INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I. Generic Evaluation Criteria _____
II. Instructional Content Analysis _____
III. Specific Science Criteria _____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science K**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-65091-1**
TE ISBN:	**0-618-49230-5**

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

KINDERGARTEN

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II - Instructional Content Analysis
KINDERGARTEN

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

1. **History and the Nature of Science**
   - the history of science and the evolvement of scientific knowledge
   - science as a human endeavor encompassing the contributions of diverse cultures and scientists
   - the nature of science

   ✓ (A)

2. **Science as Inquiry**
   - engage in active inquiries, investigations and hands-on activities a minimum of 50% of the instructional time.

   ✓ (I)

3. **Unifying Themes**
   - interdependent themes present in the natural and designed world
   - identify, construct, test, analyze and evaluate systems, models and changes
   - draw conclusions about and predict changes in natural and designed systems

   ✓ (I)

4. **Scientific Design and Application**
   - interdependence between science and technology
   - distinguish between natural and man-made objects
   - to utilize technology to gather data and communicate designs, results and conclusions

   ✓ (A)

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Science in Personal and Social Perspectives** • evaluate personal and societal benefits when examining health, population, resource and environmental issues • evaluate the impact of different points of view on health, population, resource and environmental practices • predict the long-term societal impact of specific health, population, resource and environmental practices • understand public policy decisions as related to health, population, resource and environmental issues					✓		

PART III SPECIFIC SCIENCE CRITERIA
KINDERGARTEN
COORDINATED AND THEMATIC SCIENCE (CATS K)

The Coordinated and Thematic Science (CATS) Kindergarten objectives emphasize the process skills. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the physical sciences, the life sciences and the earth and space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes and models. Students will engage in active inquiries, investigations, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. CATS Kindergarten enhances the child's natural curiosity about the environment and augments the awe and wonder of inquiries and discoveries using the senses and by hands-on manipulation of objects to build a strong foundation of concepts blended with safety principles.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Characteristics of Organisms** using the five senses, identify living and non-living things (K.4.1)				✓			
	2. **Life Cycles of Organisms** observe the movement, growth and changes in plants and animals (K.4.2)				✓			
	3. **Organisms and Environments** observe models of plants and animals in different environments (K.4.3)					✓		
	4. **Properties of Objects and Materials** describe, compare, sort and group objects in terms of how they are made (K.4.4)					✓		
	5. **Properties of Objects and Materials** a. describe, compare, sort and group objects in terms of how they are made (K.4.4)					✓		
	b. describe, compare, sort and group objects in terms of their physical properties (K.4.4)					✓		
	c. identify liquids and solids (K.4.5)					✓		
	6. **Light, Heat, Electricity and Magnetism** a. identify colors (K.4.6)					✓		
	b. explore changes in energy (K.4.7)							✓
	c. explore magnetic properties of objects (K.4.8)							✓

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	7. **Position and Motion of Objects** explore the different ways objects can be moved (K.4.9)				✓			
	8. **Changes in Earth and Sky** observe and record daily changes in weather (K.4.10)				✓			
	9. **Objects in the Sky** identify objects in the day and night sky (K.4.11)				✓			
	10. **Properties of Earth Materials** observe and compare differences in earth materials (K.4.12)				✓			

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I. Generic Evaluation Criteria _____
II. Instructional Content Analysis _____
III. Specific Science Criteria _____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 1**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49223-2**
TE ISBN:	**0-618-49231-3**

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE ONE

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II - Instructional Content Analysis
GRADE ONE

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

1. **History and the Nature of Science**
   - the history of science and the evolvement of scientific knowledge
   - science as a human endeavor encompassing the contributions of diverse cultures and scientists
   - the nature of science

	✓			

2. **Science as Inquiry**
   - engage in active inquiries, investigations and hands-on activities a minimum of 50% of the instructional time.

