

FLOYD COUNTY SCHOOLS' CURRICULUM RESOURCES

"Building a Better Future for Every Child - Every Day!" Summer 2011

Subject Content:	Grade
	Indicates the Curriculum Map

Weeks 1 – 3	Weeks 4 – 6
Unit/Topic Scientific Method/ Inquiry and Measurement Structure and Transformation of Matter- Understanding Matter	Unit/Topic Structure and Transformation of Matter- Understanding Matter Motion and Forces- Laws of Motion
SC-08-1.1.1 Students will: • interpret models/representations of elements; • classify elements based upon patterns in their physical (e.g., density, boiling point,	SC-08-1.1.1 Students will: • interpret models/representations of elements; • classify elements based upon patterns in their
solubility) and chemical (e.g., flammability, reactivity) properties. Models enhance understanding that an element is composed of a single type of atom.	physical (e.g., density, boiling point, solubility) and chemical (e.g., flammability, reactivity) properties. Models enhance understanding that an element is
Organization/interpretation of data illustrates that when elements are listed according to the number of protons, repeating patterns of physical (e.g., density, boiling point, solubility) and chemical properties (e.g., flammability, reactivity), can be used to identify families of elements with similar properties.	composed of a single type of atom. Organization/interpretation of data illustrates that when elements are listed according to the number of protons, repeating patterns of physical (e.g., density, boiling point,
DOK 2	solubility) and chemical properties (e.g., flammability, reactivity), can be used to identify families of elements with similar properties.
SC-08-1.1.2	DOK 2
Students will understand that matter is made of minute particles called atoms, and atoms are	

composed of even smaller components. The components of an atom have measurable properties such as mass and electrical charge. Each atom has a positively charged nucleus surrounded by negatively charged electrons. The electric force between the nucleus and the electrons holds the atom together.

SC-08-1.1.3

Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons.

SC-08-1.1.4

Students will describe interactions which cause the movement of each element among the solid Earth, oceans, atmosphere and organisms (biogeochemical cycles).

Earth is a system containing essentially a fixed amount of each stable chemical atom or element that can exist in several different reservoirs. The interactions within the earth system cause the movement of each element among reservoirs in the solid Earth, oceans, atmosphere and organisms as part of biogeochemical cycles.

DOK 2

SC-08-1.1.2

Students will understand that matter is made of minute particles called atoms, and atoms are composed of even smaller components. The components of an atom have measurable properties such as mass and electrical charge. Each atom has a positively charged nucleus surrounded by negatively charged electrons. The electric force between the nucleus and the electrons holds the atom together.

SC-08-1.1.3

Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons.

SC-08-1.1.4

Students will describe interactions which cause the movement of each element among the solid Earth, oceans, atmosphere and organisms (biogeochemical cycles).

Earth is a system containing essentially a fixed amount of each stable chemical atom or element that can exist in several different reservoirs. The interactions within the earth system cause the movement of each element among reservoirs in the solid Earth, oceans, atmosphere and organisms as part of biogeochemical cycles.

Motion And Forces- Laws of Motion
SC-08-1.2.1 Students will describe and explain the effects of balanced
and unbalanced forces on motion as found in real-life phenomena.
Objects change their motion only when a net force is applied. Newton's Laws of Motion are used to describe the effects of forces on the motion of objects.
DOK 3

