



# SCIENCE 8 COURSE SYLLABUS

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Tutorial time: Mon-Fri 8:30-9:10am

This course is divided into five areas of Science: Processes of Science, Life Science (Biology), Physical Science (Physics and Chemistry) and Earth Science.

## What will I do...?

All units allow you to develop and practice your curricular competencies. These competencies are skills you need to learn to meet the science content and learning standards. The science curricular competencies are:

Curricular Competencies	A Curricular Competency Example
Questioning & predicting	Formulate alternative "If..then..." hypothesis based on your questions.
Planning & conducting	Measure and control variables (dependent and independent) through fair tests.
Processing & analyzing data and information	Use scientific understandings to identify relationships and draw conclusions.
Evaluating	Identify possible sources of error and suggest improvements to their investigation methods.
Applying & innovating	Generate and introduce new or refined ideas when problem solving.
Communicating	Communicate ideas, findings, and solutions to problems, using scientific language, representation and digital technologies as appropriate.

## What will I learn...?

Life Science

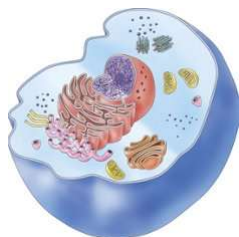
Physical Science: Chemistry

Physical Science: Physics

Earth Science

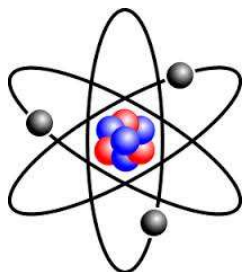
Big Idea:

**Life processes are performed at the cellular level.**



Big Idea:

**The behavior of matter can be explained by the kinetic molecular theory (KMT) and atomic theory.**



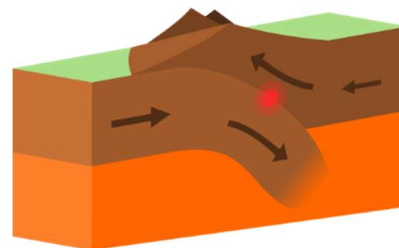
Big Idea:

**Energy can be transferred as both a particle and a wave.**



Big Idea:

**The theory of plate tectonics is the unifying theory that explains Earth's geological processes.**



## What will I need...?

Pencil

Paper/  
notebook

Calculator

Ruler

Protractor (optional)

Graph paper (optional)



(MS teams)



(OneNote)



(Arduino Science Journal) (free digital apps)

## How will I be assessed...?



Tests/quizzes



designing and analyzing labs



researching and presenting projects

Extending 5	Proficient 4	Developing 3	Emerging 2	Insufficient Evidence 1
You demonstrated a <b>sophisticated</b> understanding of the concepts and competencies relevant to the expected learning.	You demonstrated a <b>complete</b> understanding of the concepts and competencies relevant to the expected learning.	You demonstrated a <b>partial</b> understanding of the concepts and competencies relevant to the expected learning.	You demonstrated an <b>initial</b> understanding of the concepts and competencies relevant to the expected learning.	You have <b>not provided sufficient evidence</b> of learning the concepts and competencies relevant to the expected learning.

## Plagiarism, Cheating, and Academic Dishonesty

Plagiarism is the act of using someone else's words, ideas, images, or work—whether copied directly or paraphrased—without properly crediting the original source. Cheating refers to giving or receiving unauthorized assistance on any task that is meant to be completed individually.

Both plagiarism and cheating are serious academic offenses and will have a significant impact on your course grade. No credit will be given for any work found to involve academic dishonesty, and no opportunity for make-up or resubmission will be provided.