August through September

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
NS.1.7.2 a	Analyze components of experimental design used to produce empirical evidence: hypothesis	empirical evidence, hypothesis
NS.1.7.2 b	Analyze components of experimental design used to produce empirical evidence: replication	replication
NS.1.7.2 c	Analyze components of experimental design used to produce empirical evidence: sample size	Sample size
NS.1.7.2 d	Analyze components of experimental design used to produce empirical evidence: appropriate use of control	control
NS.1.7.2 e	Analyze components of experimental design used to produce empirical evidence: use of standardized variable	variable
NS.1.7.5	Communicate results and conclusions from scientific inquiry	Communicate
NS.1.7.6	Develop and implement strategies for long-term, accurate data collection	data
ESS.9.7.2	Demonstrate that Earth has a magnetic field that is detectible at the surface with a compass	Magnetic field, compass
ESS.9.7.3 a	Compare and contrast Earth's magnetic field to those of natural or human-made magnets with: North and South poles	Compare, contrast
ESS.9.7.3 b	Compare and contrast Earth's magnetic field to those of natural or human-made magnets with: lines of force	Lines of force
ESS.9.7.4 a	Analyze evidence of sea floor spreading: magnetic reversal	magnetic reversal
ESS.9.7.4 b	Analyze evidence of sea floor spreading: molten material	molten material
ESS.9.7.4 c	Analyze evidence of sea floor spreading: drilling samples	drilling samples
ESS.9.7.5	Research ways in which people have used compasses	compass

ESS.10.7.1	Identify and model the causes of night and day	model
ESS.10.7.2	Compare and contrast Earth's day to those of other planets in our solar system	Compare, contrast
ESS.10.7.3	Identify and model the cause of planetary years	planetary
ESS.10.7.4	Compare and contrast Earth's year to those of other planets in our solar system	Solar ayatem
ESS.10.7.5	Identify and model the causes of seasons	seasons
NS.1.7.1	Interpret evidence based on observations	Observations, interpret

WESTSIDE MIDDLE SCHOOL 7TH Grade CURRICULUM MAP

September through October

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
NS.1.7.1	Interpret evidence based on observations	Observation
NS.1.7.8	Explain the role of testability and modification in the development of a theory	Theory
NS.1.7.9	Compare and contrast hypotheses, laws, and theories	hypotheses, laws, theories
PS.6.7.2	Conduct investigations demonstrating Newton's first law of motion	first law of motion
PS.6.7.3	Demonstrate Newton's second law of motion	second law of motion
PS.6.7.4	Conduct investigations of Newton's third law of motion	third law of motion
PS.7.7.3 a	Conduct investigations to identify types of potential energy	potential energy
PS.7.7.3 b	Conduct investigations to identify types of kinetic energy	kinetic energy
PS.7.7.2 a	Describe alternatives to the use of fossil fuels: solar energy	solar energy
PS.7.7.2 b	Describe alternatives to the use of fossil fuels: geothermal energy	geothermal energy
PS.7.7.2 c	Describe alternatives to the use of fossil fuels: wind	alternative
PS.7.7.2 d	Describe alternatives to the use of fossil fuels: hydroelectric power	hydroelectric power
PS.7.7.2 e	Describe alternatives to the use of fossil fuels: nuclear energy	nuclear energy
PS.7.7.2 f	Describe alternatives to the use of fossil fuels: biomass	biomass

PS.6.7.1	Compare and contrast Newton's three laws of motion	three laws of motion
PS.6.7.5	Explain how Newton's three laws of motion apply to real world situations (e.g., sports, transportation)	situations
PS.7.7.1	Identify natural resources used to supply energy needs	natural resources
NS.1.7.7	Distinguish between questions that can and cannot be answered by science	Distinguish

WESTSIDE MIDDLE SCHOOL 7ᵀᴴ Grade CURRICULUM MAP

October through November

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
PS.5.7.1	Explain how a small number of naturally-occurring elements can result in the large variety of substances found in the world	Variety, substance, elements
PS.5.7.2 a	Create models of common compounds: water	compounds
PS.5.7.2 b	Create models of common compounds: carbon dioxide	Carbon dioxide
PS.5.7.2 c	Create models of common compounds: salt	compounds
PS.5.7.2 d	Create models of common compounds: iron oxide	Iron oxide
PS.5.7.2 e	Create models of common compounds: ammonia	ammonia
PS.5.7.4	Compare and contrast properties of compounds to those of the elements that compose them: salt: sodium, chlorine water: hydrogen, oxygen carbon dioxide: carbon, oxygen	Compose, sodium, chlorine, hydrogen, oxygen, carbon dioxide
PS.5.7.5	Demonstrate techniques for forming mixtures: mixing	mixtures
PS.5.7.5 b	Demonstrate techniques for separating mixtures: magnetic attraction	magnetic attraction
PS.5.7.5 c	Demonstrate techniques for separating mixtures: evaporation	evaporation
PS.5.7.5 d	Demonstrate techniques for separating mixtures: filtration	filtration
PS.5.7.5 e	Demonstrate techniques for separating mixtures: chromatography	chromatography

PS.5.7.5 f	Demonstrate techniques for forming and separating mixtures: settling	settling
PS.5.7.6 a	Classify substances as: elements	elements
PS.5.7.6 b	Classify substances as: compounds	Compounds, classify
PS.5.7.6 c	Classify substances as: mixtures	mixtures
PS.5.7.7	Distinguish among solvent, solute, and solution	solvent, solute, solution
PS.5.7.8	Investigate the effect of variables on solubility rates	solubility rates
PS.5.7.9	Interpret solubility graphs	interpret

