****

**PHYSICAL SCIENCE PACING GUIDE**

|  |
| --- |
| **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)** |