✓				

3. **Unifying Themes**
   - interdependent themes present in the natural and designed world
   - identify, construct, test, analyze and evaluate systems, models and changes
   - draw conclusions about and predict changes in natural and designed systems

✓				

4. **Scientific Design and Application**
   - interdependence between science and technology
   - distinguish between natural and man-made objects
   - to utilize technology to gather data and communicate designs, results and conclusions

✓				

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Science in Personal and Social Perspectives** • evaluate personal and societal benefits when examining health, population, resource and environmental issues • evaluate the impact of different points of view on health, population, resource and environmental practices • predict the long-term societal impact of specific health, population, resource and environmental practices • understand public policy decisions as related to health, population, resource and environmental issues				✓			

PART III - SPECIFIC CRITERIA
GRADE ONE:
COORDINATED AND THEMATIC SCIENCE 1 (CATS 1)

The Coordinated and Thematic Science 1 (CATS 1) objectives build on the process skills and add data gathering and reporting. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics, and earth and space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes, and models. Students will engage in active inquiries, investigations, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities.

CATS 1 continues the excitement of learning about the natural world and allows the beginning of experimentation and data collection to emphasize the tools of science and the properties of matter.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Characteristics of Organisms**							
	a. using the five senses, identify living and non-living things (1.4.1)					✓		
	b. identify that most living things need water, food, light and air (1.4.2)					✓		
	2. **Life Cycles of Organisms**							
	a. recognize changes in life cycle of living organisms (1.4.3)				✓			
	b. identify the parts of growing plants as they develop (1.4.4)					✓		
	3. **Organisms and Environments**							
	a. depict movement of living things in air, water and on land (1.4.5)					✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	4. **Properties of Objects and Materials**							
	a. recognize that materials are composed of smaller parts that may be seen with a magnifier (1.4.6)					✓		
	b. recognize that materials can be recycled and used again, sometimes in different forms (1.4.7)					✓		
	c. recognize that water can be a solid or a liquid, and can change from one form to another (1.4.8)					✓		
	d. predict and investigate the buoyancy of objects in water (1.4.9)					✓		
	5. **Light, Heat, Electricity, and Magnetism**							
	a. classify objects as magnetic or non-magnetic (1.4.10)				✓			
	b. observe and record shadows at different times of the day (1.4.11)					✓		
	6. **Position and Motion of Objects**							
	a. describe the changes in the motion of objects (1.4.12)					✓		
	b. demonstrate that sounds are produced by vibrations (1.4.13)					✓		
	7. **Changes in Earth and Sky**							
	a. observe, identify and record changes in weather (1.4.14)				✓			
	b. observe, identify and record the effects of weather on living organisms (1.4.14)					✓		
	c. recognize that the sun, moon and stars appear to move (1.4.15)				✓			
	8. **Objects in the Sky**							
	a. observe and discuss the importance of objects in the day and night sky (1.4.16)					✓		
	9. **Properties of earth materials**							
	a. use a model to compare land and water features on the earth (1.4.17)					✓		
	b. identify important uses of air (1.4.18)					✓		
	c. investigate and compare the properties of soil (1.4.19)					✓		

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I. Generic Evaluation Criteria _____
II. Instructional Content Analysis _____
III. Specific Science Criteria _____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 2**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49224-0**
TE ISBN:	

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE TWO

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II - Instructional Content Analysis
GRADE TWO

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

	1. **History and the Nature of Science** • the history of science and the evolvement of scientific knowledge • science as a human endeavor encompassing the contributions of diverse cultures and scientists • the nature of science		✓		
	2. **Science as Inquiry** • engage in active inquiries, investigations and hands-on activities a minimum of 50% of the instructional time.	✓			
	3. **Unifying Themes** • interdependent themes present in the natural and designed world • identify, construct, test, analyze and evaluate systems, models and changes • draw conclusions about and predict changes in natural and designed systems	✓			
	4. **Scientific Design and Application** • interdependence between science and technology • distinguish between natural and man-made objects • to utilize technology to gather data and communicate designs, results and conclusions	✓			

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Science in Personal and Social Perspectives** • evaluate personal and societal benefits when examining health, population, resource and environmental issues • evaluate the impact of different points of view on health, population, resource and environmental practices • predict the long-term societal impact of specific health, population, resource and environmental practices • understand public policy decisions as related to health, population, resource and environmental issues					✓		

