

#### FLOYD COUNTY SCHOOLS' CURRICULUM RESOURCES

# "Building a Better Future for Every Child - Every Day!" Summer 2012

<b>Subject Content:</b>	Science	Grade	5
	Indicates the Curric	culum Map	

Weeks 1 – 3	Weeks 4 – 6
Unit/Topic	Unit/Topic
LIFE SCIENCE	LIFE SCIENCE
Unity and Diversity and Biological Change	Unity and Diversity and Biological Change

# In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards

#### SC-05-3.4.1

Students will describe and compare living systems to understand the complementary nature of structure and function.

Observations and comparisons of living systems at all levels of organization illustrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms

(e.g., bacteria, protists, fungi, plants, animals), and ecosystems. Examining the relationship between structure and function provides a basis for comparisons and classification schemes.

#### DOK 2

# In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards

#### SC-05-3.4.3

Students should understand that all organisms are composed of cells, the fundamental unit

of life. Most organisms are single cells; other organisms, including plants and animals are

multi cellular.

#### SC-05-3.4.2

Students will explain the essential functions of cells necessary to sustain life. Cells carry on the many functions needed to sustain life. Models of cells, both physical and

analogical, promote understanding of their structures and functions. Cells grow and divide,

thereby producing more cells. This requires that they take in nutrients, which provide energy for the work that cells do and make the materials that a cell needs.

DOK 2

	CURRICULUM		CUR	RICULUM	
Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics
Living Systems plants animals	Living Systems plants animals	Living Systems plants animals	Cell formation Mitosis Meiosis	Cell formation continued	Cell function
I CAN STATEMENTS: I can describe how plant and animal cells have many features in common as well as distinguishing features. I can compare animal and plant cells. I can explain how tissues function in plants and animals I can describe how organs system functions in plants and animals. I can compare different organisms and their function in an ecosystem.	I CAN STATEMENTS: same	I CAN STATEMENTS:	I CAN STATEMENTS: I can explain the functions of cells necessary to sustain life. I can explain how cells carry on the many functions needed to sustain life. I can explain models of cells, both physical and analogical, to promote understanding of their structures and functions. I can explain how cells grow and divide, thereby producing more cells.	I CAN STATEMENTS: same	I CAN STATEMENTS:

Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
Living systems Cells Biological Tissues Organs Organ systems Organisms Bacteria Protist Fungi Ecosystems Nucleus Nucleolus Mitochondria Cytoplasm Chlorophyll Nuclear membrane Single cells Multi-cellular Reproduction Mitosis Meiosis Specialized cells			Bacteria Protist Fungi Ecosystems Nucleus Nucleolus Mitochondria Cytoplasm Chlorophyll Nuclear membrane Single cells Multi-cellular Reproduction Mitosis Meiosis Specialized cells		
Suggested Strategies/Activities use observations & models to describe and compare	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities  conduct web quest and use research to Cell Division Exercise using http://www.biologyinmotion.com/index. Html	Suggested Strategies/Activities	Suggested Strategies/Activities

conduct web quest and use research to- use observations & models to describe and compare - conduct web quest and use research to make student presentations and reports			make student presentations and reports		
Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative
Oral Checks Reflective writing piece Open-Response Exit Slips Observation			Oral Checks Reflective writing piece Open-Response Exit Slips Observation		
Summative Multiple Choice On-Demand Projects	Summative Multiple Choice On-Demand Projects	Summative Multiple Choice On-Demand Projects	Summative Multiple Choice On-Demand Projects	Summative Multiple Choice On-Demand Projects	Summative Multiple Choice On-Demand Projects
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	Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed
Textbook Science web quest KCCT coach books Edheads.com Bbscienceclips.com United Streaming Education city Brain pop Jr. Lesson pathways.com http://free.ed.gov			http://www.biologyinmotion.com/index. html Textbook Science web quest KCCT coach books Edheads.com Bbscienceclips.com United Streaming Education city Brain pop Jr. Lesson pathways.com http://free.ed.gov		

Weeks 7-9	Weeks 10-12
LIFE SCIENCE Unity and Diversity and Biological Change	Unit/Topic Earth/Space Science
In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards	In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards
SC-05-3.5.1	
Students will describe cause and effect relationships between enhanced	SC-05-2.3.1
survival/reproductive success and particular biological adaptations (e.g.,	Students will:
changes in structures, behaviors, and/or physiology) to generalize about the	_ describe the circulation of water (evaporation and condensation) from the

diversity of species.