	CURRICULUM			CURRICULUM	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Identify Sub-Topics Scientific Method/Inquiry and Measurement	Identify Sub-Topics Structure and Transformation of Matter- Understanding Matter	Identify Sub-Topics Structure and Transformation of Matter- Understanding Matter	Identify Sub-Topics Structure and Transformation of Matter- Understanding Matter & Motion and Forces- Laws of Motion	Identify Sub-Topics Structure and Transformation of Matter- Understanding Matter & Motion and Forces- Laws of Motion	Identify Sub-Topics Structure and Transformation of Matter- Understanding Matter & Motion and Forces- Laws of Motion
I CAN STATEMENTS: Scientific Method/Inquiry and Measurement	I CAN STATEMENTS: Structure and Transformation of Matter- Understanding Matter	I CAN STATEMENTS: Structure and Transformation of Matter- Understanding Matter	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
I can use the scientific method to create an original experiment or test a previous experiment.	I can identify the parts of an atom.	I can identify the parts of an atom.			
I can communicate scientific findings through verbal and/or written expression.	I can interpret models/representations of elements.	I can interpret models/representations of elements.			
	I can classify elements based on their physical properties.	I can classify elements based on their physical properties.			
	I can distinguish the differences and similarities between	I can distinguish the differences and similarities between			

	physical/chemical properties of elements. I can classify substances by their reactivity.	physical/chemical properties of elements. I can classify substances by their reactivity.			
Critical Vocabulary Scientific Method/Inquiry and Measurement	Critical Vocabulary Structure and Transformation of Matter- Understanding Matter	Critical Vocabulary Structure and Transformation of Matter- Understanding Matter	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
scientific method, variable, control, data, observation, interpret, mass, volume, density, weight, metric, predict, infer, horizontal/vertical axis, hypothesis	chemistry, matter, element, atom, compound, molecule, chemical formula, pure substance, mixture, miscible, immiscible, pressure, energy evaporation, condensation, sublimation, chemical property, reactivity, melting point, boiling point, density, chemical change, physical change, Atom, nucleus, proton, neutron, electron, atomic mass, atomic charge.	chemistry, matter, element, atom, compound, molecule, chemical formula, pure substance, mixture, miscible, immiscible, pressure, energy evaporation, condensation, sublimation, chemical property, reactivity, melting point, boiling point, density, chemical change, physical change, Atom, nucleus, proton, neutron, electron, atomic mass, atomic charge.			
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activit	Suggested Strategies/Activit	Suggested Strategies/Activit
 Investigate different systems of measurement using "Who Wants to Be a Ruler? Webquest, and develop a measrement board 	 Use a density column to analyze the affects density produces on various liquidsand small objects. Produce models which illustrate the three 	 Classify various store-bought substances as element, compound, or mixture based on their ingredient labels. Develop methods of 	ies	ies	ies

pame Design an experiment to investigate a community issue or problem that requires hypothesizing, data collection, evaluation of data and making inferences and present investifgation findings to peer audience and/or community members.	main states of matter Investigate the effects of temperature on the volume of a balloon. Use a vacuum to determine the changes associated with reduced pressure. Expert group investigation of laws and principles associated with states of matter	separating various mixtures into their componenets based on their physical properties. • Analyze and model the physical characteristics of suspensions, colloids, and solutions. • Categorize the different chemical and physical changes and properties • Investigate properties of substances (e.g., color, texture, hardness, etc.), analyze the properties of the substances and produce consumer information pamphlets. (WP-Transactive)			
Balanced Assessment: Formative: Clickers Thumbs up Exit slips Quick writes	Balanced Assessment: Formative Clickers Thumbs up Exit slips Quick writes	Balanced Assessment: Formative Clickers Thumbs up Exit slip Quick writes	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative
Summative • Open response	Summative • Open response	Summative Open response Multiple choice	Summative	Summative	Summative

 Multiple choice On Demand Design of Authentic Products 	 Multiple choice On Demand Design of Authentic Products 	 On Demand Design of Authentic Products 			
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed United Streaming KCCT Coach Book Buckle Down books Web Textbook Brainpop Sciencesaurus www.chen4kids.com www.sciencespot.com	Resources Needed United Streaming KCCT Coach Book Buckle Down books Web Textbook Brainpop Sciencesaurus www.chen4kids.com www.sciencespot.com	Resources Needed United Streaming KCCT Coach Book Buckle Down books Web Textbook Brainpop Sciencesaurus www.chen4kids.com www.sciencespot.com	Resources Needed	Resources Needed	Resources Needed