PART III - SPECIFIC CRITERIA
GRADE TWO:
COORDINATED AND THEMATIC SCIENCE 2 (CATS 2)

The Coordinated and Thematic Science 2 (CATS 2) objectives build upon the early stages of experimentation and maintenance of natural curiosity. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics and earth and space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes and models. Students will engage in active inquiries, investigations and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities. CATS 2 will provide opportunities for developmental and academic growth. The activities will introduce the concepts that science and technology are interrelated. The curricular thrust will be to develop early problem-solving skills through observation, experimenting and concluding.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Characteristics of Organisms**							
	a. identify that plants and animals have different structures (2.4.1)					✓		
	b. identify the structures of physical characteristics of living things and explain their functions (2.4.2)				✓			
	2. **Life Cycles of Organisms**							
	a. sequence pictures of events to illustrate the changes in the life cycle of plants and animals (2.4.3)				✓			
	b. relate observations of the butterfly's life cycle to student's own growth and change (2.4.4)					✓		
	3. **Organisms and Environments**							
	a. observe and compare simple models of different kinds of habitats, including a forest and a stream (2.4.5)				✓			

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	4. **Properties of Objects and Materials**							
	a. identify materials as a solid, a liquid or a gas (2.4.6)					✓		
	b. recognize that matter can change from one state to another (2.4.6)				✓			
	c. demonstrate that solids, liquids and gases take up space (2.4.7)					✓		
	5. **Light, Heat, Electricity and Magnetism**							
	a. demonstrate that a magnet can attract or repel objects (2.4.8)				✓			
	b. recognize that some materials conduct heat better than others (2.4.9)					✓		
	c. demonstrate that a shadow is cast when an object blocks light (2.4.10)						✓	
	6. **Position and Motion of Objects**							
	a. compare the effects of force on the motion of an object (2.4.11)				✓			
	b. recognize that sound can change in pitch and volume (2.4.12)				✓			
	7. **Changes In Earth and Sky**							
	a. examine changes in the earth's surface (2.4.13)					✓		
	b. identify the effects of wind movement (2.4.14)					✓		
	c. observe and describe different types of precipitation (2.4.15)					✓		
	d. compare seasonal changes (2.4.16)					✓		
	e. explain how the rotation of the earth on its axis causes day and night (2.4.17)					✓		
	8. **Objects in the Sky**							
	a. understand that the moon has phases (2.4.18)					✓		
	9. **Properties of Earth Materials**							
	a. describe how fossils are formed (2.4.19)					✓		
	b. match a fossil or a picture of a fossil with a picture of its original organism (2.4.20)					✓		

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I. Generic Evaluation Criteria _____
II. Instructional Content Analysis _____
III. Specific Science Criteria _____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 3**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49225-9**
TE ISBN:	**0-618-49233-X**

PART I –GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE THREE

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II – Instructional Content Analysis
GRADE THREE

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

1. **History and the Nature of Science** • the history of science and the evolvement of scientific knowledge • science as a human endeavor encompassing the contributions of diverse cultures and scientists • the nature of science		✓				
2. **Science as Inquiry** • engage in active inquiries, investigations and hands-on activities a minimum of 50% of the instructional time.	✓					
3. **Unifying Themes** • interdependent themes present in the natural and designed world • identify, construct, test, analyze and evaluate systems, models and changes • draw conclusions about and predict changes in natural and designed systems	✓					
4. **Scientific Design and Application** • interdependence between science and technology • distinguish between natural and man-made objects • to utilize technology to gather data and communicate designs, results and conclusions	✓					

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Science in Personal and Social Perspectives** • evaluate personal and societal benefits when examining health, population, resource and environmental issues • evaluate the impact of different points of view on health, population, resource and environmental practices • predict the long-term societal impact of specific health, population, resource and environmental practices • understand public policy decisions as related to health, population, resource and environmental issues					✓		

