

Welcome to Eighth Grade Science at Scottsdale Preparatory Academy!

Dear Parents,

I am looking forward to working with you and your child as we explore the nature of science with an Earth Science focus. To ensure student success throughout the year, please take a few moments to review the attached items with your child:

- 1. Course syllabus, major assignments summary and supply list**
- 2. Minimum writing requirements**
- 3. Parent/Guardian commitment**
- 4. “Return to Teacher” form** *(please complete & return)*
- 5. Lab safety form** *(please complete & return)*

The “Return to Teacher” form should be signed by you, and then returned to me at your child’s next class period, along with the signed lab safety contract.

I have high expectations for each student in concert with the aims of Great Hearts. I intend to maintain a positive environment where each student will be recognized and valued for his or her unique talents and abilities, while being challenged to grow in new ways.

Responsibility, accountability and independence continue to be important traits for students to continue to grow during eighth grade. I look forward to your input and participation throughout the year as we partner together in your child’s education.

Sincerely,

Gregg Swackhamer
pswackhamer@scottsdaleprep.org

Class website for assignments and most handouts:
<http://swackhamer.weebly.com/earth-science.html>

Syllabus

The focus of the 8th grade Earth Science course is the continued investigation of science as a means for exploring and understanding the natural world with respect to foundational earth science topics (geology, oceanography, meteorology and astronomy), key conceptual models and mathematical concepts (e.g. systems, derived units, energy/matter relationships, etc.), and the challenges encountered in science and technology. As with all junior high science classes, methods of observation, experimental design, modeling, measurement, and data interpretation are emphasized throughout as students regularly engage in active research, projects and labs in a variety of scientific disciplines. There will be emphasis throughout the year on the application of mathematics to science.

Course Format & Expectations

This course will include a variety of scientific concepts. Readings, research, lab experiments, demonstrations, simulations, and projects will supplement the daily class discussion. Students are expected to proactively participate and contribute daily with their best effort, act in a scholarly manner, be accountable and take ownership of their education. Students are also expected to practice active listening, organize their science materials according to instructor requirements, consistently take notes and outline pertinent information from each reading assignment and classroom discussion in order to ensure thorough understanding of the material. Students are also expected to take the initiative to seek out clarification of unclear concepts.

The interactive nature of daily classroom discussion will require thorough *prior* preparation. Student confidence and success with the subject material is frequently directly linked to that student's level of preparation for each class session. The ability to think critically and analyze information with an open mind will be key to probing the concepts associated with this course.

Course Schedule

The course will proceed according to the following general schedule (subject to change):

| Quarter 1 | Quarter 2 | Quarter 3 | Quarter 4 |
|---|---|--|--|
| What is Earth Science? Measurement & Methods Mapping Earth's Surface Rocks & Minerals Plate Tectonics | Earthquakes & Volcanoes Weathering & Soil Erosion & Deposition Geologic Time Energy Resources | Fresh Water Ocean Motions & Zones Earth's Atmosphere Weather Factors & Patterns | Earth's Climate Earth, Moon and Sun The Solar System Stars, Galaxies & the Universe |

Course Grading:

Projects & Lab Write Ups (20%): Throughout the year there will be a variety lab activities requiring formal write-ups, at least one major research paper, as well as additional project activities. Labs will be performed regularly, with differing levels of at-home completion requirements. Papers and some project items will largely be done outside of school. All major projects (e.g., research papers, certain labs and project activities) are considered to be "standing homework" and will require at-home activities which are to be done in parallel with regular daily/weekly class preparation. Weekend homework may also entail activities related to major projects. Requirements and timelines for research papers and project deliverables will be provided before these projects begin to allow ample planning and completion time. History has consistently demonstrated that those students who carefully adhere to the requirements and timelines have superior knowledge retention and quality of work, while taking greater pride in their individual accomplishments.

Quizzes, Tests and Exams (50%): Quizzes will cover material presented in the class and/or material assigned as homework since the prior quiz. Quizzes can be announced or unannounced and will typically be administered weekly. Quizzes are given to measure both understanding of the material as well as to help students develop strong study habits. Tests will be administered periodically during the quarter to test understanding and comprehension of key concepts. An exam may be administered at the end of each quarter and/or semester and be comprehensive in scope with regard to the information covered during the quarter or semester. Any topics covered during the quarter or semester (whether in class or as homework) are fair game for inclusion on a test or an exam.

