

Blue Oak School

Seventh Grade Science

2010-2011

[Paul Cooke](#)

Welcome to Seventh Grade Science. Topics explored in class this year will include: metric measurement, data collection, interpretation and analysis, scientific methods, formal lab report writing, the big bang theory, movements of the Earth and Moon, seasons, maps, mapping, and orienteering, plate tectonics, seismology, rocks, minerals, soil, stream morphology, photosynthesis, introduction to microbiology-cell cycle and mitosis, plant structure and function, principles of plant propagation, carbon cycle and the greenhouse effect, environmental sustainability, oceanography, astronomy and the human lymphatic system. You will be developing your skills of observation and problem-solving while learning more about the world around you.

The main objectives for this course are as follows:

- To develop your observation and problem-solving skills by using the scientific method as a starting point for inquiry.
- To increase your scientific knowledge, especially of processes related to the Earth and living systems.
- To improve your laboratory techniques and report writing.
- To encourage a positive attitude towards science and a thirst for knowledge.
- To encourage productive class and small group discussion and effective work habits.
- To improve skills necessary for collection, analysis, interpretation and presentation of scientific data.

Course Materials

- A science notebook (or separate section in a binder) in which to keep class notes, homework, lab reports, and assessments.
- Mechanical and colored pencils and/or pens for recording data and making diagrams.
- Your laptop computer for access to the science website-
www.blueoakschool.org/science/

Expectations

- Strive for excellence in this class every day.
- Show respect for each other, the teacher, the classroom and yourself.
- Exhibit curiosity, enthusiasm, and resourcefulness.
- Be an active participant in class and small group discussions.

If you have questions or thoughts you'd like to share, please stop in and visit. My goal is to create a positive learning environment where we can have fun discovering the wonders of the world around us.

Blue Oak School

Eighth Grade Science

2010-2011

[Paul Cooke](#)

Welcome to Eighth Grade Science. This class is an inquiry based physical science program. Topics explored in our studies this year will include: metric measurement, data collection, interpretation and analysis, scientific methods, formal lab report writing, energy, motion and forces, Newton's laws, simple machines, heat and thermodynamics, solar oven construction and use, environmental sustainability, structure and interactions of matter, periodic table use, physical and chemical properties of matter, chemical reactions, nitrogen cycle, soil testing and amending, Charles's law, Boyle's law, aquatic life and marine ecosystems and the human endocrine system. You will be developing your skills of observation and problem-solving while learning more about the nature of the world around you.

The main objectives for this course are as follows:

- To develop your observation and problem-solving skills by using the scientific method as a starting point for inquiry
- To increase your scientific knowledge of matter and energy
- To improve your laboratory techniques and report writing
- To encourage a positive attitude towards science and a thirst for knowledge
- To encourage productive class and small group discussion and effective work habits
- To improve skills necessary for collection, analysis, interpretation and presentation of scientific data

Course Materials

- A science notebook (or separate section in a binder) in which to keep class notes, homework, lab reports, and assessments.
- Mechanical and colored pencils and/or pens for recording data and making diagrams.
- Your laptop computer for access to the science website-
www.blueoakschool.org/science/

Expectations

- Strive for excellence in this class everyday.
- Show respect for each other, the teacher, the classroom and yourself.
- Exhibit curiosity, enthusiasm, and resourcefulness.
- Be an active participant in class and small group discussions.

If you have questions or thoughts you'd like to share, please stop in and visit. My goal is to create a positive learning environment where we can have fun discovering the wonders of the world around us.