



Grade Level Introduction: Middle School Science 2020-2021

Teacher Contact Information

Mr. Joe Beard

B.A., M.A. University of Arizona
Twenty-nine years teaching at Casas including
13 years K-8 Computer Science, 1 year 5th
grade, 6 years 3rd Grade, 9 years 4th Grade.

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Grade Level Description

At Casas Christian School, Middle School students are encouraged to “learn science by doing science.” The Middle School has a fully equipped science lab where students are provided with many hands-on activities designed to enhance learning, develop problem-solving skills, engage students in cooperative learning and develop critical thinking skills. Students attend a 50-minute science class each school day and are required to complete one or more laboratory experiments each week. Sixth and Eighth Grade students develop, implement, and present their own experiments in the CCS Science Fair. Winners from each grade level go on to participate in the Southern Arizona Regional Science and Engineering Fair.

The content area studied is unique to each grade level. All middle school students will begin with a six-week study of health, after that, core studies will begin. Sixth grade students learn about the nature of matter, earth science (including rocks and minerals, plate tectonics, earthquakes and volcanoes, surface and groundwater systems, and meteorology), and astronomy. Seventh grade students learn about life and environmental science with in-depth studies of ecosystems, cells, microorganisms, plants, and animals. In Eighth Grade, the emphasis is on chemistry and physics, including force, energy, and motion, electricity and magnetism, as well as sound and light. In each of the content areas, the curriculum meets or exceeds state and national standards, and emphasis is placed on a biblical worldview of God’s creation.

Grade Level Resources

6th Grade:

Houghton, Mifflin, Harcourt **Science Fusion:**
Human Body Systems (Health Unit), The
Dynamic Earth, Earth’s Water and Atmosphere,
and Space Science.

7th Grade:

Houghton, Mifflin, Harcourt **Science Fusion:**
Human Health (Health Unit), Ecology and the
Environment; Cells and Heredity, The Diversity
of Living Things.

8th Grade:

Excel (Live Your Life, Be Free Health Unit)
Houghton, Mifflin, Harcourt **Science Fusion:**
Motion, Forces, and Energy; Matter & Energy;
Sound and Light.

Special Events & Field Trips (TBD)

6th Grade: Geology and History Field Trip to
Northern Arizona, including the Grand Canyon,
Meteor Crater, and many other places.

7th Grade: Field Trip to Catalina Island Marine
Institute to learn about marine ecosystems.
Includes snorkeling and kayaking.

Grade Level Weighting

| | |
|------------------------|------------|
| Unit Quizzes/Tests | 50% |
| In-class/Labs/Projects | 30% |
| <u>Homework</u> | <u>20%</u> |
| Total | 100% |

MS Report Card Weighting

| <u>Subject</u> | <u>Weight</u> |
|-------------------|---------------|
| Bible | 1.0 |
| Math | 1.0 |
| Language Arts | 1.0 |
| Science | 1.0 |
| History | 1.0 |
| PE | 0.6 |
| Health | 0.4 |
| Discovery Classes | 0.4 |