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Physical Science Curriculum Guide Q2

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| TN Ready | Learning Target | ResourcesSupplemental |
| 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 notesCh. 19 review and testElement Poster ProjectPeriodic Table VideoMartian periodic table challenge |
| TN Ready | Learning Target | ResourcesSupplemental |
| 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 notes20-3 ppt and notesChemical Bonding QuizCh. 20 Review and TestBonds foldableCompound Cut and PasteBonding Basics ppt and worksheetAtomic Bonding SongBonding Buddies Activity |
| TN Ready | Learning Target | ResourcesSupplemental |
| 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 notes21-3 and 4 ppt and notesCh. 21 and 22 Review and TestBalancing Equations practiceTypes of Reactions checklistChemical Reactions ppt and worksheet |
| TN Ready | Learning Target | ResourcesSupplemental |
| 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 notes22-3 and 4 ppt and notesCh. 21-22 Review and TestCompounds and Reactions Video |
| TN Ready | Learning Target | ResourcesSupplemental |
| 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 notes23-3 ppt and notesAcids/Bases Project PosterAcids/Bases Computer Lab ActivitypH Lab |