Biological change over time accounts for the diversity of species developed through gradual processes over many generations. Examining cause and effect relationships between enhanced survival/reproductive success and biological adaptations (e.g., changes in structures, behaviors, and/or physiology), based on evidence gathered, creates the basis for explaining diversity

### DOK 2

#### SC-05-3.5.2

Students should understand that all organisms must be able to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment.

surface of the Earth, through the crust, oceans, and atmosphere (water cycle);

explain how matter is conserved in this cycle.

Water, which covers the majority of the Earth's surface, circulates through the crust, oceans, and atmosphere in what is known as the water cycle.

#### DOK 2

#### SC-05-2.3.2

Students will explain interactions of water with Earth materials and results of those interactions (e.g., dissolving minerals, moving minerals and gases). Water dissolves minerals and gases and may carry them to the oceans.

DOK 3

	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
Organism/survival			Water Cycle		Water shed
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
I can explain how			I can describe how		I can define the concept
differences in			water can change forms		of watersheds.
organisms give			yet still be conserved in		
individuals an			the water cycle.		I can identify factors that
advantage in surviving					impact watersheds,

and reproducing.  I can describe adaptations of various organisms to their environments and how these adaptations led to a wide variety of organisms.  I can identify ways that organisms cope with fluctuations in their environment.			I can create / analyze/explain representations that illustrate the circulation of water from the surface of the Earth, through the crust, oceans, and atmosphere.		including results of interactions of water with earth materials.
Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
Reproduction Adaptations Survival of the fittest Internal stimulus Environmental stimulus Behavioral response Adaptations fluctuations Temperature Precipitation Change in food sources			Evaporation Condensation Circulation Earth's crust Atmosphere Water cycle Dissolving Mantle Core Dense core Plate tectonics Landforms	Destructive forces Volcanic Eruption Deposition of sediment Weathering Erosion Lava Magma Rock cycle Metamorphic Sedimentary Igneous	Watershed Atmosphere Dissolving minerals Moving minerals Gases Solvent
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Construct models using	Construct models using	Construct models using	Construct models using	Construct models	Construct models using

research to make student presentations. Conduct experiments to test hypothesis Project Wild Activities	research to make student presentations. Conduct experiments to test hypothesis Project Wild Activities	research to make student presentations. Conduct experiments to test hypothesis Project Wild Activities	research to make student presentations. Conduct experiments to test hypothesis Project Wild Activities	using research to make student presentations. Conduct experiments to test hypothesis Project Wild Activities	research to make student presentations. Conduct experiments to test hypothesis  Project Wild Activities
Balanced Assessment: Formative	Balanced Assessment: Formative				
Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip
Summative	Summative	Summative	Summative	Summative	Summative
Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance
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	Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed
Computer/laptop United streaming videos. Textbook Access to internet	Computer/laptop United streaming videos. Textbook Access to internet	Computer/laptop United streaming videos. Textbook Access to internet	Computer/laptop United streaming videos. Textbook Access to internet	Computer/laptop United streaming videos. Textbook Access to internet	Computer/laptop United streaming videos. Textbook Access to internet -

Weeks 13-15	Weeks 16-18
Unit/Topic	Unit/Topic
PHYSICAL SCIENCE	
Structure and Transformation of Matter	PHYSICAL SCIENCE
SC-05-2.3.3	
Students will:	Structure and Tr SC-05-2.3.5
_ describe Earth's atmosphere as a relatively thin blanket of air consisting of a	Students will compare components of our solar system, including using
mixture of nitrogen, oxygen, and trace gases, including water vapor;	models/representations that illustrate the system and resulting interactions.
_ analyze atmospheric data in order to draw conclusions about real life	
phenomena related to atmospheric changes and conditions.	Earth is the third planet from the Sun in a system that includes the moon, the
Earth is surrounded by a relatively thin blanket of air called the atmosphere.	Sun, eight other planets and their moons, and smaller objects. The Sun, an
The atmosphere is a mixture of nitrogen, oxygen, and trace gases that include	average star, is the central and largest body in the solar system.
water vapor. The atmosphere has different properties at different elevations.	Models/diagrams provide understanding of scale within the solar system.
Conclusions based on the interpretation of atmospheric data can be used to	DOK 2ansformation of Matter
explain real life phenomena (e.g., pressurized cabins in airplanes, mountainclimber's	
need for oxygen).	
DOK 3	
SC-05-2.3.4	
Students will:	
_ analyze global patterns of atmospheric movement;	
_ explain the basic relationships of patterns of atmospheric movement to local	
weather.	
Global patterns of atmospheric movement can be observed and/or analyzed	
by interpreting patterns within data. Atmospheric movements influence local	
weather. Oceans have a major effect on climate, because water in the oceans	

