



PS 1	The natural and designed world is complex; it is too large and complicated to investigate and comprehend all at once. Scientists and students learn to define small portions for the convenience of investigation. The units of investigation can be referred to as “systems.” (6-8 SYSF)	10
PS 2	Models are used to represent objects, events, systems, and processes. Models can be used to test hypotheses and better understand phenomena, but they have limitations. (6-8 INQE)	1, 6, 7
PS 3	Distinguish between the results of a particular investigation and general conclusions drawn from these results. (6-8 INQF)	1, 3, 7
PS 4	Communicate Clearly: Scientific reports should enable another investigator to repeat the study to check the results. (6-8 INQG) Intellectual Honesty: Science advances through openness to new ideas, honesty, and legitimate skepticism. Asking thoughtful questions, querying other scientists’ explanations, and evaluating one’s own thinking in response to the ideas of others are abilities of scientific inquiry. (6-8 INQH)	1, 3, 4, 8
PS 5	Solutions must be tested to determine whether or not they will solve the problem. Results are used to modify the design, and the best solution must be communicated persuasively. (6-8 APPF)	1, 2, 9, 10
PS 6	People in all cultures have made and continue to make contributions to society through science and technology. (6-8 APPH)	4, need more
PS 7	Average speed is defined as the distance traveled in a given period of time. (6-8 PS1A)	1, 4
PS 8	Friction is a force that can help objects start moving, stop moving, slow down, or can change the direction of the object's motion. (6-8 PS1B)	4
PS 9	Unbalanced forces will cause changes in the speed or direction of an object's motion (6-8 PS1C)	4
PS 10	Substances have characteristic intrinsic properties such as density, solubility, boiling point, and melting point, all of which are independent of the amount of the sample. (6-8 PS2A)	1, 2, 3, 4, 5
PS 11	Mixtures are combinations of substances whose chemical properties are preserved. Compounds are substances that are chemically formed and have different physical and chemical properties from the reacting substances. (6-8 PS2B)	1, 6, 7
PS 12	Compounds are composed of two or more kinds of atoms, which are bound together in well-defined molecules or arrays. (6-8 PS2D)	1, 6, 7
PS 13		

PS 14	Solids, liquids and gases differ in the motion of individual particles. In solids, particles are packed in a nearly rigid structure; in liquids, particles move around one another; and in gases, particles move almost independently. (6-8 PS2E)	1, 6, 7
PS 15	Energy exists in many forms: heat, light, chemical, electrical, motion of objects and sound. Energy can be transformed from one form to another and transferred from one place to another. (6-8 PS3A)	1, 2, 4, 7

### **Course Outline**

Units

Unit 1 Planet Earth

Unit 2 Weather and Climate

Unit 3 Semester Project - due the last week of the semester.

Unit 4 Physics is Fun

Unit 5 The Planets

### **Course Work**

Students are expected to put in 6-8 hours per week to complete their lessons. Lessons should be turned in as soon as they are completed and not turned in all at one time. Lessons should be submitted in Angel in most cases and exceptions must be approved by the instructor in advance.

### **Grading**

Students are expected to maintain weekly contact with the teacher for the purpose of teaching and learning. Asking questions in Science is extremely important. Consistent completion of assignments allows for questions, feedback and revision of assignments. Turning in work in bulk does not allow for this critical interaction, nor for lesson revision and will result in grade reduction. Labs should be fun as well as educational. Most labs can be modified with your teacher's permission. **Always be safe!**

### **Lesson assignments will be graded using the following criteria:**

1. Proper spelling and grammar should be used at all times.
2. Lab write-ups should follow the standard format provided in the course library.
3. All lesson answers should be in the student's own words.
4. Copying and pasting from sources will not be tolerated. Students must write answers in their own words.

### **Projects will be graded using the following criteria:**

1. All prescribed formats will be followed.
2. Bibliographic citation of all web resources must accompany the project, including the URL, name of the web site, and author or editor if available.
3. Copying or plagiarism will not be tolerated. Plagiarism may result in no credit given for the lesson or project.

**Occupational Credit:**

This course may qualify for \*occupational credit. Please consult your school counselor for further clarification.

\*Please note that FLA901 (Sign Language) does not qualify for occupational credit.

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