**PHYSICAL SCIENCE LAB**

**Instructor:** Laureen Rupert
**Email:** laureen@sheep.education

**Phone:** (843)991-8376

**Grades:** 8th – 9th

**Class time:** 12:10 – 1:00 pm

**Required text**: Apologia Exploring Creation with Physical Science 2nd Edition

**Supplies:** 3-ring binder, #2 sharpened or mechanical pencils

This laboratory class offers students the opportunity to perform the experiments and discuss the material contained in Apologia Exploring Creation with Physical Science, second edition. Students will have the opportunity to learn to properly collect data during a laboratory experiment and write up scientific experiments. Students will also be required to complete two projects.

**The lab grade counts for 30% of the course grade.** ***This grade is not to be used as their overall Physical Science course grade, since it will only reflect work done on the labs, not on reading and tests.*** Students will be graded on weekly lab reports, maintaining a neat lab notebook, two major projects, and class participation. Detailed instructions for all assignments will be given in class. Absences are excused only with an email from parent within 24 hours of a missed class. Late assignments will drop 1 letter grade.

Students are to read the modules in the textbook at home on the same schedule as the lab syllabus. Parents are responsible for grading all text work (tests, study guides, on-you-own questions) and textbook progress will be checked at the end of each semester.

**Physical Science – Lab Schedule and Suggested Sequence**

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| Week | Topic/Lab | Home Progress | Assignments/Notes |
| 1 | Atoms & Molecules Labs 1.1, 1.2 | Module 1 |  |
| 2 | Concentration, Lab 1.3 |  |  |
| 3 | Evaporation, Lab 2.1 | Module 2 |  |
| 4 | Oxygen, Lab 2.2 |  | Lab 2.3 optional at home |
| 5 | Atmospheric Pressure, Lab 3.1 | Module 3 |  |
| 6 | Changing Temperature, lab 3.2 |  |  |
| 7 | Intro to Water, Labs 4.1, 4.2, 4.3 | Module 4 |  |
| 8 | Cohesion, Labs 4.4, 4.5, 4.6 |  |  |
| 9 | Salt & Ice Lab | Module 5 |  |
| 10 | Hydrosphere, Labs 5.1, 5.2, 5.3 |  |  |
| 11 | Earth’s Lithosphere, Labs 6.1, 6.2 | Module 6 | Lab 6.3 optional at home |
|  | Thanksgiving Break |  |  |
| 12 | Candy Quiz |  | **Project assigned** |
| 13 | Clouds & Weather, Lab 8.1 | Module 7-8 |  |
|  | Christmas Break | Module 7-8 | Lab 7.1 |
| 14 | Motion, Labs 9.1, 9.2 | Module 9 |  |
| 15 | Project Day |  | **Semester project due** |
| 16 | Motion, cont’d, Lab 9.3 |  |  |
| 17 | Newton’s Laws, Lab 10.1, 10.2 | Module 10 |  |
| 18 | Newton’s Third law, Lab 10.3, 10.4 |  |  |
| 19 | Circular Motion, Lab 11.1 | Module 11 |  |
|  | Winter Break |  |  |
| 20 | Gravity, labs 11.2, 11.3 |  |  |
| 21 | Electromagnetism, Labs 12.1, 12.2 | Module 12 |  |
| 22 | Current & Resistance, Lab 12.3 |  | **Planet project assigned** |
| 23 | Periodic Table of the Elements | Module 13 |  |
| 24 | Waves, Labs 14.1, 14.2 | Module 14 | Lab 14.4 optional at home |
| 25 | Waves & Sound, Labs 14.3, 14.5 |  |  |
| 26 | Project Dayr 4.3 and 14.5t homen12.3s, Lab 6.4 |  | **Planet project due** |
| 27 | Light, Labs 15.1, Reflection  | Module 15 |  |
|  | Spring Break |  |  |
| 28 | Refraction, Labs 15.4, 15.5 |  |  |
| 29 | Candy quiz | Module 16 |  |