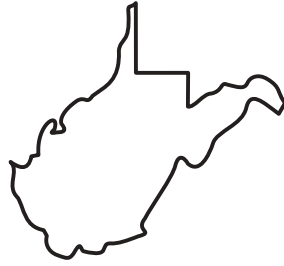


**A Correlation of
Science and Technology for Children[®]
to the
West Virginia CATS
(Grades K–6)**



Prepared by

Carolina Biological Supply Company

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This document gives a quick visual guide to the alignment of Science and Technology for Children® (STC®) units with the West Virginia Coordinated and Thematic Science (CATS) objectives for grades K–6. Although each STC® unit was developed for use at a specific grade level, there is some flexibility in grade placement, so any unit may be used a grade above or below the one for which it was designed. These grade ranges are indicated in the chart below.

STC® Units with Recommended Grade Ranges

Grades	Life Science	Earth Science	Physical Science	Technology
K–2	<i>Organisms</i> (O)	<i>Weather</i> (W)	<i>Solids and Liquids</i> (SL)	<i>Comparing and Measuring</i> (CM)
1–3	<i>The Life Cycle of Butterflies</i> (LCB)	<i>Soils</i> (S)	<i>Changes</i> (C)	<i>Balancing and Weighing</i> (BW)
2–4	<i>Plant Growth and Development</i> (PGD)	<i>Rocks and Minerals</i> (RM)	<i>Chemical Tests</i> (CT)	<i>Sound</i> (So)
3–5	<i>Animal Studies</i> (AS)	<i>Land and Water</i> (LW)	<i>Electric Circuits</i> (EC)	<i>Motion and Design</i> (MD)
4–6	<i>Microworlds</i> (M)	<i>Ecosystems</i> (E)	<i>Food Chemistry</i> (FC)	<i>Floating and Sinking</i> (FS)

Legend

To reduce the page count of this document, the STC® alignment information has been abbreviated as follows:

- Unit abbreviations = noted in parentheses in the chart above
- TG = Teacher’s Guide
- Sec4 = Section 4, titled “Unit Investigations and Blackline Masters,” in each unit Teacher’s Guide (2nd Edition books only)
- L01, L02, L03, etc. = Lesson 1, Lesson 2, Lesson 3, etc.
- pp = pages

Additional Curriculum Units Available from Carolina

Carolina offers 4 additional STC® curriculum units, designed for use at grades 5–7, that were not submitted for adoption in West Virginia, as well as an 8-unit middle school curriculum program, Science and Technology Concepts for Middle Schools™ (STC/MS™), for grades 6–8. For more information about these instructional materials, visit www.carolina.com/STC, email stc@carolina.com, or call 800.227.1150.

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

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

GRADE:	Kindergarten
VENDOR:	Carolina Biological Supply Company
COURSE:	
TITLE:	Science and Technology for Children®: Comparing and Measuring Unit, Organisms Unit, Solids and Liquids Unit, Weather Unit
COPYRIGHT DATE:	2004
UNIT ISBN:	See Attachment 1

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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

Part II - Instructional Content Analysis KINDERGARTEN

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

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

In all STC units, students learn about the nature of science through active inquiry and hands-on investigation.

In *Weather*, students read stories about the lives and discoveries of scientists in the following lessons:

W - TG: Sec4.L11 (pp101-112)

W - TG: Sec4.L12 (pp113-122)

In all STC units, students learn primarily through active inquiry and hands-on investigations.

In *Comparing and Measuring*, students recognize that models are representations of real things in the following lessons:

CM - TG: Sec4.L13 (pp87-92)

CM - TG: Sec4.L15 (pp99-110)

In *Organisms and Weather*, students observe changes in the environment in the following lessons:

O - TG: Sec4.L06 (pp65-74)

O - TG: Sec4.L11 (pp119-126)

O - TG: Sec4.L12 (pp127-134)

W - TG: Sec4.L02 (pp11-24)

W - TG: Sec4.L03 (pp25-32)

W - TG: Sec4.L15 (pp135-140)

W - TG: Sec4.L17 (pp149-150)

In *Comparing and Measuring*, *Organisms*, and *Solids and Liquids*, students observe the uses of tools and appliances at home and at play in all lessons. In *Weather*, students observe the uses of tools and appliances at home and at play in the following lessons:

W - TG: Sec4.L04 (pp33-42)

W - TG: Sec4.L05 (pp43-54)

W - TG: Sec4.L06 (pp55-62)

W - TG: Sec4.L07 (pp63-70)

W - TG: Sec4.L08 (pp71-82)

W - TG: Sec4.L10 (pp91-100)

1. History and the Nature of Science

- the history of science and the evolution 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>I= In-depth 80%</i>	<i>A= Adequate 80%</i>	<i>M= Minimal 60%</i>	<i>N= Nonexistent Less than 60%</i>	I	A	M	N

In all STC units, students work in groups and are guided to listen to and be tolerant of different viewpoints.

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							
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[As a safety precaution, the sense of taste is never used during an STC unit.]

- O - TG: Sec4.L01 (pp3-10)
- O - TG: Sec4.L15 (pp155-168)
- O - TG: Sec4.L17 (pp179-182)
- W - TG: Sec4.L12 (pp113-122)
- W - TG: Sec4.L13 (pp123-128)
- W - TG: Sec4.L14 (pp129-134)
- SL - TG: Sec4.L15 (pp121-130)
- SL - TG: Sec4.L17 (pp137-140)

1. Characteristics of Organisms

using the five senses, identify living and non-living things (K.4.1)

- O - TG: Sec4.L03 (pp21-36)
- O - TG: Sec4.L04 (pp36-52)
- O - TG: Sec4.L05 (pp53-64)
- O - TG: Sec4.L06 (pp65-74)
- O - TG: Sec4.L07 (pp75-86)
- O - TG: Sec4.L08 (pp87-96)
- O - TG: Sec4.L09 (pp97-104)
- O - TG: Sec4.L10 (pp105-118)
- O - TG: Sec4.L11 (pp119-126)
- O - TG: Sec4.L12 (pp127-134)
- O - TG: Sec4.L13 (pp135-148)
- O - TG: Sec4.L14 (pp149-154)
- O - TG: Sec4.L15 (pp155-168)
- O - TG: Sec4.L16 (pp169-178)

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)

- CM - TG: Sec4.L01 (pp3-10)
- CM - TG: Sec4.L02 (pp11-16)
- CM - TG: Sec4.L03 (pp17-22)
- CM - TG: Sec4.L04 (pp23-30)
- CM - TG: Sec4.L05 (pp31-42)

4. Properties of Objects and Materials

describe, compare, sort and group objects in terms of how they are made (K.4.4)

CM - TG: Sec4.L06 (pp43-48)
 CM - TG: Sec4.L07 (pp49-58)
 CM - TG: Sec4.L08 (pp59-64)
 CM - TG: Sec4.L09 (pp65-70)
 CM - TG: Sec4.L10 (pp71-74)
 CM - TG: Sec4.L11 (pp75-80)
 CM - TG: Sec4.L12 (pp81-86)
 CM - TG: Sec4.L14 (pp93-98)
 CM - TG: Sec4.L15 (pp99-110)
 CM - TG: Sec4.L16 (pp111-116)
 CM - TG: Sec4.L17 (pp117-120)
 O - TG: Sec4.L01 (pp3-10)
 O - TG: Sec4.L02 (pp11-20)
 O - TG: Sec4.L03 (pp21-36)
 O - TG: Sec4.L04 (pp36-52)
 O - TG: Sec4.L05 (pp53-64)
 O - TG: Sec4.L06 (pp65-74)
 O - TG: Sec4.L07 (pp75-86)
 O - TG: Sec4.L08 (pp87-96)
 O - TG: Sec4.L09 (pp97-104)
 O - TG: Sec4.L10 (pp105-118)
 O - TG: Sec4.L13 (pp135-148)
 O - TG: Sec4.L14 (pp149-154)
 O - TG: Sec4.L15 (pp155-168)
 SL - TG: Sec4.L01 (pp3-10)
 SL - TG: Sec4.L02 (pp11-18)
 SL - TG: Sec4.L03 (pp19-28)
 SL - TG: Sec4.L04 (pp29-40)
 SL - TG: Sec4.L05 (pp41-46)
 SL - TG: Sec4.L06 (pp47-54)
 SL - TG: Sec4.L07 (pp55-62)
 SL - TG: Sec4.L08 (pp63-68)
 SL - TG: Sec4.L09 (pp69-80)
 SL - TG: Sec4.L10 (pp81-86)
 SL - TG: Sec4.L11 (pp87-94)
 SL - TG: Sec4.L12 (pp95-100)
 SL - TG: Sec4.L13 (pp101-108)
 SL - TG: Sec4.L14 (pp109-120)
 SL - TG: Sec4.L15 (pp121-130)
 SL - TG: Sec4.L16 (pp131-136)
 SL - TG: Sec4.L17 (pp137-140)
 W - TG: Sec4.L01 (pp3-10)
 W - TG: Sec4.L02 (pp11-24)
 W - TG: Sec4.L03 (pp25-32)
 W - TG: Sec4.L04 (pp33-42)
 W - TG: Sec4.L09 (pp83-90)
 W - TG: Sec4.L11 (pp101-112)
 W - TG: Sec4.L12 (pp113-122)
 W - TG: Sec4.L13 (pp123-128)
 W - TG: Sec4.L14 (pp129-134)
 W - TG: Sec4.L16 (pp141-148)
 W - TG: Sec4.L17 (pp149-150)