Weeks 7-9 Weeks 10-12

Unit/Topic Motion and Forces- Laws of Motion Energy Transformations- Forms of Energy	Unit/Topic Energy Transformations-Forms of Energy Unity and Diversity- Cells
Motion and Forces- Laws of Motion	Energy Transformations- Forms of Energy
SC-08-1.2.1	SC-08-4.6.1
Students will describe and explain the effects of balanced and unbalanced forces on motion as found in real-life phenomena.	Students will:
Objects change their motion only when a net force is applied. Newton's Laws of Motion are used to describe the effects of forces on the motion of objects. DOK 3	issues. Global climate is determined by energy transfer from the Sun at and near Earth's surface.
	DOK 3
Energy Transformation- Forms of Energy	SC-08-4.6.2 Students will:
SC-08-4.6.1	 describe or explain energy transfer and energy conservation; evaluate alternative solutions to energy problems.
Students will:	
 explain the cause and effect relationships between global climate and energy transfer; 	Energy can be transferred in many ways, but it can neither be created nor destroyed.
 use evidence to make inferences or predictions about global climate issues. 	DOK 3
Global climate is determined by energy transfer from the Sun at and near Earth's surface.	SC-08-4.6.3 Students will understand that all energy can be considered to be kinetic energy, potential energy, or energy contained by a field (e.g., electric,

DOK 3 magne

magnetic, gravitational).

SC-08-4.6.2

Students will:

- describe or explain energy transfer and energy conservation;
- evaluate alternative solutions to energy problems.

Energy can be transferred in many ways, but it can neither be created nor destroyed.

DOK 3

SC-08-4.6.3

Students will understand that all energy can be considered to be kinetic energy, potential energy, or energy contained by a field (e.g., electric, magnetic, gravitational).

SC-08-4.6.4

Students will:

- analyze information/data about waves and energy transfer;
- describe the transfer of energy via waves in real life phenomena. Waves, including sound and seismic waves, waves on water and electromagnetic waves, can transfer energy when they interact with matter.

DOK 2

SC-08-4.6.4

Students will:

- analyze information/data about waves and energy transfer;
- describe the transfer of energy via waves in real life phenomena. Waves, including sound and seismic waves, waves on water and electromagnetic waves, can transfer energy when they interact with matter.

DOK 2

SC-08-4.6.5

Students will:

- describe the relationships between organisms and energy flow in ecosystems (food chains and energy pyramids);
- explain the effects of change to any component of the ecosystem.

Energy flows through ecosystems in one direction from photosynthetic organisms to herbivores to carnivores and decomposers.

SC-08-4.6.5

Students will:

- describe the relationships between organisms and energy flow in ecosystems (food chains and energy pyramids);
- explain the effects of change to any component of the ecosystem.

Energy flows through ecosystems in one direction from photosynthetic organisms to herbivores to carnivores and decomposers.

DOK 2

Unity and Diversity of Cells

SC-08-3.4.1

Students will explain the relationship between structure and function of the cell components using a variety of representations.

Observations of cells and analysis of cell representations point out that cells have particular structures that underlie their function. Every cell is surrounded by a membrane that separates it from the outside world. Inside the cell is a concentrated mixture of thousands of different molecules that form a variety of specialized structures. These structures carry out specific cell functions.

DOK 3

SC-08-3.4.2

Students will understand that in the development of multicellular organisms, cells multiply (mitosis) and differentiate to form many specialized cells, tissues and organs. This differentiation is regulated through the expression of different genes.

SC-08-3.4.3

Students will form or justify conclusions as to whether a response is innate or learned using data/evidence on behavioral responses to internal and external stimuli.