holds a large amount of weather and climate.	heat. Related data can be	used to predict change in			
	CURRICULUM		CURRICULUM		
Week 13	Week 14	Week 15	Week 16	Week 17	Week 18
Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics
Weather	Weather/atmosphere	Weather/atmosphere	Solar System	Solar System	Solar System
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
I can use appropriate tools and observations to describe physical properties of substances and to classify materials.  I can design and conduct fair tests to safely investigate properties of matter.	I can create graphical representations about the motion of an object. I can interpret graphical representations about the motion of an object. I can infer and draw conclusions about the motion of an object.	I can use observations and appropriate tools to explore the relationship between force and mass.	I can classify energy as phenomena as kinetic or potential  I can describe the transfer of energy occurring in simple systems or related data.	I can predict how heat energy moves.  I can describe the transfer of energy occurring in simple systems or related data.	I can describe solar energy.  I can describe the impacts that solar energy has on physical and biological systems on earth.
I can design questions about the properties of matter.  Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
-	,	,			
Boiling point	Qualitative	Gravity	Kinetic	Thermal energy	Solar energy

Solubility Density Physical properties Balance Thermometer Graduated cylinder Beaker Meter stick	Quantitative Motion Relative position direction Speed Position Velocity Acceleration Momentum Newton's Laws of Motion Graph Inertia Force = Mass X Acceleration Action Reaction Friction Pressure	Magnetism Friction Collisions Timer Meter stick Balance spring scale	Potential Energy Phenomena Heat Light Transmission Sound Solar Electricity Chemical energy Electrical energy	Conduction	Physical systems Biological systems
Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities	Strategies/Activities
Construct models Research to develop student performance Construct experiments	Construct models Research to develop student performance Construct experiments	Construct models Research to develop student performance Construct experiments	Construct models Research to develop student performance Construct experiments	Construct models Research to develop student performance Construct experiments	Construct models Research to develop student performance Construct experiments
Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative
Discovery education probes Thumbs up Oral questioning	Discovery education probes Thumbs up Oral questioning	Discovery education probes Thumbs up Oral questioning	Discovery education probes Thumbs up Oral questioning	Discovery education probes Thumbs up Oral questioning	Discovery education probes Thumbs up Oral questioning

Quiz Exit slip	Quiz Exit slip	Quiz Exit slip	Quiz Exit slip	Quiz Exit slip	Quiz Exit slip
Summative  Open Response End of unit test Culminating performance  Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Summative  Open Response End of unit test Culminating performance  Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Summative  Open Response End of unit test Culminating performance  Common (PLC Teams willdesign the common assessments, i.e., grade level, and/or depts)	Summative  Open Response End of unit test Culminating performance  Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)	Summative  Open Response End of unit test Culminating performance  Common (PLC Teamswill design the common assessments, i.e., grade level, and/or depts)	Summative  Open Response End of unit test Culminating performance  Common (PLC Teams will design the common assessments, i.e., grade level, and/or depts)
Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed	Resources Needed
http://classroom.jcsch ools .net/sciunits/plantsani	http://classroom.jcsch ools .net/sciunits/plantsani	http://classroom.jcschools .net/sciunits/plantsanimal s.htm	http://classroom.jcschoo ls .net/sciunits/plantsanim	http://classroom.jcsch ools .net/sciunits/plantsani	http://classroom.jcscho ols .net/sciunits/plantsanim
mal s.htm http://www.brainpopjr	mal s.htm http://www.brainpopjr	http://www.brainpopjr.co m/ http://jcschools.net/tutori	al s.htm http://www.brainpopjr.c	mal s.htm http://www.brainpopjr	al s.htm http://www.brainpopjr.
.co m/ http://jcschools.net/tu tori	.co m/ http://jcschools.net/tu tori	als/interactive.htm http://www.internet4clas s rooms.com/	o m/ http://jcschools.net/tuto	.co m/ http://jcschools.net/tut ori	co m/ http://jcschools.net/tut ori
als/interactive.htm http://www.internet4cl ass	als/interactive.htm http://www.internet4cl ass	http://jc-schools.net/PPTs science. html	als/interactive.htm http://www.internet4cla	als/interactive.htm http://www.internet4cl ass	als/interactive.htm http://www.internet4cl ass
rooms.com/	rooms.com/	http://www.mikids.com/A	rooms.com/	rooms.com/	rooms.com/

