

Rachel Joiner
Physical Science
8th Grade
2008-2009

Course Overview

This course is a one-year required science class for 8th grade students. The students are provided with instruction in the application of the process skills necessary for using the scientific method of problem solving as it relates to physical science.

Topics Covered

- ✓ Nature of Science
- ✓ Safety
- ✓ SI Units (metric)
- ✓ Waves
 - Sound and light
 - Reflection, Refraction and Absorption
- ✓ Matter
- ✓ Inertia
- ✓ Forces and Work
- ✓ Energy
 - Heat, Electrical, Nuclear, Mechanical and Chemical
- ✓ Basic Chemistry

Course Goals

At the end of the course the student should be able to:

- ✓ Understand the interrelationships among history, science and technology.
- ✓ Utilize safe practices in the science laboratory.
- ✓ Become familiar with the use of common laboratory equipment.
- ✓ Understand how physical science concepts relate to physical events in the environment.
- ✓ Practice problem-solving skills using the scientific method.
- ✓ Develop skills in the metric (SI) system of measurement.
- ✓ Evaluate an experiment or demonstration.
- ✓ Examine the relationship between force and motion.
- ✓ Recognize the various forms of energy.
- ✓ Identify the structure of matter.
- ✓ Recognize the physical and chemical properties of matter.
- ✓ Examine wave characteristics.
- ✓ Relate wave characteristics to observe phenomena exhibited by sound and light.
- ✓ Relate motion of a conductor in a magnetic field to the production of electricity.

- ✓ Examine the role of the physical science in the development of technology.
- ✓ Understand that scientific principals can be expressed through mathematics.
- ✓ Explore career opportunities in science and technology.
- ✓ Develop an understanding of character, ethics and manners as appropriate for this course.
- ✓ Write lab reports and write-ups using the steps of the scientific method.

Daily Classroom Procedures:

- ✓ Start the in question in science notebook.
- ✓ Lesson of the day
- ✓ Out question.
- ✓ Clean up.

Rules

- ✓ Sit quietly and immediately start in question
- ✓ Follow all directions given by the teacher.
- ✓ Listen to speakers respectfully.
- ✓ All work must be neat, complete and on time.
- ✓ Stay in assigned area.
- ✓ Have all supplies needed.

If a student makes a bad choice, the steps in progressive discipline are:

- ✓ Warning form
- ✓ Time Out/MAP
- ✓ Hone call home
 - I talk to the parent after the student does.
 - If there is no answer, it is still counted as a parent phone call.
- ✓ Detention
- ✓ Counselor or Dean's Referral (Depends on Situation)

Grades are as follows:

- ✓ 90%+ A
- ✓ 80-89% B
- ✓ 70-79% C
- ✓ 60-69% D
- ✓ Below 59% F

Students will be graded on:

- ✓ Lab safety
- ✓ Class work
- ✓ Lab reports and write-ups
- ✓ Tests
- ✓ Notebooks

I went online and read the course expectations. I understand what is expected of my student and myself.

Parent's Signature

Date

Student's Signature

Date