Behavioral responses to internal changes and external stimuli can be innate or learned. Responses to external stimuli can result from interactions with

the organism's own species or other species, as well as environmental
changes.
DOK 3
SC-08-3.4.4
Students will describe and explain patterns found within groups of organisms in order to make biological classifications of those organisms.
Observations and patterns found within groups of organisms allow for biological classifications based on how organisms are related.
DOK 2
SC-08-3.4.5
Students will understand that multicellular animals have nervous systems that generate behavior. Nerve cells communicate with each other by secreting specific molecules.

	CURRICULUM		CURRICULUM		
Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Identify	Identify	Identify	Identify	Identify	Identify
Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
Critical Vocabulary					
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Balanced Assessment: Formative					

Summative	Summative	Summative	Summative	Summative	Summative
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed					

Weeks 13-15	Weeks 16-18		
Unit/Topic	Unit/Topic		
Structure and Transformation of Matter- Conservation of Matter)	Energy Transformation- Forms of Energy		
SC-08-1.1.1	SC-08-4.6.1		
Students will:	Students will:		
 interpret models/representations of elements; classify elements based upon patterns in their physical (e.g., density, boiling point, solubility) and chemical (e.g., flammability, reactivity) properties. 	 explain the cause and effect relationships between global climate and energy transfer; use evidence to make inferences or predictions about global climate issues. 		
Models enhance understanding that an element is composed of a single type			

of atom. Organization/interpretation of data illustrates that when elements are listed according to the number of protons, repeating patterns of physical (e.g., density, boiling point, solubility) and chemical properties (e.g., flammability, reactivity), can be used to identify families of elements with similar properties.

DOK 2

SC-08-1.1.2

Students will understand that matter is made of minute particles called atoms, and atoms are composed of even smaller components. The components of an atom have measurable properties such as mass and electrical charge. Each atom has a positively charged nucleus surrounded by negatively charged electrons. The electric force between the nucleus and the electrons holds the atom together.

SC-08-1.1.3

Students will understand that the atom's nucleus is composed of protons and neutrons that are much more massive than electrons.

SC-08-1.1.4

Students will describe interactions which cause the movement of each element among the solid Earth, oceans, atmosphere and organisms (biogeochemical cycles).

Earth is a system containing essentially a fixed amount of each stable chemical atom or element that can exist in several different reservoirs. The interactions within the earth system cause the movement of each element among reservoirs in the solid Earth, oceans, atmosphere and organisms as part of biogeochemical cycles.

DOK 2

Global climate is determined by energy transfer from the Sun at and near Earth's surface.

DOK 3

SC-08-4.6.2

Students will:

- describe or explain energy transfer and energy conservation;
- evaluate alternative solutions to energy problems.

Energy can be transferred in many ways, but it can neither be created nor destroyed.

DOK 3

SC-08-4.6.3

Students will understand that all energy can be considered to be kinetic energy, potential energy, or energy contained by a field (e.g., electric, magnetic, gravitational).

SC-08-4.6.4

Students will:

- analyze information/data about waves and energy transfer;
- describe the transfer of energy via waves in real life phenomena.

Waves, including sound and seismic waves, waves on water and electromagnetic waves, can transfer energy when they interact with matter.

			ecosystems (food cl explain the effects o	nships between organism hains and energy pyramic of change to any compone systems in one direction fr o carnivores and decompo	ds); ent of the ecosystem. rom photosynthetic
	CURRICULUM			CURRICULUM	
Week 13	Week 14	Week 15	Week 16	Week 17	Week 18
Identify	Identify	Identify	Identify	Identify	Identify
Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:

| Critical Vocabulary |
|--|--|--|--|--|--|
| Strategies/Activities | Strategies/Activities | Strategies/Activities | Strategies/Activities | Strategies/Activities | Strategies/Activities |
| Balanced Assessment:
Formative |
| Summative | Summative | Summative | Summative | Summative | Summative |
| Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) | Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) | Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) | Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) | Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) | Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts) |
| Resources Needed |

