­­Eighth Grade Science Curriculum Teacher: Rosemary Calvert

St. Joseph School

2017 - 2018

**Course Description**: The Eighth Grade Science curriculum is divided into three parts: **Earth Science**: which includes understanding the universe, the major geologic events that shaped the surface of the Earth and Geological Time; **Life Sciences** where students will explore heredity as it relates to adaptation, evolution, and biodiversity; and  **Physical Science**  which will explore motion, how objects move in ways that can be observed, predicted, and measured and includes simple machines, force, speed, velocity and Newton’s Law of Motion, sound and light, and Chemistry.

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| **Week** | **Date** | **Topic** |
| 1 | 8/8- 8/11 | Safety Rules, Scientific Method, Controls and Variables, Tools of Science, SI Units |
| 2 | 8/14 - 8/18 | Understanding the Universe |
| 3 | 8/21 - 8/25 | SOLAR ECLIPSE 8/21 Position and Motion, Speed and Velocity |
| 4 | 8/28- 9/1 | Acceleration, Gravity and Friction |
| 5 | 9/4 - 9/8 | Newton’s First Law and Newton’s Second Law of Motion |
| 6 | 9/11 - 9/15 | Newton’s Third Law of Motion |
| 7 | 9/18 - 9/22 | Types of Energy, Energy Transformation and Work, Simple Machines |
| 8 | 9/25 – 9/29 | Simple Machines |
| 9 | 10/2- 10/6 | Sound and Light |
|  | 10/9 – 10/13 | FALL BREAK |
| 10 | 10/16 - 10/20 | Mirrors, Lenses, and the Eye |
| 11 | 10/23- 10/27 | Thermal Energy |
| 12 | 10/30-11/3 | States of Matter: Solids, Liquids, and Gases |
| 13 | 11/6 -11/10 | Behavior of Gases |
| 14 | 11/13-11/17 | Parts of the Atom, Periodic Table |
| 15 | 11/20 -11/21 | Periodic Table |
|  | 11/22 – 11/24 | THANKSGIVING BREAK |
| 16 | 11/27-11/30 | Electrons and Energy Levels, Compounds, Chemical Formulas, Covalent Bonds, Ionic and Metallic Bonds |
| 17 | 12/4-12/8 | Chemical Reactions, Balancing Equations |
| 18 | 12/11-12/15 | Balancing Equations and Midterm Review |
| 19 | 12/18-12/21 | Midterm Review and Midterm Exams |
|  | 12/22 – 1/5/2018 | CHRISTMAS BREAK |
| 20 | 2018  1/8-1/12 | Energy Changes in Chemical Reactions |
| 21 | 1/15-1/19 | Energy Changes in Chemical Reactions |
| 22 | 1/22-1/26 | Substances, Mixtures, Solutions |
| 23 | 1/29-2/2 | SCIENCE FAIR! pH |
| 24 | 2/5-2/9 | Biomolecules |
| 25 | 2/12-2/16 | Clues to Earth’s Past: Fossils |
| 26 | 2/19-2/23 | Relative and Absolute Dating of Rocks |
| 27 | 2/26-3/2 | Geological Time: History and Evolution of Life |
| 28 | 3/5-3/9 | Paleozoic, Mesozoic, Cenozoic Eras |
|  | 3/12 – 3/16 | SPRING BREAK |
| 29 | 3/19-3/23 | Humans and Ecosystems, How Body Systems Interact - Biofeedback |
| 30 | 3/26-3/29 | Heredity GOOD FRIDAY 3/30 |
| 31 | 4/3-4/6 | EASTER MONDAY 4/2 Genetic Disorders |
| 32 | 4/9-4/13 | Bioengineering |
| 33 | 4/16-4/20 | Adaptation and Evolution |
| 34 | 4/23- 4/27 | CAMP GREENVILLE |
| 35 | 4/30- 5/4 | Biodiversity |
| 36 | 5/7- 5/11 | 8th Grade Review for Exams |
| 37 | 5/14 - 5/18 | **8th GRADE FINALS, 8TH GRADE GRADUATION 5/17** |
| 38 | 5/21 – 5/24 | Middle School Finals, Field Day |