

7th Grade Science Pacing Guide

2022-23

	Objectives/"I Can" Statements	Standards
Week 1,2	"I Can" Statements: ...develop and use models to describe what makes up matter. ...compare and contrast elemental molecules and compound molecules. ...classify matter as pure substance or mixtures based on composition.	Standards 7.PS1.1 7.PS1.2 7.PS1.3
Week 3,4	"I Can" Statements:...create and interpret models of substances whose atoms represent the state of matter with respect to temperature and pressure	Standards 7.PS1.6
Week 5,6	"I Can" Statements: ...use the periodic table as a model to analyze and interpret evidence relating to physical and chemical properties to identify a sample of matter.	Standards 7.PS1.5
Week 7,8	"I Can" Statements: ...analyze and interpret chemical reactions to determine if the total number of atoms in the reactants and products support the Law of Conservation of Mass.	Standards 7.PS1.4
Week 9	9 Weeks Test	
Week 10,11	"I Can" Statements: ...develop and construct models that identify and explain the structure and function of major cell organelles as they contribute to the life activities of the cell and organism. ...conduct an investigation to demonstrate how the cell membrane maintains homeostasis through the process of passive transport. ...evaluate evidence that cells have structural similarities and differences in organisms across kingdoms.	Standards 7.LS1.1 7.LS1.2 7.LS1.3
Week 12,13	"I Can" Statements: ...diagram the hierarchical organization of multicellular organisms from cells to organisms. ...explain that the body is a system comprised of subsystems that maintain equilibrium and support life through digestion, respiration, excretion, circulation, sensation, and locomotion.	Standards 7.LS1.4 7.LS1.5
Week 14,15	"I Can" Statements: ...construct a scientific explanation based on compiled evidence for the processes of photosynthesis,	Standards 7.LS1.9

	cellular respiration, and anaerobic respiration in the cycling of matter and flow of energy into and out of organisms. ...develop a model to depict the cycling of matter, including carbon and oxygen, including the flow of energy among biotic and abiotic parts of an ecosystem.	7.LS2.1
Week 16,17	"I Can" Statements: ...develop an argument based on empirical evidence and scientific reasoning to explain how behavioral and structural adaptations in animals and plants affect the probability of survival and reproductive success. ...evaluate and communicate evidence that compares and contrasts the advantages and disadvantages of sexual and asexual reproduction.	Standards 7.LS1.6 7.LS1.7
Week 18	9 Weeks Test and Mid-term	

Week 19,20	"I Can" Statements: ...construct an explanation demonstrating that the function of mitosis for multicellular organisms is for growth and repair through the production of genetically identical daughter cells. ...distinguish between mitosis and meiosis and compare the resulting daughter cells.	Standards 7.LS1.8 7.LS3.2
Week 21,22	"I Can" Statements: ...predict the probability of individual dominant and recessive alleles to be transmitted from each parent to offspring during sexual reproduction and represent the phenotypic and genotypic patterns using ratios. ...hypothesize that the impact of structural changes to genes located on chromosomes may result in harmful, beneficial, or neutral effects to the structure and function of the organism	Standards 7.LS3.3 7.LS3.1
Week 23,24	"I Can" Statements: ...examine a problem from the medical field pertaining to biomaterials and design a solution taking into consideration the criteria, constraints, and relevant scientific principles of the problem that may limit possible solutions.	Standards ETS2.1
Week 25,26	"I Can" Statements: ...graphically represent the composition of the atmosphere as a mixture of gasses and discuss the potential for atmospheric change. ...engage in a scientific argument through graphing and translating data regarding human activity and climate.	Standards ESS3.1 ESS3.2
Week 27-year end	REVIEW STANDARDS	