Homework (15%) Homework will be assigned daily and usually consists of preliminary work to prepare for the next class discussion and/or a review of that day's notes recorded during the class discussion. Homework is typically reviewed the following day in class and may also be collected. Excepting approved delays, homework must be completed and ready to submit **in class** at the next class meeting. Homework not turned in at this time will be considered incomplete. Homework which does not meet the "Minimum Writing Requirements" guidelines will be considered incomplete. **Incomplete or missing homework will receive a grade of zero, but is still due.** *Multiple missing or incomplete homework assignments will result in lunch or after school detentions, as determined by the instructor. Similarly, the instructor may require a student to make up missing homework or other items not completed in class, during student "free time" periods, such as lunch break.*

Participation (15%): Participation is a very important aspect of student achievement at SPA. Each student is expected to *consistently* contribute to class discussions in a conscientious and meaningful manner, and participate appropriately during labs and other group work. Answers to posed questions, thoughtful questions about the subject matter, and comments about a given topic or experiences related to the subject being discussed are all acceptable

ways of class participation. Such participation will aid in understanding of the course material. All students are expected to cultivate positive, proactive attitudes toward their learning. Student behavior during class will also be a factor in grading.

Missed Work: Any daily missed work (including homework, tests, quizzes, class notes, etc.) due to an excused absence will receive an extension (typically 24 hours) to allow students time to make it up. **It is the student's responsibility to find out what was missed and to make arrangements to obtain any notes, handouts and make up work.** Please note that this extension does **not** apply to those assignments (research papers or project items, for example) where a long-term timeline or due date was communicated earlier to students. Late long-term assignments will be issued zero or partial credit only, as determined by the instructor.

Tutoring: Tutoring will be available weekly according to the schedule announced in class. Students should sign up for tutoring using the sign in sheet in class. Because tutoring is limited, it is intended as *additional* help for students who are seeking a more thorough understanding of the principles presented during class. Tutoring hours may also be used to make up missing quizzes, tests or other assignments missed due to absence. Tutoring is not intended to replace class time for students who were not attentive to regular instruction, nor is tutoring an appropriate time for students or parents to discuss performance. These concerns, and others, should be reserved for private discussions by appointment only.

Online Resources: Homework assignments and additional materials will be posted for parent and student reference. The website can be found at <http://swackhamer.weebly.com/earth-science.html>. Although every effort is made to keep the blog listings current, homework assigned daily in class always supersedes that listed on the blog.

Major 8th Grade Science Assignments Summary:

| | 8-Aug-17 | 16-Oct-17 | 8-Jan-18 | 19-Mar-18 | 23-May-18 |
|--|--------------|--------------|--------------|--------------|--------------|
| Major Out-of-class Preparation | 1st Q | 2nd Q | 3rd Q | 4th Q | Total |
| Cumulative Exams | 0 | 1 | 0 | 1 | 2 |
| Research Projects | 1 | 0 | 1 | 0 | 2 |
| Formal Lab Reports | x | x | x | x | TBA |
| Subject to change. Deliverable dates to be announced. | | | | | |

Supplies

INDIVIDUAL MATERIALS (brought by student & replenished from home as needed)

| | | |
|--|---|---|
| <ul style="list-style-type: none"> ○ Pencils (mechanical ok) & erasers ○ Small, portable pencil sharpener ○ Red ballpoint pen (erasable ok) ○ Blue ballpoint pen (erasable ok) ○ 1 ½ inch, 3-ring VIEW binder (has clear plastic pocket on front) ○ Zippered binder pouch for supplies | <ul style="list-style-type: none"> ○ Wide ruled, lined notebook paper ○ Divider sheets with tabs & holes (to separate binder sections) ○ Lined 3"x5" cards ○ Highlighter ○ Ruler with metric units (cm, mm) ○ Black fine-tip marker ("Sharpie") | <ul style="list-style-type: none"> ○ Student scissors (pointed) ○ Protractor ○ Small box multicolor pencils (self sharpening preferred but not required) ○ Small basic function (+/-/x/÷) calculator ○ Small, portable stapler with staples ○ Graph paper (50 sheets) |
|--|---|---|

OPTIONAL (not required, although some parents have donated these for general classroom use in past)

| | | |
|---|---|--|
| <ul style="list-style-type: none"> ○ Paper towels & Dixie cups ○ Disinfecting desk wipes ○ Kleenex (boxed & personal size) | <ul style="list-style-type: none"> ○ Gallon sized Ziploc bags ○ Quart sized Ziploc bags ○ Hand sanitizer | <ul style="list-style-type: none"> ○ Consumable materials and household chemicals for labs (e.g., ice, baking powder, corn syrup, vinegar, etc.); please contact teacher BEFORE sending in, as storage space is very limited |
|---|---|--|

