

2022-2023 Themes in Physical Science - Pacing Guide

Physical Science is the study of any of several branches of **science**, such as chemistry and physics, that study the nature and properties of matter (non-living) and energy. In this course students will explore and answer **some** of the following questions as they learn about key ideas in physical science:

- How can one explain the structure and properties of matter?
- How do substances combine or change (react) to make new substances? How does one characterize and explain these reactions and make predictions about them?
- How can one explain and predict interactions between objects and within systems of objects?
- How is energy transferred and conserved?
- How are waves used to transfer energy and send and store information?

* We do not have a reference text for this course. Materials will be provided through Schoology.

NOTE: The order of the units has changed effective 8.17.2020 to accommodate the use of lab materials that are more conducive with COVID-19 restrictions. We will be studying introductory physics concepts for 1st semester and introductory chemistry concepts for 2nd semester.

Quarter	Thematic Unit	Connected to these Physical Science Topics:	Want more? Other Related Topics
1	Solids and Liquids and Gases, Oh My !	Intro to Physical Science; Introduction to Matter; Solids, Liquids, Gases	
2	Mixing & Separating Matter	Elements and the Periodic Table; Compounds; Mixtures	Atoms and Bonding; Chemical Reactions
3	Motion and Forces - Part I	Energy; Motion; Forces	
4	Motion and Forces - Part 2	Work and Machines	
Notes: The thematic units are always under development and are subject to change. This document will be updated periodically and posted through the specific course listing in Schoology. If you have questions, comments, or concerns, please contact Ms. Sandy (sjsmith@d49.org)			

More information on other side of this page...

FHAP - Themes in Science Courses

FHAP Themes in Science classes are delivered once per week (Thursday) in a thematic unit-studies format. During class, students will have the opportunity to explore and discover science in an active, collaborative and creative way. In addition to the classroom activities, students are expected to complete related homework assignments due each Tuesday before Thursday's science class. Because of the limited time designated to learning via this FHAP science class, parents are encouraged to expand upon their learning* while at home (beyond the home assignments) in order to consider these courses as full year studies and assign a credit to the transcript.

[*Connections to the course text are provided on the pacing guide as a possible resource.]

The content of all FHAP science courses will be drawn from key ideas in science that have broad importance within or across multiple science disciplines, including Physical Science, Life science, and Earth and Space Science. In addition to the science content, the science classes will integrate crosscutting science principles as opportunities arise. Students will engage in science practices to build, deepen, and apply their ideas and concepts.

knowledge of key crosscutting

