test  Compounds and Reactions Video |
| TN Ready | Learning Target | Resources  Supplemental |
| Acids and Bases, Ch. 23 | | |
| 3202.1.10 Distinguish among acids, bases, and neutral substances. | Identify a substance as acidic, basic, or neutral based on its pH or response to an indicator or instrument.  Measure and compare the acid- neutralizing strengths of antacids.  Recognize the effect of acid rain on the environment. | 23-1 and 2 ppt and notes  23-3 ppt and notes  Acids/Bases Project Poster  Acids/Bases Computer Lab Activity  pH Lab |