



Sixth Grade Science

Sixth Grade Science focuses on the physical sciences. Content will not be emphasized in this course. The particular topics that we study will continue to be important later in your education though. The skill of recalling information will be kept to a minimum; instead, you will be asked to perform scientific tasks. The course is built around a series of key exploratory experiments.

The grades will come primarily from the lab reports written about these experiments, there will also be in-class evaluations that test the your ability to perform some of these tasks. The process of the scientific method will be emphasized throughout the course. There are many ancillary skills associated with science that will be learned in the context of doing the experiments.

Skills Include:

- ▶ Designing experiments
- ▶ Taking data
- ▶ Making scientific tables and creating graphs
- ▶ Analyzing data
- ▶ Finding proportional relationships
- ▶ Finding inverse proportional relationships
- ▶ Finding independent (or no) relationship
- ▶ Learning spreadsheet skills
- ▶ Plotting data and making best-fit lines
- ▶ Looking for patterns
- ▶ Building computer models
- ▶ Using units
- ▶ Making scientific graphs
- ▶ Identifying independent and dependent variables
- ▶ Using mathematics to describe natural patterns
- ▶ Writing lab reports

Big Topics Include:

- ▶ Linear Motion (and Newton's First Law)
- ▶ Projectile Motion
- ▶ Pendula
- ▶ Flight
- ▶ Density
- ▶ Gravity (and Newton's Third Law)
- ▶ Electricity
- ▶ Energy
- ▶ Waves and Sound

What to Bring to Class Every Day:

- ▶ Science Binder ("Journal")
- ▶ Assignment Folder
- ▶ Pencil with Eraser

Get organized. Stay organized. You will not regret it.

Homework and the Honor Code:

As long as you keep up with the material, you will find the homework to be quite appropriate. Plagiarism, cases of copying from either an author or another person (especially classmates), will not be tolerated in any form. If you work with another person, list their name beside yours on the assignment. The homework should be done in your own words in these cases too. You are here to learn and think on your own. Assignments are due at the beginning of class. Homework will be posted on TowerNet and on the board. Late assignments receive a sizable deduction in their grade (one grade level).

Evaluation:

Grades will be taken from tests, quizzes, writing/research assignments, presentations and laboratory work. Your science notebook will be graded occasionally. Decent behavior and active participation are always expected, and are important in my evaluation of your work. I will also consider your promptness, attitude, neatness, organization, cooperation, initiative and attendance at extra help sessions, (should the need arise).

Other Policies:

Please be punctual to class. Should you not be a complete your work or cannot get to class on time, a note from an adult is imperative. While in class, you should be attentive and courteous. Your raised hand is a sure way of having your questions answered. Another area to mention is laboratory safety. The guidelines I will offer you are for our collective safety, so heed them well. As long as you listen carefully, lab time will be smooth as Teflon.

In Conclusion:

If you are unsure about something, please do not hesitate to ask. Those who hesitate, lose.