

**SCIENCE 6-8
2018 - 2019**

Course Title: Science 6-8
Grade Level: 6-8 or instructor approval
Prerequisites: None
Length of Course: One Year
Meets/Instructor: Mondays, 12:30 pm - 2 pm
Canyon Oak
Jalynne Redman
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Requirements:

- 1) Chromebook
- 2) Signed Tech Waiver - **REQUIRED**
- 3) Internet Access - most assignments are online

WORKSHOP DESCRIPTION:

- This workshop is designed to introduce students to grade-level standards and activities in Earth Science, Life Science and Physical Science. The workshop will offer a blended learning format which utilizes a combination of short lectures and hands on projects, inclusive of block coding assignments via Tynker. Tynker is a specialized software application that teaches critical thinking skills, math and systems design in a game-based environment. Science fair participation opportunities will also be include.

Students will learn the scientific method, inclusive of lab procedures. They will participate individually and in groups in various standards related labs. Additionally, lab notebook procedures and journaling via online blogging will be expected. Students will also have opportunities to explore science concepts via an instructional process that involves Four C's of Learning:

Creativity
Communication
Collaboration
Critical Thinking

Topics for the workshop will include:

UNIT I - Earth Science - with lab:

- the solar system
- plate tectonics
- earthquakes, volcanoes and more
- all about oceans
- all about national forests
- water cycle
- global warming
- blogging and lab notebook

UNIT II - Life Science - with lab:

- photosynthesis
- the cell
- scientific method
- genetics and the punnett square
- ecology and the food chain
- animals, plants and reptiles
- oxygen and carbon dioxide
- blogging and lab notebook

Unit III - Physical Science - with lab:

- atoms, elements and compounds
- periodic table
- magnetic fields
- electricity
- space
- blogging and lab notebook

Unit IV - Science Fair

- science projects
- how to do a display board
- presentation skills
- Google slides and infographics

Unit V - Special Projects

- coding for science projects
- special internet research techniques
- preparing a presentation
- presentation skills

- **all about famous scientists and their discoveries**