Weeks 19-21	Weeks 22-24
Unit/Topic	Unit/Topic
Unity and Diversity- Animal Behavior	Unity and Diversity- Biological Classification
SC-08-3.4.1	SC-08-3.4.1
Students will explain the relationship between structure and function of	Students will explain the relationship between structure and function of the
the cell components using a variety of representations.	cell components using a variety of representations.
Observations of cells and analysis of cell representations point out that	Observations of cells and analysis of cell representations point out that cells
cells have particular structures that underlie their function. Every cell is	have particular structures that underlie their function. Every cell is surrounded
surrounded by a membrane that separates it from the outside world.	by a membrane that separates it from the outside world. Inside the cell is a
Inside the cell is a concentrated mixture of thousands of different molecules that form a variety of specialized structures. These structures	concentrated mixture of thousands of different molecules that form a variety of specialized structures. These structures carry out specific cell functions.
carry out specific cell functions.	of specialized structures. These structures carry out specific cell functions.
	DOK 3
DOK 3	SC-08-3.4.2
SC-08-3.4.2	
Students will understand that in the development of multicellular examisms	Students will understand that in the development of multicellular organisms, cells
Students will understand that in the development of multicellular organisms, cells multiply (mitosis) and differentiate to form many specialized cells,	multiply (mitosis) and differentiate to form many specialized cells, tissues and organs. This differentiation is regulated through the expression of different
tissues and organs. This differentiation is regulated through the expression	genes.
of different genes.	
SC-08-3.4.4	SC-08-3.4.4
30-00-3.4.4	Students will describe and explain patterns found within groups of organisms
Students will describe and explain patterns found within groups of	in order to make biological classifications of those organisms.
organisms in order to make biological classifications of those organisms.	Observations and patterns found within groups of organisms allow for

•	ns found within groups of o	_	biological classifications	based on how organisms are	e related.	
DOK 2 SC-08-3.4.5	based on how organisms a	re related.	DOK 2			
	that multicellular animals h lerve cells communicate wid es.	•	generate behavior. Nerve	that multicellular animals ha cells communicate with each		
innate or learned using dand external stimuli. Behavioral responses to innate or learned. Respo	SC-08-3.4.3 Students will form or justify conclusions as to whether a response is innate or learned using data/evidence on behavioral responses to internal and external stimuli. Behavioral responses to internal changes and external stimuli can be innate or learned. Responses to external stimuli can result from interactions with the organism's own species or other species, as well as environmental changes.			SC-08-3.4.3 Students will form or justify conclusions as to whether a response is innate or learned using data/evidence on behavioral responses to internal and external stimuli. Behavioral responses to internal changes and external stimuli can be innate or learned. Responses to external stimuli can result from interactions with the organism's own species or other species, as well as environmental changes. DOK 3		
Week 19 Identify Sub-Topics	CURRICULUM Week 20 Identify Sub-Topics	Week 21 Identify Sub-Topics	Week 22 Identify Sub-Topics	CURRICULUM Week 23 Identify Sub-Topics	Week 24 Identify Sub-Topics	

I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
Critical Vocabulary					
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Balanced Assessment: Formative					
Summative	Summative	Summative	Summative	Summative	Summative

Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed					

Weeks 25-27	Weeks 28-30
Unit/Topic Biological Change- Diversity	Unit/Topic Energy Transformations- Energy Global Climate
SC-08-3.5.1 Students will draw conclusions and make inferences about the	SC-08-4.6.1 Students will:
consequences of change over time that can account for the similarities among diverse species.	 explain the cause and effect relationships between global climate and energy transfer; use evidence to make inferences or predictions about global climate issues.
The consequences of change over time provide a scientific explanation for the fossil record of ancient life forms and for the striking molecular similarities observed among the diverse species of living organisms.	Global climate is determined by energy transfer from the Sun at and near Earth's surface.
DOK 3	DOK 3 SC-08-4.6.2 Students will:

- describe or explain energy transfer and energy conservation;
- evaluate alternative solutions to energy problems.