WESTSIDE MIDDLE SCHOOL 7TH Grade CURRICULUM MAP

November through December

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
ESS.8.7.1	Describe the composition and physical characteristics of the atmosphere	Composition, atmosphere
ESS.8.7.3	Conduct investigations demonstrating the effects of solar energy on the atmosphere	Solar energy
ESS.8.7.5	Identify elements of weather: temperature, air pressure, wind speed, wind direction, humidity	temperature, air pressure, wind speed, wind direction, humidity
ESS.8.7.6 a	Conduct investigations using weather measurement devices: anemometers	anemometers
ESS.8.7.6 b	Conduct investigations using weather measurement devices: barometers	barometers
ESS.8.7.6 c	Conduct investigations using weather measurement devices: sling psychrometers	psychrometers
ESS.8.7.6 d	Conduct investigations using weather measurement devices: thermometers	thermometers
ESS.8.7.6 e	Conduct investigations using weather measurement devices: weather charts	weather charts
ESS.8.7.7 a	Predict weather conditions using data on the following: temperature	temperature
ESS.8.7.7 b	Predict weather conditions using data on the following: air pressure: highs, lows, fronts	highs, lows, fronts
ESS.8.7.7 c	Predict weather conditions using data on the following: clouds	predict
ESS.8.7.7 d	Predict weather conditions using data on the following: wind speed	Wind speed
ESS.8.7.7 e	Predict weather conditions using data on the following: wind direction	Wind direction
ESS.8.7.7 f	Predict weather conditions using data on the following: humidity	humidity

ESS.8.7.8	Identify the causes and effects of weather-related phenomena: thunderstorms, tornadoes/hurricanes/cyclones/typhoons, drought, acid precipitation	thunderstorms, tornadoes/hurricanes/cyclones/typhoons, drought, acid precipitation
ESS.8.7.9	Explain tornado belt weather patterns using a map of the United States	Tornado belt
ESS.8.7.10	Describe ways human beings protect themselves, others, and their property from adverse weather conditions	adverse
ESS.8.7.16	Conduct investigations demonstrating the water cycle	Water cycle
ESS.8.7.18	Investigate cloud formation	investigate
ESS.8.7.14	Describe causes and effects of acid precipitation	acid precipitation

January

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
ESS.8.7.4	Investigate the effect that oceans have on climate	climate
ESS.8.7.11	Describe and map climates of major Earth regions	Earth regions
ESS.8.7.12	Analyze the effect of the shape of Earth and the tilt of Earth's axis on climate	Tilt, axis
ESS.8.7.21 a	Explain examples of actual events that cause temporary climate changes: volcanic dust	Climate change
ESS.8.7.21 b	Explain examples of actual events that cause temporary climate changes: drought	Drought
ESS.8.7.21 c	Explain examples of actual events that cause temporary climate changes: meteor impact	Meteor impact
ESS.8.7.2 a	Investigate the influence of global patterns on local weather: movement of air masses	air masses
ESS.8.7.2 b	Investigate the influence of global patterns on local weather: Coriolis effect	Coriolis effect
ESS.8.7.2 c	Investigate the influence of global patterns on local weather: jet stream	jet stream
ESS.8.7.2 d	Investigate the influence of global patterns on local weather: global wind belts	global wind belts
ESS.8.7.13	Identify and explain the effects that human activities have on weather and atmosphere	Human activities
ESS.8.7.19	Conduct investigations demonstrating the greenhouse effect	greenhouse effect
ESS.8.7.20	Research how human activities may contribute to global warming	global warming
ESS.9.7.1	Analyze charts to infer past atmospheric conditions based on the organisms found in the fossil record	fossil record

WESTSIDE MIDDLE SCHOOL 7TH Grade CURRICULUM MAP

February through April

Student Learning Expectation Number	Student Learning Expectation (SLE)	Vocabulary
LS.2.7.1	Illustrate the hierarchical relationships of cells, tissues, organs, and organ systems	cells, tissues, organs, organ systems
LS.2.7.4a	Analyze the structure and function of tissues, organs, and organ systems of a vertebrate using various models or methods of dissection	Dissection, structure, function
LS.2.7.4b	Analyze the structure and function of tissues, organs, and organ systems of an angiosperm using various models or methods of dissection	angiosprerm
LS.2.7.6 a	Identify human body systems: nervous	Nervous system
LS.2.7.6 b	Identify human body systems: digestive	Digestive system
LS.2.7.6 c	Identify human body systems: circulatory	Circulatory system
LS.2.7.6 d	Identify human body systems: respiratory	Respiratory system
LS.2.7.6 e	Identify human body systems: excretory	Excretory system
LS.2.7.6 f	Identify human body systems: integumentary	Integumentary system
LS.2.7.6 g	Identify human body systems: skeletal/muscular	skeletal/muscular system
LS.2.7.6 h	Identify human body systems: endocrine	Endocrine system
LS.2.7.6 i	Identify human body systems: reproductive	Reproductive system

LS.3.7.1	Explain that the fertilized egg cell carries genetic information from each parent and multiplies to form a complete organism	Genetic, fertilized, organism
LS.3.7.2	Distinguish between sperm cells and egg cells	distinguish
LS.3.7.4	Investigate and analyze the development of embryos	embryo
LS.3.7.5	Dissect a poultry egg to analyze its structure (e.g., paper, plastic, or clay models, virtual dissection, or specimen dissection)	Dissect, analyze
LS.3.7.12	Summarize the interactions between organ systems in the maintenance of homeostasis	homeostasis
LS.3.7.8	Identify the number and source of chromosomes in human body cells	chromosomes
LS.3.7.7	Differentiate between sexual and asexual reproduction in: vertebrates, plants	Asexual reproduction, vertebrates
LS.3.7.10	Explain the role of cell division	Cell division
LS.3.7.9	Identify the number and source of chromosomes in human sex cells	Sex cells, cromosomes