PART III – SPECIFIC CRITERIA
GRADE THREE

The Coordinated and Thematic Science 3 (CATS 3) objectives build upon problem-solving and experimentation and move into a more in-depth study of science. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics and earth and space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes, and models. Students will engage in active inquiries, investigations and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities. CATS 3 highlights science-related careers. The study of geology and astronomy expands in CATS 3. Collecting materials, testing the materials, recording data and developing concepts related to physics and chemistry are introduced to expand investigative abilities that lead to logical conclusions.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Characteristics of Organisms**							
	a. identify the structures of living things and explain their functions (3.4.1)				✓			
	b. identify the systems of living things and explain their functions (3.4.1)					✓		
	2. **Life Cycles of Organisms**							
	a. observe, measure and record changes in living things (3.4.2)					✓		
	3. **Organisms and Environments**							
	a. compare physical characteristics and behaviors of living organisms and explain how they are adapted to a specific environment (3.4.3)				✓			
	b. observe and describe relationships among organisms in an ecosystem (3.4.3)				✓			
	4. **Properties of Objects and Materials**							
	a. relate the buoyancy of an object to its density (3.4.3)						✓	
	b. identify physical properties (3.4.3)					✓		
	c. identify chemical properties (3.4.6)					✓		
	d. relate changes in states of matter to changes in temperature (3.4.6)					✓		

	e. investigate the dissolving of solids in liquids (3.4.6)		✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Light, Heat, Electricity and Magnetism**							
	a. investigate the absorption, reflection and refraction of light by objects (3.4.6)					✓		
	b. relate how the color of an object is based upon the absorption or reflection of light (3.4.7)					✓		
	6. **Position and Motion of Objects**							
	a. recognize that it takes work to move objects over a distance (3.4.11)					✓		
	b. recognize that speed, distance and time are interrelated (3.4.6.12)					✓		
	c. recognize that the greater a force is exerted on an object, the greater the change of its motion will be (3.4.13)					✓		
	d. identify examples of potential energy (3.4.14)					✓		
	e. identify examples of kinetic energy (3.4.14)					✓		
	7. **Changes in Earth and Sky**							
	a. identify fossils as a record of time (3.4.15)					✓		
	b. explore the eroding of different materials by water and wind (3.4.16)					✓		
	c. describe how volcanoes change the Earth (3.4.17)				✓			
	d. describe how earthquakes change the Earth (3.4.17)					✓		
	8. **Objects in the Sky**							
	a. recognize the relationship of the Earth's position to the Sun (3.4.18)					✓		
	b. recognize the relative movement of the Moon to the Earth's position (3.4.19)					✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	9. **Properties of Earths Materials**							
	a. identify properties of minerals (3.4.20)					✓		
	b. recognize that rocks are composed of different minerals (3.4.20)					✓		
	c. explain how igneous rocks are formed (3.4.21)					✓		
	d. explain how sedimentary rocks are formed (3.4.21)					✓		
	e. explain how metamorphic rocks are formed (3.4.21)					✓		
	f. identify geographical features using a model of a map (3.4.22)					✓		
	g. describe the layers of the Earth and their various features (3.4.23)					✓		

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I.	Generic Evaluation Criteria	_____
II.	Instructional Content Analysis	_____
III.	Specific Science Criteria	_____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 4**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49226-7**
TE ISBN:	**0-618-49234-8**

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE FOUR

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II - Instructional Content Analysis
GRADE FOUR

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

	1.	**History and the Nature of Science** • the history of science and the evolvement of scientific knowledge • science as a human endeavor encompassing the contributions of diverse cultures and scientists • the nature of science		✓		
	2.	**Science as Inquiry** • engage in active inquiries, investigations and hands-on activities a minimum of 50% of the instructional time.	✓			
	3.	**Unifying Themes** • interdependent themes present in the natural and designed world • identify, construct, test, analyze and evaluate systems, models and changes • draw conclusions about and predict changes in natural and designed systems	✓			
	4.	**Scientific Design and Application** • interdependence between science and technology • distinguish between natural and man-made objects • to utilize technology to gather data and communicate designs, results and conclusions		✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5. **Science in Personal and Social Perspectives** • evaluate personal and societal benefits when examining health, population, resource and environmental issues • evaluate the impact of different points of view on health, population, resource and environmental practices • predict the long-term societal impact of specific health, population, resource and environmental practices • understand public policy decisions as related to health, population, resource and environmental issues					✓		