Energy can be transferred in many ways, but it can neither be created nor destroyed.

DOK 3

SC-08-4.6.3

Students will understand that all energy can be considered to be kinetic energy, potential energy, or energy contained by a field (e.g., electric, magnetic, gravitational).

SC-08-4.6.4

Students will:

- analyze information/data about waves and energy transfer;
- describe the transfer of energy via waves in real life phenomena. Waves, including sound and seismic waves, waves on water and

electromagnetic waves, can transfer energy when they interact with matter.

DOK 2

SC-08-4.6.5

Students will:

- describe the relationships between organisms and energy flow in ecosystems (food chains and energy pyramids);
- explain the effects of change to any component of the ecosystem.

Energy flows through ecosystems in one direction from photosynthetic organisms to herbivores to carnivores and decomposers.

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Week 25	CURRICULUM Week 26	Week 27	Week 28	CURRICULUM Week 29	Week 30
Identify Sub-Topics I CAN STATEMENTS:	Identify Sub-Topics I CAN STATEMENTS:	I CAN STATEMENTS:	Identify Sub-Topics I CAN STATEMENTS:	Identify Sub-Topics I CAN STATEMENTS:	Identify Sub-Topics I CAN STATEMENTS:
Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary

Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Balanced Assessment: Formative					
Summative	Summative	Summative	Summative	Summative	Summative
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed					

Weeks 31-33 Weeks 34-36

	Unit/Topic	Unit/Topic
	Interdependence- Ecosystems	The Earth and the Universe- Processes which Shape Earth
9	SC-08-4.7.1	SC-08-2.3.1
9	Students will describe the interrelationships and interdependencies within	Students will describe various techniques for estimating geological time
	in ecosystem and predict the effects of change on one or more	(radioactive dating, observing rock sequences, comparing fossils).
	components within an ecosystem.	
		Techniques used to estimate geological time include using radioactive dating,
	Organisms both cooperate and compete in ecosystems. Often changes in	observing rock sequences and comparing fossils to correlate the rock
	one component of an ecosystem will have effects on the entire system hat are difficult to predict. The interrelationships and interdependencies	sequences at various locations. Deductions can be made based on available data and observation of models as to the age of rocks/fossils.
	of these organisms may generate ecosystems that are stable for hundreds	
C	or thousands of years.	DOK 2
	ООК 3	SC-08-2.3.2
9	6C-08-4.7.2	Students will understand that earthquakes and volcanic eruptions can be
	*Andonko milla	observed on a human time scale, but many processes, such as mountain building and plate movements, take place over hundreds of millions of years
	Students will:	, , , , , , , , , , , , , , , , , , ,
	 explain the interactions of the components of the Earth system (e.g., solid Earth, oceans, atmosphere, living organisms); 	SC-08-2.3.3
	propose solutions to detrimental interactions.	Students will:
	nteractions among the solid Earth, the oceans, the atmosphere and living hings have resulted in the ongoing development of a changing Earth	 explain the transfer of Earth's internal heat in the mantle (crustal movement, hotspots, geysers);
	ystem.	 describe the interacting components (convection currents) within the Earth's system.
	DOK 3	

			the mantle. This causes the DOK 2 SC-08-2.3.4		the face of the Earth.
	CURRICULUM			CURRICULUM	
Identify Sub-Topics I CAN STATEMENTS:	Identify Sub-Topics I CAN STATEMENTS:	Week 36 Identify Sub-Topics I CAN STATEMENTS:			
Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
Suggested	Suggested	Suggested	Suggested	Suggested	Suggested

Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities
Balanced Assessment: Formative					
romative	roillauve	romative	Tormative	Tomlauve	Tomative
Summative	Summative	Summative	Summative	Summative	Summative
Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed					