****

Physical Science Curriculum Guide Q1

|  |  |  |
| --- | --- | --- |
| TN Ready | Learning Target | Resources  Supplemental |
| The Nature of Science, Ch. 1 | | |
| Foundational principles of physical science and lab safety  Identify the steps scientists use to solve problems  Identify common metric units and conversions  Identify and analyze data using the 3 types of graphs | Use scientific methods to solve problems.  Identify the basis of the SI system, including base units and metric prefixes and scientific notation.  Apply prior knowledge of SI systems in the conversion units from one prefix to another.  Communicate and interpret scientific data collected during experiments in the form of a graph. | Ch. 1 ppt and notes  Ch. 1 Vocab. quiz  Ch. 1 review and test  Bad Science Cartoon  Measurement project |
| TN Ready | Learning Target | Resources  Supplemental |
| Classification of Matter, Ch. 15 | | |
| 3202.1.1 Explore matter in terms of its physical and chemical properties  3202.1.4 Investigate chemical and physical changes.  3202.1.5 Evaluate pure substances and mixtures. | Identify substances and mixtures based on physical properties.  Use the properties of selected materials to categorize them into groups.  Compare and contrast physical and chemical changes  Compare different types of mixtures.  Construct an experiment to separate the components of a mixture.  Distinguish between examples of common elements and compounds. | 15-1 ppt and notes  15-2 ppt and notes  Ch. 15 review and test  Classification Activity  Mixture labs  Physical Properties form  The Property Song  Mixtures Reinforcement Sheet |
| TN Ready | Learning Target | Resources  Supplemental |
| Solids, Liquids, Gases, Ch. 16 | | |
| 3202.1.8 Investigate relationships among the pressure, temperature, and volume of gases and liquids. | Distinguish among states of matter in terms of energy, mass, volume, shape, density, particle arrangement, and phase changes.  Explain the interrelationship between pressure, temperature, and volume of gases. | 16-1 ppt and notes  16-2 ppt and notes  16-3 ppt and notes  Ch. 16 review and test  Cartesian Diver activity  Archimedes’ principle video and questions  Gas Laws demos  Charles’ Law video  BrainPop States of Matter  States of Matter foldable/rubric  Phase change worksheet |
| TN Ready | Learning Target | Resources  Supplemental |
| Properties of Atoms and the Periodic Table, Ch. 17 | | |
| 3202.1.2 Describe the structure and arrangement of atomic particles. | List the three major subatomic particles and distinguish among their location, charges, and relative masses.  Identify the number of protons, neutrons, and electrons in an atom of an isotope based on its atomic number and atomic mass.  Know the chemical symbols for the common elements. | 17-1 ppt and notes  17-2 Quiz  17-2 & 3 ppt and notes  17-2 & 3 Quiz  Ch. 17 Review and test  What I know About Ch. 1 Graphic Organizer  Atomic Theory Timeline/rubric  Bohr’s model video  The Atom Song  The Halogen Song  Element symbol Bingo review and quiz  SciLinks Activity All About Atoms |