PART III - SPECIFIC CRITERIA
GRADE FOUR:
COORDINATED AND THEMATIC SCIENCE 4 (CATS 4)

The Coordinated and Thematic Science 4 (CATS 4) objectives build on the study of geology, astronomy, chemistry and physics. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics and earth and space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes and models. Students will engage in active inquiries, investigations and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated into all activities. CATS 4 promotes cooperative learning, group decisions, cultural diversity, careers and expands the development of hands-on exploration. Basic science concepts are developed and problem-solving abilities are augmented.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Characteristics of Organisms**							
_____	a. describe the different characteristics of plants and animals which help them to survive in different niches and environments (4.4.1)				✓			
_____	b. associate the behaviors of living organisms to external and internal influences (4.4.2)					✓		
_____	c. identify and classify variations in structures of living things and explain their functions (4.4.3)						✓	
_____	d. identify and classify variations in systems of living things and explain their functions (4.4.3)				✓			

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	2. **Life Cycles of Organisms**							
	a. compare and sequence changes in plant and animal life cycles (4.4.4)				✓			
	b. understand that plants and animals closely resemble their parents (4.4.5)				✓			
	c. understand characteristics of plants and animals are inherited from the parents (4.4.5)					✓		
	d. understand that some characteristics of plants and animals result from interaction with the environment (4.4.5)						✓	
	3. Organisms and Environments							
	a. identify human uses of plants and animals (4.4.6)							✓
	b. describe environmental barriers to the migration of animals (4.4.7)					✓		
	c. construct and explain models of habitats, food chains and food webs (4.4.8)						✓	
	4. Properties of Objects and Materials							
	a. investigate how properties can be used to identify substances (4.4.9)					✓		
	b. investigate and compare the dissolving of different solids in a given liquid (4.4.9)				✓			
	c. examine simple chemical changes (4.4.10)				✓			
	d. understand that materials, including air, have mass, take up space and are made of parts that are too small to be seen without magnification (4.4.11)				✓			
	e. identify various changes in states of matter to heat loss or gain (4.4.12)					✓		
	f. investigate variables that affect the rate of evaporation of a liquid (4.4.13)					✓		
	g. investigate the density of liquids (4.4.14)					✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	5.	**Light, Heat, Electricity and Magnetism**						
		a. identify different forms of energy (4.4.15)			✓			
		b. describe energy transformations that occur between different forms of energy (4.4.16)				✓		
		c. examine transverse and longitudinal waves (4.4.17)					✓	
		d. examine wave properties of frequency and wavelength (4.4.17)					✓	
		e. investigate static electricity (4.4.18)			✓			
		f. investigate conductors/nonconductors of electricity (4.4.18)				✓		
		g. construct simple electrical circuits (4.4.19)			✓			
		h. understand the relationship between a compass and a magnetic field (4.4.20)				✓		
	6.	**Position and Motion of Objects**						
		a. relate motion of an object to its frame of reference (4.4.21)				✓		
		b. predict and investigate the motion of an object if the applied force is changed (4.4.22)			✓			
		c. explore that sounds are produced by vibrating objects and columns of air (4.4.23)				✓		
		d. explore the relationship between frequency of vibration (4.4.24)				✓		
	7.	**Changes in Earth and Sky**						
		a. understand the geologic time scale (4.4.25)				✓		
		b. locate and identify patterns of stars and their seasonal changes (4.4.26)				✓		
		c. compare and explain the relative time differences to erode materials (4.4.27)					✓	
		d. investigate the cause and effects of volcanoes, earthquakes and landslides (4.4.28)			✓			
		e. interpret a weather chart or map (4.4.29)				✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	8.	**<u>Objects in the Sky</u>**						
		a. identify the sun as a star (4.4.30)				✓		
		b. describe the orbits of the sun and moon (4.4.31)			✓			
		c. describe and explain the planets' orbital paths (4.4.32)				✓		
	9.	**<u>Properties of Earth Materials</u>**						
		a. describe the rock cycle (4.4.33)				✓		
		b. explain the relationship between the rate of cooling and crystal size of igneous rocks (4.4.34)				✓		
		c. compare ocean water and fresh water (4.4.35)						✓

