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**PHYSICAL SCIENCE PACING GUIDE**

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| **FIRST QUARTER** | | |
| **UNIT** | **PACING** | **TOPICS** |
| **The Nature of Science, Ch 1** | **2** | * **Scientific Method** * **Si System** * **Conversions** * **Interpret Data** |
| **Classification of Matter, Ch 15** | **2** | * **Mixtures** * **Properties** * **Physical and Chemical Changes** * **Types of Mixtures** * **Elements and Compounds** |
| **Solids, Liquids, Gases, Ch 16** | **3** | * **States of Matter** * **Forces in Fluids** * **Pressure and volume of a gas** * **Gas Laws** |
| **Properties of Atoms and the Periodic Table, Ch 17** | **2** | * **Properties of subatomic particles** * **Numbers of subatomic particles** |
| **SECOND QUARTER** | | |
| **UNIT** | **PACING** | **TOPICS** |
| **Elements and Their Properties, Ch 19** | **2** | * **Composition of atoms** * **Metals, Metalloids, Nonmetals** * **Periodic Table** * **Groups on the periodic table** |
| **Chemical Bonds, Ch 20** | **2** | * **Using the Periodic Table** * **Chemical Formulas** * **Balancing Equations** * **Predict Products of Chemical reactions** |
| **Chemical Reactions, Ch 21** | **2** | * **Mass and Chemical change** * **Law of Conservation of Mass and Energy** * **Distinguish Reaction Types** * **Endothermic and Exothermic Reactions** * **Connect Balanced equations with conservation of mass and energy** |
| **Solutions, Ch 22** | **1** | * **Solutes and Solvents** * **Solubility and Concentration** |
| **Acids and Bases, Ch 23** | **2** | * **Identify Acid, Basic, and Neutral Substances** * **Strengths of antacids** * **Acid Rain** |
| **THIRD QUARTER** | | |
| **UNIT** | **PACING** | **TOPICS** |
| **Motion and Speed, Ch 2** | **2** | * **Speed on a ramp** * **Speed and Velocity** * **Graphing Velocity and Acceleration** * **Solving for variables in equations** * **Graphing experimental data** |
| **Forces in Motion, Ch 3** | **2** | * **Mass and Weight** * **Acceleration** * **Newton’s Laws of Motion** * **Law of Conservation of Momentum** |
| **Energy, Ch 4** | **2** | * **Gravitational Force** * **Law of Conservation of Energy** * **Energy Transformations** |
| **Work, Power and Machines, Ch 5** | **1.5** | * **Force, Work and Power** * **Simple and compound machines** |
| **Electricity and Magnetism, Ch 7** | **1.5** | * **Electrical Circuits** * **Electrical Safety Devices** |
| **FOURTH QUARTER** | | |
| **UNIT** | **PACING** | **TOPICS** |
| **Thermal Energy, Ch 6** | **2** | * **Behavior of warm and cold objects** * **Thermal Energy** * **Conduction, convection, radiation** * **Specific Heat** |
| **Energy Sources, Ch 9** | **2** | * **Fossil Fuels** * **Nuclear Energy** * **Renewable Energy Sources** |
| **Mechanical Waves and the Electromagnetic Spectrum, Ch 12** | **2** | * **Properties of Waves** * **Transverse and Longitudinal waves** * **Wavelength, Frequency and amplitude** |
| **Light and Optics, Ch 13** | **2** | * **Behavior of Light** * **Light and Color** * **Producing Light** * **Using Light** |
| **Family Life Curriculum** | **1** | **Teacher to use Curriculum determined by the Bartlett City Schools (Middle School Only)** |