

6th Grade Life Science Syllabus
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Dear Students and Parents/Guardians,

Welcome to CCMS! I am looking forward to working with you and your student this year. We have so many wonderful things planned, and I feel certain that you and your student will enjoy sixth grade science. The following syllabus is a brief description of the course, including grading, rules and policies, and materials needed. I look forward to working with you all; let's have a great year!

Course Description

Life Science is the study of all living things. The life sciences consist of all fields of science that involve the scientific study of living organisms, including plants, animals and human beings. The students will learn about environment and global issues that affect our world.

Contact information

Parents may sign up for text reminders about tests and assignments for class by texting @agcd6 to the number 81010. If parents have questions or concerns, they may reach me at leslie.essary@crockettschools.net or call CCMS during my planning period at 1:10- 1:55.

Materials

The following materials are needed every day for class, unless otherwise instructed.

- science textbook & science coach book (Provided by teacher)
- binder
- pen & pencil

Grading Policy

Weekly Assessments	25%
Teacher Option- Journal and project	25%
Primary Assessments	50%

Assessment Dates: (subject to change)

- 1st- September 27th, 2017
- 2nd- December 13th, 2017
- 3rd- February 9th, 2018
- 4th- March 9th, 2018
- 5th- April 20th, 2018

Policies & Procedures

Absences: You are responsible for checking to see what you missed. I will be glad to do whatever I can to catch you up with any missed work- just be sure to check in with me to see what you need to make-up.

Rewards System: There will be a rewards system designed in class to encourage positive behavior and hard work.

Grades:

- A- 93-100
- B- 92-85
- C- 84-75
- D- 74-70
- F- 69- and below

Bathroom Policy: When a student needs to use the restrooms, they will be required to sign out when they leave and sign back in when they return. They will also need to take a pass with them whenever they leave the room.

SCIENCE BINDERS-

All notes will be written in your Science Binder. These notes will include everything you will need to study for tests and complete assignments in class. Each nine weeks the journal will be checked and a grade will be given. You must bring your binder to class every day.

SKILLS BROKEN DOWN BY 9 WEEKS:

1st 9 WEEKS:

August 3rd-September 30th

9 Weeks Assessment on September 29th

Scientific Method

Inquiry SPI 0607.Inq. 1-5

SPI 0607.Inq.1 Design a simple experimental procedure with an identified control and appropriate variables.

SPI 0607.Inq.2 Select tools and procedures needed to conduct a moderately complex experiment.

SPI 0607.Inq.3 Interpret and translate data in a table, graph or diagram.

SPI 0607.Inq.4 Draw a conclusion that establishes a cause and effect relationship supported by evidence.

SPI 0607.Inq.5 Identify a faulty interpretation of data that is due to bias or experimental error.

Ecosystems:

SPI 0607.2.2 Interpret how materials and energy are transferred through an ecosystem.

6. 2: Evaluate the impact of an increase or decrease of an abiotic component of an ecosystem.

6. 3: Evaluate the impact of an increase or decrease of a species in a food web.

6. 4: Model and explain energy transfer through an energy pyramid.

SPI 0607.2.3 Identify the biotic and abiotic elements of the major biomes.

6. 6: Model levels of ecological organization: organism, population, community, ecosystem, biome, and biosphere.

SPI 0607.2.4 Identify the environmental conditions and interdependencies among organisms found in the major biomes.

6. 7: Use scientific reasoning to explore adaptations of organisms for their biome.

6.8: Analyze predator/prey data and adaptations.

6.9: Analyze evidence of the effect of an invasive species and design a solution to lessen its impact.

SPI 0607.2.1 Classify organisms as producers, consumers, scavengers, or decomposers according to their role in a food chain or food web.

PROJECTS:

Identify the components of a science experiment

Biome Booklet

Journal Check

2nd 9 WEEKS:

October 1st- Jan. 2nd

9 Weeks Assessment December 14th

Universe

SPI 0607.6.3 Distinguish among a day, lunar cycle and year based on the movements of the earth, sun, and moon.

SPI 0607.6.6 Use a diagram that shows the positions of the earth and sun to explain the four seasons.

6.20: Relate the tilt of Earth's axis to varying intensities of sunlight at different latitudes, and its impact on climate and global atmospheric convection currents.