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I. Generic Evaluation Criteria _____
II. Instructional Content Analysis _____
III. Specific Science Criteria _____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 5**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49227-5**
TE ISBN:	**0-618-49235-6**

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE FIVE

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II – Instructional Content Analysis
GRADE FIVE

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

	1.	**History and the Nature of Science**					
		a. demonstrate an understanding that scientists formulate and test their explanations of nature using observation and experiments	✓				
		b. demonstrate an understanding of careers and contributions of men and women of diverse cultures to the development of science	✓				
	2.	**Science as Inquiry**					
		a. the instructional materials program presents information and opportunities that support a minimum of 50% active inquiry, investigations and hands-on activities	✓				
		b. cooperate and collaborate to ask questions, find answers, solve problem, conduct investigations to further an appreciation for scientific discovery	✓				
		c. formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection	✓				
		d. apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe		✓			
		e. use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world	✓				

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
		f. demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms				✓		
		g. utilize experimentation to demonstrate scientific processes and thinking skills				✓		
		h. construct and use charts, graphs and tables to organize, display, interpret, analyze and explain data				✓		
	3.	**<u>Unifying Themes</u>**						
		a. compare and contrast the relationship between the parts of a system to the whole system				✓		
		b. construct a variety of useful models of an object, event or process			✓			
		c. compare and contrast changes that occur in an object or a system to its original state				✓		
		d. identify the influence that a variation in scale will have on the way an object or system works				✓		
	4.	**<u>Scientific Design and Application</u>**						
		a. research everyday applications and interactions of science and technology				✓		
		b. implement engineering solutions for given tasks and measure their effectiveness						✓
	5.	**<u>Science in Personal and Social Perspectives</u>**						
		a. explore the connections between science, technology, society and career opportunities			✓			
		b. analyze the positive and negative effects of technology on society and the influence of societal pressures on the direction of technological advances				✓		

PART III - SPECIFIC CRITERIA
GRADE FIVE

The Coordinated and Thematic Science Grade Five (CATS 5) objectives evaluate, interpret and predict conditions and phenomena of the living and designed worlds. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics and earth/space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes and models. Students will engage in active inquires, investigations, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Science Subject Matter/Concepts Objectives**							
	a. demonstrate an understanding of the inter-connections of biological, earth and space and physical science concepts (SC.5.4.1)							✓
	2. **Structure and function in Living Systems**							
	a. identify and explain common energy conversions (SC.5.4.2)					✓		
	b. identify the structures of living organisms and explain their function (SC.5.4.3)				✓			
	c. observe and identify cells of organisms using microscope (SC.5.4.3)					✓		
	3. **Life Cycles of Organisms: Reproduction and Heredity**							
	a. compare variations of plant growth and reproduction (SC.5.4.3)					✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	4. **Populations and Ecosystems**							
	a. explain how the different characteristics of plants and animals help them to survive in different niches and environments including adaptations, natural selection and extinction (SC.5.4.6)				✓			
	b. explore the extinction of a species due to environmental conditions (SC.5.4.7)					✓		
	c. trace and describe the pathways of the sun's energy through producers, consumers and decomposers using food webs and pyramids (SC.5.4.8)				✓			
	5. **Properties of Objects and Materials**							
	a. explain that the mass of a material is conserved whether it is together in parts or in a different state (SC.5.4.9)						✓	
	b. recognize that elements are composed of only one type of matter (SC.5.4.10)						✓	
	c. using the periodic table, identify common elements according to their symbols (SC.5.4.11)					✓		
	d. compare the relative density of substances by their ability to float and sink (SC.5.4.12)					✓		
	6. **Light, Heat, Electricity and Magnetism**							
	a. analyze diagrams of electrical circuits (SC.5.4.13)				✓			
	b. use SI (metric) measurement units of volts, amps and watts as they apply to electricity (SC.5.4.14)						✓	
	c. investigate the properties of an electromagnet (SC.5.4.15)						✓	

