

## **Earth & Space Syllabus**

**Course Name:** Earth and Space

**Teacher's Name:** Mrs. Shanel Lightfoot-Brown

**Communication:** I will correspond to parents through e-mail. You may email me at [slbrown@tcss.net](mailto:slbrown@tcss.net). You may visit my classroom blog at [brownsbiology.wordpress.com](http://brownsbiology.wordpress.com) for weekly updates. Please visit the school's website at <http://hillcresthigh.tcss.net/site/default.aspx?PageID=37>. Please sign up for remind101 by texting this message @edc74c0 to this number 81010 homework reminders.

**Course Description:** Earth and Space Science is the study of Earth, Earth Systems, meteorology, the solar system, space travel and the Universe. Topics covered will include Energy Resources, Climate, Weather, space travel, composition and formation of Earth, and the theories pertaining to the formation of the solar system, stars and the Universe

### **Course Objectives:**

- 1.) Describe sources of energy, including solar, gravitational, geothermal, and nuclear.
- 2.) Describe effects on weather of energy transfer within and among the atmosphere, hydrosphere, biosphere, and lithosphere.
- 3.) Explain how weather patterns affect climate.
- 4.) Describe the production and transfer of stellar energies.
- 5.) Discuss various theories for the origin, formation, and changing nature of the universe and our solar system.
- 6.) Explain the length of a day and of a year in terms of the motion of Earth.
- 7.) Explain techniques for determining the age and composition of Earth and the universe.
- 8.) Explain the terms astronomical unit and light year.
- 9.) Relate the life cycle of stars to the H-R diagram.
- 10.) Identify scientists and their findings relative to Earth and space, including Copernicus, Galileo, Kepler, Newton, and Einstein.
- 11.) Describe pulsars, quasars, black holes, and galaxies.
- 12.) Describe challenges and required technologies for space exploration.

**Materials:** Glencoe Earth Science; 3 ring notebook with dividers (you will place and organize your handouts and bell ringers/ Data Sheets); pencils, pen; paper and 1 black and white composition notebook for labs

**Composition Notebooks:** Students are required to keep up with your notebook throughout the semester. Notebooks will include notes, foldables, labs, and quick looks.

**Important Things to think of:** Bring all materials every day. Taking notes is required each day. You are required to keep up with all of your handouts, graded work, bell ringers, and study notes.

**Attendance:** Attendance is critical to your success! Students who miss school due to illness may make arrangements to make up missed work within two days of their return from an excused absence. Students who miss class due to extracurricular activities are responsible for getting their work.

**Grading Policy:** All grades will be calculated on a point system. Students will receive points for homework, classwork, laboratory reports, student journals, projects, quizzes, research papers, news article summaries and test. A comprehensive examination will be given every nine weeks. Keep all of your notes for it will be used as a study guide to prepare for test.

Bell Ringers- will be worth 25 points each week

Labs- 50 points (days that you are absent, you will be given a worksheet to make the lab grade up)

Quizzes- 40 points

Exams- 100 points

Research reports and projects- 100-150 points, no more than two people to a group

**Statements of Essential Functions:**

1. Students will be able to
2. Follow written and oral directions
3. Follow and apply basic safety requirements in class and in lab
4. Collect and analyze data
5. Manipulate apparatus
6. Perform laboratory work
7. Prepare and read graphs, written reports, collections and projects
8. Communicate effectively in writing and orally
9. Solve problems
10. Read from textbooks, supplemental materials, and teacher made materials
11. Think Critically

**This course outline is subject to change and students will be notified of such changes**

I have read the entire syllabus for Mrs. Brown's Earth/Space Class

Parent\_\_\_\_\_

Student\_\_\_\_\_

Please list any questions or concerns that you may have for Mrs. Brown below:

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