SPI 0607.6.4 Explain the different phases of the moon using a model of the earth, moon, and sun. SPI 0607.6.5

Predict the types of tides that occur when the earth and moon occupy various positions.

SPI 0607.6.7 Explain the difference between a solar and a lunar eclipse.

SPI 0607.6.1 Use data to draw conclusions about the major components of the universe.

6.21: Synthesize data of the solar system to compare and contrast planetary relationships.

6.22: Research and communicate how gravity is a force effecting celestial bodies throughout our solar system.

SPI 0607.6.2 Explain how the relative distance of objects from the earth affects how they appear.

- Inner terrestrial planets, Outer gaseous planets, Asteroids, Meteors/Meteoroids/Meteorites, Comets, Satellites (Man-Made and Natural), Stars, Solar Systems (Planetary Systems), Galaxies

Project:

MOON PHASES DISPLAY

Journal Check

3rd 9 WEEKS:

9 Weeks Assessment to be Announced

Weather

SPI 0607.8.1 Analyze data to identify events associated with heat convection in the atmosphere.

SPI 0607.8.2 Recognize the connection between the sun's energy and the wind.

6.10: Diagram convection patterns that flow due to uneven heating of the Earth.

6.11: Model a convection cell in the atmosphere.

6.12: Explain the Coriolis Effect.

6.13: Research the climatic effects of mountain ranges, bodies of water and other geographical features.

SPI 0607.8.3 Describe how temperature differences in the ocean account for currents.

6.14: Explain that the global movement of water is affected by the transfer of energy and variations in salt concentrations.

6.15: Model and explain a convection cell in the ocean.

SPI 0607.8.4 Interpret meteorological data to make predictions about the weather.

6.16: Explain how wind and ocean currents affect weather and climate along coastal regions.

6.17: Model how air moves along coastal regions, due to land and water heating at different rates.

6.18: Research and communicate the following concepts: tornado/hurricane, cold/warm air masses, weather fronts, high/low pressure systems, the water cycle as it pertains to weather.

6.19: Evaluate tools and technologies designed to predict and minimize the effects of severe weather and other natural disasters.

SPI 0607.T/E.3 Distinguish between the intended benefits and the unintended consequences of a new technology.

Energy

SPI 0607.10.1 Distinguish among gravitational potential energy, elastic potential energy, and chemical potential energy.

SPI 0607.10.2 Interpret the relationship between potential and kinetic energy.

SPI 0607.10.3 Recognize that energy can be transformed from one type to another.

SPI 0607.10.4 Explain the Law of Conservation of Energy using data from a variety of energy transformations.

PROJECT:

PowerPoint created by students- Topic chosen by the teacher

Journal Check

4th 9 WEEKS:

Final Assessment date to be announced

Electricity

SPI 0607.12.1 Identify how simple circuits are associated with the transfer of electrical energy when heat, light, sound, and chemical changes are produced.

6.24: Investigate the similarities and differences of series and parallel circuits.

SPI 0607.Inq.1, Inq.2, Inq.3, Inq.4, and Inq.5 from Quarter 1 – may be embedded here as well.

SPI 0607.12.2 Identify materials that can conduct electricity.

6.1: Recognize the difference between renewable and nonrenewable energy resources.

Differentiate between adaptive and assistive engineering products (e.g., food, biofuels, medicines, integrated pest management)

Technology

SPI 0607.Inq.3 Interpret and translate data in a table, graph or diagram.

SPI 0607.T/E.1 Identify the tools and procedures needed to test the design features of a prototype.

SPI 0607.T/E.2 Evaluate a protocol to determine if the engineering design process was successfully applied.

SPI 0607.T/E.3 Distinguish between the intended benefits and the unintended consequences of a new technology.

SPI 0607.T/E.4 Differentiate between adaptive and assistive engineering products (e.g., food, biofuels, medicines, integrated pest management).

PROJECT:

Science Experiment and PowerPoint- To be announced

Journal Check

This sheet will be kept in the students' notebooks for reference throughout the year.

I, _____, understand what is expected of me as a student to be successful in science class this year.

Signature: _____

Parent/Guardian Signature: _____