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	7.	**Position and Motion of Objects**						
		a. describe how the variables of gravity and friction affect the motion of objects (SC.5.4.16)				✓		
		b. compare and contrast the change in length, tension or thickness of a vibrating object on the frequency of vibration (SC.5.4.17)					✓	
	8.	**Structure of the Earth System**						
		a. describe the layers of the earth and their various features (SC.5.4.18)			✓			
		b. identify and describe natural landforms (SC.5.4.19)					✓	
		c. describe how weather and climate are changed by natural landforms (SC.5.4.19)			✓			
		d. use a variety of instruments and sources to collect and display weather data to describe weather patterns. Data collected should be temperature, wind direction, wind speed and precipitation (SC.5.4.21)				✓		
		e. compare and explain the different rates of weathering, erosion and deposition in certain materials (SC.5.4.21)			✓			
		f. identify land features and elevations on a topographical map (SC.5.4.22)				✓		
		g. identify resources as being renewable or non-renewable (SC.5.4.23)				✓		
	9.	**Earth's History**						
		a. explore and explain how fossils and geologic features can be used to determine the relative age of rocks and rock layers (SC.5.4.24)					✓	
		b. identify that the Earth is made of plates (SC.5.4.25)				✓		

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

I.	Generic Evaluation Criteria	_____
II.	Instructional Content Analysis	_____
III.	Specific Science Criteria	_____

PUBLISHER:	**Houghton Mifflin Company**
SUBJECT:	**Science**
COURSE:	**Science 6**
TITLE:	**Houghton Mifflin Science**
COPYRIGHT DATE:	**2007**
SE ISBN:	**0-618-49228-3**
TE ISBN:	**0-618-49236-4**

PART I -GENERIC EVALUATION CRITERIA
GROUP V – 2006 TO 2012

GRADE SIX

R-E-S-P-O-N-S-E			CRITERIA	NOTES
Yes	No	N/A		
✓			**I. INTER-ETHNIC** The instructional material meets the requirements of inter-ethnic: concepts, content and illustrations, as set by West Virginia Board of Education Policy (Adopted December 1970).	
✓			**II. EQUAL OPPORTUNITY** The instructional material meets the requirements of equal opportunity: concept, content, illustration, heritage, roles contributions, experiences and achievements of males and females in American and other cultures, as set by West Virginia Board of Education Policy (Adopted May 1975).	

Part II – Instructional Content Analysis
GRADE SIX

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**

The instructional materials program presents information and opportunities in a manner that enables the student an understanding of:

	1. **History and the Nature of Science**						
	a. demonstrate an understanding that scientists formulate and test their explanations of nature using observation and experiments		✓				
	b. demonstrate an understanding of careers and contributions of men and women of diverse cultures to the development of science	✓					
	2. **Science as Inquiry**						
	a. the instructional materials program presents information and opportunities that support a minimum of 50% active inquiry, investigations and hands-on activities	✓					
	b. cooperate and collaborate to ask questions, find answers, solve problem, conduct investigations to further an appreciation for scientific discovery		✓				
	c. formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection		✓				
	d. apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe		✓				
	e. use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world		✓				

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
		f. demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms				✓		
		g. utilize experimentation to demonstrate scientific processes and thinking skills			✓			
		h. construct and use charts, graphs and tables to organize, display, interpret, analyze and explain data				✓		
	3.	**<u>Unifying Themes</u>**						
		a. compare and contrast the relationship between the parts of a system to the whole system				✓		
		b. construct a variety of useful models of an object, event or process				✓		
		c. compare and contrast changes that occur in an object or a system to its original state				✓		
		d. identify the influence that a variation in scale will have on the way an object or system works						✓
	4.	**<u>Scientific Design and Application</u>**						
		a. research everyday applications and interactions of science and technology				✓		
		b. implement engineering solutions for given tasks and measure their effectiveness					✓	
	5.	**<u>Science in Personal and Social Perspectives</u>**						
		a. explore the connections between science, technology, society and career opportunities			✓			
		b. analyze the positive and negative effects of technology on society and the influence of societal pressures on the direction of technological advances			✓			

PART III - SPECIFIC CRITERIA
GRADE SIX (CATS 6)

The Coordinated and Thematic Science Grade Six (CATS 6) objectives evaluate, interpret, and predict conditions and phenomena of the living and designed worlds. Through a spiraling, inquiry-based program of study, all students will demonstrate scientific literacy in the fields of biology, chemistry, physics, and earth/space sciences. The subject matter is delivered through a coordinated, integrated approach with an emphasis on the development of the major science themes of systems, changes, and models. Students will engage in active inquires, investigations, and hands-on activities for a minimum of 50% of the instructional time to develop conceptual understanding and research/laboratory skills. Safety instruction is integrated in all activities.

