

Curriculum Map
Pine Eagle School District
Grade Level/Benchmark:



Teacher: Troy Tubbs
Subject: 7th/8th Grade Science

Units and Lessons	Time Period	Standards Addressed	Assessment	Lesson Objective
What is the nature of science?	1st Quarter	N/A	In class activities. Periodic questions on tests and quizzes	Upon completion a student will be able to: Students will be able to recognize that science is evolving and expanding as technologies improve and as new facts are revealed.
What is the scientific method and how can it be used?	1st Quarter	SC.08.SI.01 SC.08.SI.02 SC.08.SI.03 SC.08.SI.04	In class activities. Periodic questions on tests and quizzes	Students will be able to apply the scientific method to investigations by creating their own hypothesis, designing an experiment, gathering data, and formulating a theory based on the results of their experiment.
What are the levels of organization among organisms, beginning at a cellular level?	1st Quarter	SC.08.LS.02	Chapter Review. Periodic questions on tests and quizzes	Students will recognize the cellular organization of organisms beginning with atoms and then progressing to ecosystems as more entities are included.
What constitutes a cell? What are the structures found within a cell?	1st Quarter	SC.08.LS.02.01 SC.08.LS.02.02	Chapter Review, Microscope activities, posters, periodic quizzes, unit and quarter tests	Students will be able to apply the cell theory to all living organisms as well as identifying the various organelles found in typical plant and animal cells.
How is a cell able to self-regulate?	1st Quarter	SC.08.LS.02	Diffusion lab, periodic quizzes, unit test, quarter test	The students will recognize the difference between active and passive transport. They will also recognize that passive transport includes diffusion and osmosis.
How can cells reproduce?	1st Quarter	SC.CM.LS.02.02	Microscope activities, periodic quizzes, unit and quarter tests	Students will learn the importance of cellular reproduction and the important steps of mitosis.

What is the difference between sexual and asexual reproduction?	1st Quarter	SC.08.LS.03.01	Periodic quizzes, unit and quarter tests	Students will distinguish between the steps of mitosis and meiosis and the outcomes for each.
What is photosynthesis?	1st Quarter	SC.08.LS.02.03	Chapter Review, periodic quizzes, unit and quarter tests	Students will learn the process of photosynthesis, with its intermediate steps.
Where do organisms get their energy to survive?	1st Quarter	SC.08.LS.02 SC.08.LS.02.03	Chapter Review, periodic quizzes, unit and quarter tests	Students will learn to distinguish producers and consumers and how each obtains energy. They will also be able to trace the process of cellular respiration and how sugar is converted to energy.
How are traits inherited?	2nd Quarter	SC.08.LS.03 SC.08.LS.03.02 SC.08.LS.03.04	Periodic tests, weekly class assignments and quizzes.	Students will learn about Gregor Mendel and his work with pea plants. They will also learn how the study of genetics has expanded and why it is important. Finally, they will recognize the role and structure of DNA.
How can inherited traits affect a population?	2nd Quarter	SC.08.LS.03.03	Periodic tests, weekly class assignments and quizzes.	Students will be able to use Punnett squares to predict offspring and allele shifts within the population.
What is natural selection?	2nd Quarter	SC.08.LS.05 SC.08.LS.05.01 SC.08.LS.05.02	Periodic tests, weekly class assignments and quizzes.	They will recognize factors that may affect reproductive success and how natural selection can lead to speciation.
How can living things be classified?	3rd Quarter	SC.05.LS.01 SC.05.LS.01.01	Periodic tests, weekly class assignments and quizzes.	Students will recognize how species can be categorized according to physical traits and evolutionary paths.
Why is classification important?	3rd Quarter	SC.05.LS.01 SC.05.LS.01.01	Periodic tests, weekly class assignments and quizzes. Class participation.	Students will learn that a binomial naming system allows scientists from different regions to easily discuss the same species. They will also learn how to trace an organism through the various levels of organization.
How can organs and organ systems help classify organisms?	3rd Quarter	SC.05.LS.01 SC.05.LS.01.01	Periodic tests, weekly class assignments and quizzes. Class participation.	Students will learn the various classifications of organisms and then confirm the classification through dissections.

How can organisms interact with their environment?	4th Quarter	SC.08.LS.04 SC.08.LS.04.01 SC.08.LS.04.02 SC.08.LS.04.03 SC.08.LS.04.04	Periodic tests, weekly class assignments and quizzes. Class participation.	Students will understand an organism's niche. They will be able to trace the flow of energy through the system.
How can humans affect the ecosystem?	4th Quarter	SC.CM.LS.03.02	Periodic tests, weekly class assignments and quizzes. Class participation.	Students will recognize the effect of deforestation, pollution, and poaching on the extinction of organisms. They will also recognize the measures being taken to preserve many species.