



Westgate Community School

7th Grade Science Overview 2017-2018

In this document, you will find an overview of all the units that will be covered in 7th grade science. All the units and their content has been taken from the Colorado model content standards for 7th grade science. First, you will find a general time line for the units for the year. You will then find a brief bulleted description of the unit. If you have any questions regarding the outlined curriculum, please contact Ellyse Colson at Ellyse.colson@westgateschool.org.

Science Year-long Overview:

Quarter 1	Quarter 2	Quarter 3	Quarter 4
Unit: Scientific Method Unit: Chemistry	Unit: Ecosystems Unit: Genetics	Unit: Cells Unit: Human Body Systems	Unit: History of Earth

Unit: Scientific Method

- Review process
- Focus on using evidence to support scientific explanation

Unit: Chemistry

- Separate mixtures of substances
- Use information from substances' properties to determine how to separate mixture (solubility, boiling points, magnetic properties, and densities)
- Design a scientific investigation to separate the components of a mixture based on properties

Unit: Ecosystems

- Traits that make some species more likely to survive
- Organisms that survive in different environments, are likely to have offspring in that environment

Unit: Genetics

- Multiple lines of evidence to demonstrate how organisms have changed over time
- Use information, data, and technology tools to develop claims about different survival and reproductive success- specific traits in a given environment



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Unit: Cells

- Photosynthesis
- Cellular respiration
- Relationship between photosynthesis and cellular respiration- plant to plant; plant to animal
- Types of cells
- Cell structures, components, and functions
- Use models to develop evidence-based explanations about different cells

Unit: Human Body Systems

- Organ systems
- Structures, functions, and interactions within the systems
- Communicate and justify explanations about functions and interactions of the human body

Unit: History of Earth

- Geologic time
- Plate tectonics and how they relate to major geologic events
- Maps and models to locate geologic hot spots
- Communicate an explanation of Earth's plates, plate motions, and results
- Fossils and rock formations- what they tell us about the past
- Analyze and develop conclusions about the changing life forms from sedimentary rock
- Create claims about organisms and environments over time
- Analyze and critique evidence regarding mass extinction- causes and effects
- Impact of major historical geologic events of life on Earth
- Sequence events in geologic time