http://jc-schools.net/P	http://jc-schools.net/P	ssignments5.htm	http://jc-schools.net/PPT	http://jc-schools.net/P	http://jc-schools.net/PP
PTsscience.	PTsscience.	http://www.staff.fcps.net	sscience.	PTsscience.	Tsscience.
html	html	/	html	html	html
http://www.mikids.co	http://www.mikids.co		http://www.mikids.com/	http://www.mikids.co	http://www.mikids.com
m/A	m/A		Α	m/A	/A
ssignments5.htm	ssignments5.htm		ssignments5.htm	ssignments5.htm	ssignments5.htm
http://www.staff.fcps.	http://www.staff.fcps.		http://www.staff.fcps.ne	http://www.staff.fcps.n	http://www.staff.fcps.n
net/	net/		t/	et/	et/

Weeks 19-21	Weeks 22-24
Unit/Topic	Unit/Topic
PHYSICAL SCIENCE	PHYSICAL SCIENCE
Structure and Transformation of Matter	Structure and Transformation of Matter
In this section IDENTIFY  CORE CONTENT 4.1  Common Core Standards	In this section IDENTIFY CORE CONTENT 4.1 Common Core Standards
SC-05-1.1.1 (week 19) Students will describe the physical properties of substances (e.g., boiling point, solubility, density). A substance has characteristic physical properties (e.g., boiling point, solubility) that are independent of the amount of the sample. DOK 2 SC-05-1.2.1 (week 20) Students will interpret data in order to make qualitative (e.g., fast, slow, forward, backward) and quantitative descriptions and predictions about the straight-line motion of an object. The motion of an object can be described by its relative position, direction of motion, and speed. That motion can be measured and represented on a graph. DOK 3 SC-05-1.2.2 (week 21) Students should understand that forces are pushes and pulls, and that these	SC-05-4.6.1 (week 22) Students will: classify energy phenomena as kinetic or potential; describe the transfer of energy occurring in simple systems or related data. Energy can be classified as kinetic or potential. Energy is a property of many substances and energy can be found in several different forms. For example, chemical energy as found in food we eat or in the gasoline we burn in our car. Heat, light (solar), sound, electrical energy and the energy associated with motion (called kinetic energy) are examples of other forms of energy. Objects can have energy simply by virtue of their position, called potential energy. Energy is transferred in many ways. Analyzing simple systems can provide the basis for describing the transfer of energy occurring within the system.  DOK 2

pushes and pulls may be invisible (e.g., gravity, magnetism) or visible (e.g.,
friction, collisions).

## SC-05-4.6.5 (week 23)

Students should understand that heat energy moves in predictable ways, flowing from warmer objects to cooler ones, until both objects reach the same temperature. By examining cause and effect relationships, consequences of heat movement and conduction can be predicted and inferred.

### SC-05-4.6.2 (week 24)

Students should understand that the Sun is a major source of energy for changes on Earth's surface. The Sun loses energy by emitting light. A tiny fraction of that light reaches Earth, transferring energy from the Sun to Earth.

	CURRICHHIM				
	CURRICULUM			CURRICULUM	
Week 19	Week 20	Week 21	Week 22	Week 23	Week 24
Identify	Identify	Identify	Identify	Identify	Identify
Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics
Properties of matter	Motion	Forces/motion	Energy Transfer	Energy Transfer	Energy Transfer
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
I can use appropriate	I can create graphical	STATEMENTS:	I can classify energy as	I can predict how	I can describe solar
tools and observations	representations about	I can use observations	phenomena as kinetic	heat energy moves.	energy.
to describe physical	the motion of an object.	an appropriate tools to	or potential.		
properties of substances		explore the relationship		I can infer results of	I can describe the
and to classify materials.	I can interpret	between forces and	I can describe the	heat movement and	impacts that solar
	graphical	mass.	transfer of energy	conduction.	energy has on physical
I can design and conduct	representations about		occurring in simple		and biological systems
fair tests to safely	the motion of an		systems or related data.		on earth.
investigate properties of	object.				
matter.					
	I can infer and draw				
I can design questions	conclusions about the				
about the properties of	motion of an object.				
matter.					

Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
Boiling point Solubility Density Physical properties Balance Thermometer Graduated cylinder Beaker Meter stick	Qualitative Quantitative Motion Relative position direction Speed Position Velocity Acceleration Momentum Newton's Laws of Motion Graph Inertia Force = Mass X Acceleration Action Reaction Friction Pressure	Gravity Magnetism Friction Collisions Timer Meter stick Balance Spring scale	Kinetic Potential Energy Phenomena Heat Light Transmission Sound Solar Electricity Chemical energy Electrical energy	Thermal energy Conduction Radiation	Solar energy Physical systems Biological systems
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Use research to make student presentations.	Use research to make student presentations.	Use research to make student presentations.	Use research to make student presentations.	Use research to make student presentations.	Use research to make student presentations.
Conduct experiments to test for hypothesis	Conduct experiments to test for hypothesis	Conduct experiments to test for hypothesis	Conduct experiments to test for hypothesis	Conduct experiments to test for hypothesis	Conduct experiments to test for hypothesis
Balanced Assessment:	Balanced Assessment:	Balanced Assessment:	Balanced Assessment:	Balanced Assessment:	Balanced Assessment:

Formative	Formative	Formative	Formative	Formative	Formative
Discovery education					
probes	probes	probes	probes	probes	probes
Thumbs up					
Oral questioning					
Quiz	Quiz	Quiz	Quiz	Quiz	Quiz
Exit slip					
Summative	Summative	Summative	Summative	Summative	Summative
Open Response					
End of unit test					
Culminating	Culminating	Culminating	Culminating	Culminating	Culminating
performance	performance	performance	performance	performance	performance
Common (PLC Teams					
will design the common					
assessments, i.e., grade level, and/or depts)					
level, allu/or depts)	level, and/or depts)	level, and/or depts)	level, and/or depts)	level, and/or depts)	level, and/or depts)
Resources Needed					
dcombs/Open%20Respo	dcombs/Open%20Respo	dcombs/Open%20Respo	dcombs/Open%20Respo	dcombs/Open%20Respo	dcombs/Open%20Respo
ns	ns	ns	ns	ns	ns
e%20Resources.htm	e%20Resources.htm	e%20Resources.htm	e%20Resources.htm	e%20Resources.htm	e%20Resources.htm
http://www.dixie.fcps.n	http://www.dixie.fcps.n	http://www.dixie.fcps.n	http://www.dixie.fcps.n	http://www.dixie.fcps.n	http://www.dixie.fcps.n
et/	et/	et/	et/	et/	et/
jeopardy_and_powerpoi	jeopardy_and_powerpoi	jeopardy_and_powerpoi	jeopardy_and_powerpoi	jeopardy_and_powerpoi	jeopardy_and_powerpoi
nt	nt	nt	nt	nt	nt
_reviews.htm	_reviews.htm	_reviews.htm	_reviews.htm	_reviews.htm	_reviews.htm
http://www.graves.k12.	http://www.graves.k12.	http://www.graves.k12.	http://www.graves.k12.	http://www.graves.k12.	http://www.graves.k12.
ky.	ky.	ky.	ky.	ky.	ky.
us/powerpoints/elemen	us/powerpoints/elemen	us/powerpoints/elemen	us/powerpoints/elemen	us/powerpoints/elemen	us/powerpoints/elemen
tary/	tary/	tary/	tary/	tary/	tary/
http://www.learner.org/	http://www.learner.org/	http://www.learner.org/	http://www.learner.org/	http://www.learner.org/	http://www.learner.org/