Minimum Requirements for Homework and Writing Assignments

To be considered for grading, each writing assignment must meet the below requirements, unless otherwise instructed. **Assignment will be returned without grading as “incomplete” or “missing” unless the minimum requirements are met.**

1. **Title** of assignment in center of upper white margin
2. **FIRST page:**
 - a. Full student **first & last names** listed in upper LEFT hand corner of white margin
 - b. **Instructor’s name** listed below student name (“Mr. Swackhamer”)
 - c. **Course & Section** listed below instructor name (ex. “Earth Science 8B”)
 - d. **Complete date** listed below course & section in appropriate format
3. **ALL pages:** Student **last name** and **page number** in upper RIGHT hand corner of white margin
4. Notebook paper **holes on left** side of paper
5. Paper should have **no rips, crumples, stains** or “fuzz” from torn out spiral notebook
6. Assignment should be **legibly handwritten** or **typed** (11 or 12 pt. font, 1.5 spaced or double spaced)
7. All paragraphs should be **indented**
8. Stray marks or **corrections** must be **fully erased**
9. Writing should only rarely, if at all, extend beyond right-hand margin notebook paper “**red-line**”
10. If assignment includes your response to questions, **questions should be restated** as part of answer, and answers must be in **complete sentences** (no one-word or partial sentence answers)
11. Paper should have **no drawings or stray comments** written on it unless part of assignment
12. Writing must be in your **own words**, unless citing a quotation
13. Multiple pages should be **stapled together** in upper left hand corner before collection of assignment, with **title, heading, student name** and **page numbers** as listed above
14. Basic **conventions** (beginning capitalization, punctuation, spelling, etc.) must be evident
15. **Bottom** margin of each page must have white space, of at least 3 lines.
16. Correct **MLA bibliography format** (if applicable). Standard to be provided.

SAMPLE FIRST PAGE

Multiple pages must be stapled together in upper left hand corner

Ima B. Student
Mr. Villaca
Science 6F
10 August 2011

List all items in the order shown on first page of written assignments such as homework and research papers

Include name and page number on all pages **Student - 1**

Paper edges must be smooth and neat. Holes must be on the left side.

Historical Figures in Science

All written assignments, including homework, must show a title.

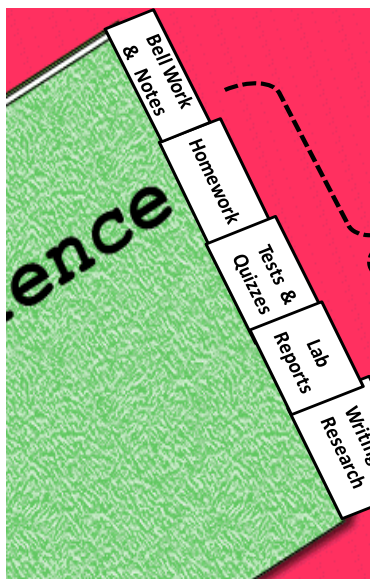
The definition of “science” through the ages has changed dramatically as structured methodologies became common practice, as testing and technology improved and as ...

Proper writing conventions should be used (e.g., punctuation, capitalization, spelling, etc.)

Writing should be surrounded by white space on all sides. If typing, margins should be set at 1 inch. Writing on notebook paper should not frequently extend past either “red line”

Student Binder Organization

Each student should maintain a highly organized science binder. The binder structure shown below is **optional, but encouraged**, especially for those students with organization challenges. Multiple subjects may be combined in a single binder:



FRONT OUTSIDE POCKET (clear):

- Study guide/Homework sheet

FRONT INSIDE POCKET:

- Nightly assignment items, vocabulary aids, etc.

USE DIVIDERS TO SEPARATE SECTIONS FOR:

1. Bell Work, Class Notes & Lesson Handouts
2. Nightly Homework
3. Tests, Quizzes & Sample Answers
4. Lab Reports
5. Writing & Research Papers

BACK INSIDE POCKET:

- Returned work (clean out nightly)

SMALL ZIPPERED POUCH:

- Calculator, small stapler, writing supplies, metric ruler, etc.

Parent / Guardian Commitment

As you know, learning is not a school-only endeavor. It is important that the activities we do in the classroom are consistently reinforced at home. I appreciate your consistent effort to directly support the following from home throughout the year:

- Reinforce and remind your child about their **ownership** of their choices and consequences, and about taking responsibility for their actions and education
- Reinforce the importance of **respecting** others' time, property, space, and learning environment
- Review and discuss nightly **homework & corrected work** or tests
- Encourage student **note-taking** along with the use of notes for homework, test preparation, & lab activities
- Reinforce class material **organization strategies** (e.g., binder sections and their use as study aids)
- Reinforce and support all **lab safety** policies
- Support drilling on weekly **vocabulary** words and **key concepts**
- Support adherence to **minimum writing requirements** and citing of sources using correct **bibliography format** (to be provided)
- Ensure that your child promptly obtains **books, supplies, and other assigned** items
- Make **public library & computer** resources available as needed
- Oversee **computer assignments** and **Internet usage** outside of school
- Replenish school **supplies** as needed
- Use the class **website** to support your child.
- Avoid **replacement fees** for lost or damaged school materials by reinforcing respect and responsibility for others' property (e.g., textbooks, etc.)
- Ensure that any **incomplete/missing** homework or in-class practice **assignments**, or **behavior issues** not closed by the end of the school day are **addressed at home**
- Realize that items contained in this packet and available electronically are subject to change

RETURN TO SCIENCE TEACHER

STUDENT NAME: _____ SECTION #: _____

PARENT/GUARDIAN NAME: _____

PARENT E-MAIL (for class distribution list-please print clearly) _____

PARENT PHONE NUMBER: () _____

EMERGENCY PHONE NUMBER: () _____

The class will have a course website, and there will be multiple assignments during the year which require Internet and computer usage. If you do not have Internet access, you may use the public library's computers without cost. All student internet usage must be supervised by a responsible adult.

At home, my child has access to:

- a computer
- the Internet
- MS Word (or similar word processor)
- MS PowerPoint (or similar presentation)
- MS Excel (or similar math)

Child's level of familiarity (circle one):

- | | | | |
|------------|-------------|-------------|-------------|
| Computer: | <i>High</i> | <i>Some</i> | <i>None</i> |
| Internet: | <i>High</i> | <i>Some</i> | <i>None</i> |
| Word: | <i>High</i> | <i>Some</i> | <i>None</i> |
| PowerPoint | <i>High</i> | <i>Some</i> | <i>None</i> |
| Excel | <i>High</i> | <i>Some</i> | <i>None</i> |

Please write down any food allergies, health restrictions or any other concerns/considerations which you feel I should be aware of: _____

Please review the following items and sign:

- I. I've reviewed all materials in the orientation packet and support the "Parent/Guardian Commitment" items
- II. I will ensure that any incomplete/missing homework or in-class practice assignments, or behavior issues not closed by the end of the school day, will be addressed at home.

PARENT/GUARDIAN SIGNATURE _____ DATE _____

Lab Safety

Science Safety Rules & Parent/Student Safety Contract

Science class is an enjoyable and exciting place to learn. You are responsible for your safety and the safety of your classmates. The following are safety rules to help guide you in protecting yourself and others from injury.

1. Read all instructions before you begin.
2. Take note of every verbal or written caution given for an experiment and be fully prepared to comply with each one.
3. Do not attempt any unauthorized experiment.
4. Never engage in horseplay or practical jokes of any kind during an experiment.
5. Know the location & use of the extinguisher, eyewash, and other safety equipment.
6. Report any accident, injury, spill or incorrect procedure to your instructor at once.
7. Use safety equipment provided for you. (goggles, aprons, gloves)
8. Long hair should be tied back. Avoid hanging necklaces or bulky jewelry.
9. Only teacher approved materials are permitted in the working area.
10. Never eat or drink during the experiment. Never inhale chemicals. Do not taste any substance or draw any material into a tube with your mouth.
11. Handle lab equipment properly. Get help if you do not know how to use something.
12. Do not use chipped, cracked or dirty glassware.
13. After the experiment, clean equipment and return all materials and supplies to their proper places. Clean your area with water. Wash your hands.

STUDENT CONTRACT:

I, _____, have read the above safety rules and have had the rules explained to me. I understand these guidelines are for my own safety. I will follow these rules when participating in lab activities. I understand that my failure to follow these rules and procedures could result in a hazardous situation for me or for other class members. I realize that my failure to follow these rules and procedures will result in some or all of the following actions:

- | | |
|--|----------------------------------|
| a. a verbal warning from my teacher | e. suspension from future labs |
| b. a zero on the lab activity | d. removal from the lab activity |
| c. notification of my parents/guardian | f. further disciplinary action |

Student signature

Date

PARENT CONTRACT:

I, _____ am the parent/guardian of

I have read the above safety items and understand them. I recognize the need for safe behavior by my child in the science lab, and support these policies. I have read the consequences for failure to comply with proper procedures/rules, and I agree that a safe environment is necessary to conduct science activities.

Parent signature

Date