5. Properties of Objects and Materials

CM - TG: Sec4.L01 (pp3-10)
 CM - TG: Sec4.L02 (pp11-16)
 CM - TG: Sec4.L03 (pp17-22)
 CM - TG: Sec4.L04 (pp23-30)
 CM - TG: Sec4.L05 (pp31-42)
 CM - TG: Sec4.L06 (pp43-48)
 CM - TG: Sec4.L07 (pp49-58)
 CM - TG: Sec4.L08 (pp59-64)
 CM - TG: Sec4.L09 (pp65-70)

- a. describe, compare, sort and group objects in terms of how they are made (K.4.4)

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

6. Light, Heat, Electricity and Magnetism

SL - TG: Sec4.L02 (pp11-18)
SL - TG: Sec4.L8 (pp63-68)

a. identify colors (K.4.6)

____ _

b. explore changes in energy (K.4.7)

____ _

c. explore magnetic properties of objects (K.4.8)

____ _

SL - TG: Sec4.L07 (pp55-62)
SL - TG: Sec4.L08 (pp63-68)
SL - TG: Sec4.L09 (pp69-80)

7. Position and Motion of Objects

explore the different ways objects can be moved (K.4.9)

____ _

SL - TG: Sec4.L03 (pp19-28)
SL - TG: Sec4.L04 (pp29-40)
SL - TG: Sec4.L12 (pp95-100)
SL - TG: Sec4.L13 (pp101-108)
CM - TG: Sec4.L6 (pp43-48)

8. Changes in Earth and Sky

observe and record daily changes in weather (K.4.10)

____ _

W - TG: Sec4.L01 (pp3-10)
W - TG: Sec4.L02 (pp11-24)
W - TG: Sec4.L03 (pp25-32)
W - TG: Sec4.L04 (pp33-42)
W - TG: Sec4.L05 (pp43-54)
W - TG: Sec4.L06 (pp55-62)
W - TG: Sec4.L07 (pp63-70)
W - TG: Sec4.L08 (pp71-82)
W - TG: Sec4.L09 (pp83-90)
W - TG: Sec4.L10 (pp91-100)
W - TG: Sec4.L11 (pp101-112)
W - TG: Sec4.L12 (pp113-122)
W - TG: Sec4.L13 (pp123-128)
W - TG: Sec4.L14 (pp129-134)
W - TG: Sec4.L15 (pp135-140)
W - TG: Sec4.L16 (pp141-148)
W - TG: Sec4.L17 (pp149-150)

9. Objects in the Sky

identify objects in the day and night sky (K.4.11)

____ _

W - TG: Sec4.L12 (pp113-122)
[day sky only]
W - TG: Sec4.L13 (pp123-128)
[day sky only]
W - TG: Sec4.L14 (pp129-134)
[day sky only]
W - TG: Sec4.L15 (pp135-140)
[day sky only]
W - TG: Sec4.L16 (pp141-148)
[day sky only]

10. Properties of Earth Materials

observe and compare differences in earth materials (K.4.12)