jnorth/	jnorth/	jnnorth	jnorth/	jnorth/	jnorth/
http://www.gamequariu	http://www.gamequariu	http://www.gamequariu	http://www.gamequariu	http://www.gamequariu	http://www.gamequariu
m.com/	m.com/	m.com/	m.com/	m.com/	m.com/
http://www.iq.poquoso	http://www.iq.poquoso	http://www.iq.poquoso	http://www.iq.poquoso	http://www.iq.poquoso	http://www.iq.poquoso
n.org/	n.org/	n.org/	n.org/	n.org/	n.org/
http://www.primaryres	http://www.primaryres	http://www.primaryres	http://www.primaryres	http://www.primaryres	http://www.primaryres
our	our	our	our	our	our
ces.co.uk/science/scienc	ces.co.uk/science/scienc	ces.co.uk/science/scienc	ces.co.uk/science/scienc	ces.co.uk/science/scienc	ces.co.uk/science/scienc
e2c.htm	e2c.htm	e2c.htm	e2c.htm	e2c.htm	e2c.htm

Weeks 25-27	Weeks 28-30		
Unit/Topic	Unit/Topic		
PHYSICAL SCIENCE Structure and Transformation of Matter	PHYSICAL SCIENCE		
Structure and Transformation of Matter	Energy Transformations		
In this section IDENTIFY	In this section IDENTIFY		
CORE CONTENT 4.1	CORE CONTENT 4.1		
Common Core Standards	Common Core Standards		
SC-05-4.6.3 (weeks 25-27) Students will:			
_ draw conclusions about the transfer of energy within	SC-05-4.6.4 (week 28 & 29)		
models/representations of electrical circuits as evidenced by the heat, light,	Students will identify predictable patterns and make generalizations about light		
sound, and magnetic effects that are produced;	and matter interactions using data/evidence.		
SC-05-4.6.3 (weeks 25-27)	Light energy interacts with matter by transmission (including refraction),		
Students will:	absorption, or scattering (including reflection). Questions related to these		
draw conclusions about the transfer of energy within	phenomena should drive the design of simple investigations that will yield		
models/representations of electrical circuits as evidenced by the heat, light,	evidence of the predictable patterns associated with these interactions.		
sound, and magnetic effects that are produced;	DOK 3		
_describe changes within the system that would affect the transfer of	00.05.4.0.5 (**** - 1-00)		
energy.	SC-05-4.6.5 (week 30)		
	Students should understand that heat energy moves in predictable ways, flowing		
Electrical circuits provide a means of transferring electrical energy. This	from warmer objects to cooler ones, until both objects reach the same temperature. By examining cause and effect relationships, consequences of		
transfer can be observed and described as heat, light, sound, and magnetic	heat movement and conduction can be predicted and inferred.		

effects are produced. Models and diagrams can be used to support conclusions and predict consequences of change within an electrical circuit.  DOK 3  CURRICULUM				CURRICULUM	
Week 25	Week 26	Week 27	Week 28	Week 29	Week 30
Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics	Identify Sub-Topics
Electricity			Light		Thermal Energy
I can draw conclusions about the transfer of energy within models/representations of electrical circuits.  I can describe changes within the system that would affect the transfer of energy.	I CAN STATEMENTS:	I CAN STATEMENT; STATEMENTS:	I can identify predictable patterns and make generalizations about light and matter interactions sing data/evidence.	I CAN STATEMENTS:	I CAN STATEMENTS:  I can predict how heat energy moves.  I can infer results of heat movement and conduction.
Critical Vocabulary  Magnetic effects	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary Reflections	Critical Vocabulary	Critical Vocabulary  Thermal energy

Electrical circuits Transfer of energy (heat, light, sound, and magnetic			Refractions Absorption Scattering		Conduction Radiation
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative
Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip	Discovery education probes Thumbs up Oral questioning Quiz Exit slip
Summative	Summative	Summative	Summative	Summative	Summative
Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance	Open Response End of unit test Culminating performance
Common (PLC Teams will design the common assessments, i.e., grade level, and/or	Common (PLC Teams will design the common assessments, i.e., grade level, and/or	Common (PLC Teams will design the common assessments, i.e.,	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)

depts)	depts)	grade level, and/or depts)			
Resources Needed					
Magnets Circuit boards Computer/Laptop Textbook Electricity Activities					

