

# Science

## Syllabus: Grade 6

### Description:

Sixth grade students will be able to learn to unify concepts and processes in science, understand that science is a method of inquiry, appreciate the interrelatedness of science and technology, and become aware of the history and nature of science.

### Science Standards:

Standard 1: Science Practices

Standard 2: Life Science

Standard 3: Earth and Space Science

Standard 4: Physical Science

### Science Objectives:

In sixth grade, students continue to use the scientific method to increase their understanding of earth, physical, and life science topics. They will conduct scientific investigations, Explore plants and animals' life and their parts and functions, Basic understanding of solar system, and Explore concepts of energy and motion.

### Science Resources & Materials:

Teacher's Resources: Harcourt Science (T. Ed)

Student's Resources: Harcourt Science (St. Text)

Digital Resources

### Class Rules:

1. Arrive on time, prepared, and ready to learn
2. Respect yourself and others
3. Make friends and be thoughtful
4. Take turns speaking and listening
5. Say Please and Thank you
6. Try your best!

### Computation of Letter Grade:

90%-100%	-----A
80%-89%	-----B
70%-79%	-----C
65%-69%	-----D
0%-64%	-----F

### Effort and Behavior & Activity

- 1 - Outstanding
- 2 - Satisfactory
- 3 - Needs Improvement
- 4- Unsatisfactory

### Methods of Evaluation

#### Quarterly grade for Grade 1 to 8 is based on:

A. 85% = Class Average

\* Class Average = 70% Test + 30% Other  
Components such as quizzes, group works, classwork, homework, self-assessments, experiments/demonstrations/research/projec

B. 15% = Quarter Exam

# What do we study in Science?

Standards	Grade Six
1	<p>Science Practices:</p> <ul style="list-style-type: none"> <li>The ways that scientists ask questions about the natural world, get and analyze data, develop explanations, and communicate their evidence-based scientific knowledge.</li> </ul>
2	<p>Life Science:</p> <ul style="list-style-type: none"> <li>Describe examples of traits in plants and animals, and explain that both genes and the environment influence traits.</li> <li>Investigate local environments and research other kinds of island environments to describe, classify and compare the biodiversity of plants in these environments.</li> <li>Investigate local environments and research other kinds of island environments to describe, classify and compare the biodiversity of animals in these environments.</li> <li>Analyze the organism adaptations that help the populations of different organisms to be successful in their environments.</li> </ul>
3	<p>Earth and Space Science:</p> <ul style="list-style-type: none"> <li>Compare and contrast ecosystems in different biomes with each other and with Palau environments.</li> <li>Gather information and communicate how humans are altering and also helping to protect ecosystems and soil.</li> <li>Model the locations and sizes of Earth's three major layers, and relate volcanoes and earthquakes to the outer two layers and to the locations of plate boundaries.</li> <li>Explain that scientists classify rocks into three types based on the ways they are formed, and make a model of the rock cycle.</li> <li>Describe the relative locations and sizes of solar system planets.</li> <li>Use charts, graphs and illustrations to describe the climate of Palau.</li> <li>Explain the main cause of climate change and diagram the current and predicted impacts of climate change on Palau's ecosystems and human systems.</li> </ul>
4	<p>Physical Science:</p> <ul style="list-style-type: none"> <li>Explain the effects of mass and distance on the force of gravity, use a spring scale to measure weight on Earth, and compare weight on different planets.</li> <li>Explain that waves can transfer energy from one place to another, and that waves are characterized by type, wavelength and amplitude.</li> <li>Compare and contrast the characteristics of sound and light waves.</li> </ul>