

Mrs. Kozlowski – General Science – 2023/2024

Curriculum Map/Pacing Guide/Science Investigation Schedule

Unit/Time Frame	Standards	Content	Main Vocabulary	Lab/Project Assessments
Unit 1: Measurement Scientific Method 4 weeks September	1.1a 1.2a 1.3a 1.3b 1.4a 2.1 2.2a 2.3a 2.3b 2.3c 3.1a	Intro. Measuring Scientific Method Graphing	Density Triple Beam Balance Observation Hypothesis Independent variable Dependent variable	Metric/Conversion Lab Candy Lab Paper Plane Lab Oreo Lab
Unit 2 – Lab Aids – Cells to Organisms Kit 4 – 6 weeks September/ October	MS-LS1-1 MS-LS1-2 MS-LS1-6 MS-LS1-7	Living vs nonliving Microscopes Cell Organelles Cell types Cell membrane and transport	Parts of a microscope Field of view Organelles Prokaryote/eukaryote Diffusion Osmosis Active transport	Microscope skills Organelle research/modeling project Edible cell lab Diffusion simulation Gummy bear osmosis lab
October 20		Science Investigation It's Alive		
Unit 3 – Body Systems 5 weeks October/ November	MS-LS1-2 MS-LS1-3 MS-LS1-8	Body Systems	Circulatory Respiratory Digestive Immune Nervous	Human body project Heart rate lab Breathing lab Blood typing lab

			Excretory Organ	Response/reaction Lab
Unit 4 – Energy Lab Aids/Science Investigation 4 weeks November/ December	MS-PS3-3 MS-PS3-4 MS-ETS1 – 4			
December 15		Cool It Science Investigation		
Unit 5 – Cell Energetics 4 weeks January	MS-LS1-6 MS-LS1-7	Plants(parts) Photosynthesis Cellular respiration	Photosynthesis Stomata Guard cell Chloroplast Chlorophyll Cellular respiration	Gizmo simulation Stomata printing Celery xylem lab Balloon respiration lab
Unit 6 – Cell Division 4 weeks February	MS-LS2-1 MS-LS2-2 MS-LS2-3	Cell Division Cell Cycle Cancer	Mitosis Prophase Metaphase Anaphase Telophase Cancer Tumor	Gummy worm mitosis lab Microscope mitosis lab Cancer research and presentation
Unit 7 – Chemical Reactions Science investigation 5 weeks	MS-PS1-2 MS-PS1-5 MS-PS1-6 MS-ETS1- 3 MS-ETS1- 4			

March/April				
April 12 – All Mixed Up Science Investigation		Science Investigation – All Mixed Up		
Unit 8 – Genetics 5 weeks Mid April/May	MS-LS3-1 MS-LS1-5 MS-LS4-5	DNA Protein Synthesis Mutation Genetics Genetic engineering	Pedigree Mutation Heredity Allele Recessive/dominant Genotype/phenotype	DNA lab Superhero genetics project
Unit 9 – Ecology 5 weeks End of May – June	MS-LS2-1 MS-LS2-2 MS-LS2-3 MS-LS2-4 MS-LS2-5 MS-LS1-5	Ecology Food chains and webs Energy pyramids Interactions Human impact on ecosystems	Abiotic/biotic Ecosystems Consumer Producer Autotroph/ Heterotroph Symbiosis Succession Biodiversity	Biome project Quiz Test