Weeks 31-33	Weeks 34-36		
Unit/Topic	Unit/Topic		
Physical Science	Physical Science		
Entergy Transformation	Energy Transformation		
In this section IDENTIFY  CORE CONTENT 4.1  Common Core Standards	In this section IDENTIFY  CORE CONTENT 4.1  Common Core Standards		
SC-05-4.7.1 Students will: describe and categorize populations of organisms according to the function they serve in an ecosystem (e.g., producers, consumers, decomposers); draw conclusions about the effects of changes to populations in an ecosystem.  Populations of organisms can be categorized by the function they serve in an ecosystem. Plants and some microorganisms are producers because they make their own food. All animals, including humans, are consumers, and obtain their food by eating other organisms. Decomposers, primarily	SC-05-4.7.2 Students should understand that a population consists of all individuals of a species that occur together at a given place and time. All populations living together and the physical factors with which they interact compose an ecosystem.		

bacteria and fungi, are consumers that use waste materials and dead organisms for food. Food webs identify the relationships among producers, consumers, and decomposers in an ecosystem. Using data gained from observing interacting components within an ecosystem, the effects of changes can be predicted.  DOK 3					
	CURRICULUM		CURRICULUM		
Week 31	Week 32	Week 33	Week 34	Week 35	Week 36
Identify	Identify	Identify	Identify	Identify	Identify
Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics	Sub-Topics
Population of living things			Energy change in ecosystem		
I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN	I CAN STATEMENTS:	I CAN STATEMENTS:	I CAN STATEMENTS:
I can define the concepts of population and community.  I can identify examples of populations and communities within various ecosystem.  I can identify the		STATEMENTS:	I can describe a population. I can explain an ecosystem.		

role/function a population of organisms has in a particular community/ecosystem.  I can draw conclusion about the effects of changes to populations in an ecosystem.					
Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary	Critical Vocabulary
Consumers Producers Decomposers Ecosystem Populations Food webs					
Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities	Suggested Strategies/Activities
Research Dioramas Student presentation Project Wild activities Construct a food web	Research Dioramas Student presentation Project Wild activities Construct a food web	Research Dioramas Student presentation Project Wild activities Construct a food web	Research Dioramas Student presentation Project Wild activities Construct a food web	Research Dioramas Student presentation Project Wild activities Construct a food web	Research Dioramas Student presentation Project Wild activities Construct a food web
Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative	Balanced Assessment: Formative

| Discovery education      |
|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| probes                   | probes                   | probes                   | probes                   | probes                   | probes                   |
| Thumbs up                |
| Oral questioning         |
| Quiz                     | Quiz                     | Quiz                     | Quiz                     | Quiz                     | Quiz                     |
| Exit slip                |
Summative	Summative	Summative	Summative	Summative	Summative
Open Response	Open Response	Open Response			
End of unit test	End of unit test	End of unit test	Open Response	Open Response	Open Response
Culminating	Culminating	Culminating	End of unit test	End of unit test	End of unit test
performance	performance	performance	Culminating	Culminating	Culminating
			performance	performance	performance
Common (PLC Teams	Common (PLC Teams	Common (PLC Teams			
will design the common	will design the common	will design the common	Common (PLC Teams	Common (PLC Teams	Common (PLC Teams
assessments, i.e., grade	assessments, i.e., grade	assessments, i.e., grade	will design the common	will design the common	will design the common
level, and/or depts)	level, and/or depts)	level, and/or depts)	assessments, i.e., grade	assessments, i.e., grade	assessments, i.e., grade
			level, and/or depts)	level, and/or depts)	level, and/or depts)
Resources Needed					
Project Wild Activity					
Book	Book	Book	Book	Book	Book
Laptop/IPad	Laptop/IPad	Laptop/IPad	Laptop/IPad	Laptop/IPad	Laptop/IPad
Text-book	Text-book	Text-book	Text-book	Text-book	Text-book
http://netvet.wustl.edu/	http://netvet.wustl.edu/	http://netvet.wustl.edu/	http://netvet.wustl.edu/	http://netvet.wustl.edu/	http://netvet.wustl.edu/
<u>e-zoo.htm</u>	<u>e-zoo.htm</u>	<u>e-zoo.htm</u>	<u>e-zoo.htm</u>	<u>e-zoo.htm</u>	<u>e-zoo.htm</u>
http://www.brainpop.co	http://www.brainpop.co	http://www.brainpop.co	http://www.brainpop.co	http://www.brainpop.co	http://www.brainpop.co
<u>m</u>	<u>m</u>	<u>m</u>	<u>m</u>	<u>m</u>	<u>m</u>