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	1. **Science Subject Matter/Concepts Objectives**							
	a. the instructional materials program presents information and opportunities in a manner that enables the student to demonstrate an understanding of the interconnections of biological, earth and space and physical science concepts (SC.6.4.1)					✓		
	2. **Structure and Function in Living Systems:**							
	a. describe the interactions of various cycles that provide energy through decomposition, photosynthesis, respiration, transpiration in the food web (e.g., nitrogen cycle) (SC.6.4.2)				✓			
	b. classify living organisms according to their structure and functions (SC.6.4.3)				✓			
	c. compare the similarities of internal features of organisms which can be used to infer relatedness (SC.6.4.4)				✓			
	d. explain how abiotic and biotic factors affect the interdependence among organisms (SC.6.4.5)					✓		
	e. construct models of plant and animal cells which show the basic parts (SC.6.4.6)						✓	

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	3.	**Life Cycles of Organisms: Reproduction and Heredity**						
		a. compare growth patterns in different plants (SC.6.4.7)			✓			
	4.	**Populations and Ecosystems**						
		a. demonstrate changes in populations of organisms due to limiting environmental factors (SC.6.4.8)			✓			
		b. analyze the ecological consequences of human interactions with the environment (SC.6.4.9)				✓		
	5.	**Structure and Properties of Matter**						
		a. classify and investigate properties and processes (changes) as either physical or chemical (SC.6.4.10)			✓			
		b. investigate the composition of matter concluding the matter is composed of tiny particles and that the particles are the same for the same type of matter (SC.6.4.11)				✓		
		c. investigate the formation and separation of simple mixtures (SC.6.4.12)				✓		
		d. use indicators to identify substances as acidic, basic or neutral (SC.6.4.13)				✓		
		e. identify the symbols of elements (SC.6.4.14)				✓		
		f. use the periodic table to identify elements as solids, liquids and gases, metals or nonmetals (SC.6.4.15)				✓		
		g. describe properties of matter (SC.6.4.16)			✓			
	6.	**Energy**						
		a. investigate the properties of the electromagnetic spectrum (SC.6.4.17)			✓			
		b. identify factors affecting absorption, reflection and refraction (SC.6.4.18-SC.6.4.19)				✓		
		c. describe the flow of heat between objects (SC.6.4.20)				✓		
		d. diagram simple parallel and series circuits (SC.6.4.21)				✓		

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	*(IMR Committee) Responses*							
	I=In-depth 80%	*A=Adequate 80%*	*M=Minimal 60%*	*N=Nonexistent Less than 60%*	**I**	**A**	**M**	**N**
	7.	**Motion and Forces**						
		a. interpret the relationship of mass to gravitational force (SC.6.4.22)				✓		
		b. examine the simple machines and the forces involved; apply the effects of balanced and unbalanced forces on motion of objects (SC.6.4.23)				✓		
		c. explain motion in terms of frames or reference and analyze graphs depicting motion and predicted future motion (SC.6.4.24)			✓			
	8.	**Structure of the Earths System**						
		a. track major atmospheric events (SC.6.4.25)			✓			
		b. describe and demonstrate the forces and results of plate tectonics (SC.6.4.26)			✓			
	9.	**Earth's History**						
		a. describe changes in the rock record due to geologic and physical events over time (SC.6.4.27)				✓		
	10.	**Earth and the Solar System**						
		a. recognize the phases of the Moon (SC.6.4.28)				✓		
		b. investigate models of Earth-Moon-Sun relationships (SC.6.4.29)				✓		
		c. compare the Earth's tilt and revolution to the seasonal changes (SC.6.4.30)				✓		