____ _

SL - TG: Sec4.L02 (pp11-18)
SL - TG: Sec4.L04 (pp29-40)
SL - TG: Sec4.L05 (pp41-46)

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

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

GRADE: 1

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Balancing and Weighing Unit, Changes Unit, Comparing and Measuring Unit, The Life Cycle of Butterflies Unit, Organisms Unit, Soils Unit, Solids and Liquids Unit, Weather Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 2

**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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

**Part II - Instructional Content Analysis
GRADE ONE**

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
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The instructional materials program presents information and opportunities in a manner that enables the student to develop an understanding of:

In all STC units, students learn about the nature of science through active inquiry and hands-on investigation. In *Weather*, students read stories about the lives and discoveries of scientists in the following lessons:
W - TG: Sec4.L11 (pp101-112)
W - TG: Sec4.L12 (pp113-122)

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

In all STC units, students learn primarily through active inquiry and hands-on investigations.

2. Science as Inquiry

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

In *Organisms*, students learn to identify that systems are made of parts that interact with one another in the following lessons:
O - TG: Sec4.L04 (pp36-52)
O - TG: Sec4.L05 (pp53-64)
O - TG: Sec4.L07 (pp75-86)
O - TG: Sec4.L08 (pp87-96)
O - TG: Sec4.L09 (pp97-104)
O - TG: Sec4.L11 (pp119-126)
O - TG: Sec4.L12 (pp127-134)
O - TG: Sec4.L13 (pp135-148)
O - TG: Sec4.L14 (pp149-154)

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

In *Balancing and Weighing* and *Comparing and Measuring*, students learn to use models as representations of real things in the following lessons:
BW - TG: Sec4.L02 (pp9-14)
BW - TG: Sec4.L03 (pp15-26)
BW - TG: Sec4.L05 (pp35-44)
BW - TG: Sec4.L06 (pp45-54)
CM - TG: Sec4.L13 (pp87-92)
CM - TG: Sec4.L15 (pp99-110)

(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

In *Weather*, students distinguish between natural and man-made objects in the following lesson:
W - TG: Sec4.L12 (pp113-122)

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

In all lessons in *Balancing and Weighing, Changes, Comparing and Measuring, Organisms, Soils, Solids and Liquids*, and *Weather*, students learn to listen to and be tolerant of different viewpoints while working in collaborative groups.
In *The Life Cycle of Butterflies*, students learn to listen to and be tolerant of different viewpoints while working in collaborative groups in the following lessons:
LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96).
In *Solids and Liquids*, students learn to develop respect and responsibility for the environment by engaging in conservation practices in the following lesson:
SL - TG: Sec4.L14 (pp109-120)

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>I=In-depth</i> 80%	<i>A=Adequate</i> 80%	<i>M=Minimal</i> 60%	<i>N=Nonexistent</i> Less than 60%	I	A	M

1. Characteristics of Organisms

- a. using the five senses, identify living and non-living things (1.4.1)

[As a safety precaution, the sense of taste is never used during an STC unit.]

LCB - TG: Sec4.L10 (pp63-68)
 O - TG: Sec4.L01 (pp3-10)
 O - TG: Sec4.L15 (pp155-168)
 O - TG: Sec4.L17 (pp179-182)
 S - TG: Sec4.L01 (pp3-16)
 S - TG: Sec4.L02 (pp17-26)
 S - TG: Sec4.L03 (pp27-36)
 S - TG: Sec4.L04 (pp37-44)
 S - TG: Sec4.L05 (pp45-56)
 S - TG: Sec4.L06 (pp57-64)
 S - TG: Sec4.L07 (pp65-72)
 S - TG: Sec4.L08 (pp73-86)
 S - TG: Sec4.L09 (pp87-96)
 S - TG: Sec4.L10 (pp97-108)
 S - TG: Sec4.L11 (pp109-114)
 S - TG: Sec4.L12 (pp115-124)
 S - TG: Sec4.L13 (pp125-138)
 S - TG: Sec4.L14 (pp139-148)
 S - TG: Sec4.L16 (pp159-168)
 S - TG: Sec4.L17 (pp169-172)
 SL - TG: Sec4.L02 (pp11-18)
 SL - TG: Sec4.L03 (pp19-28)
 SL - TG: Sec4.L04 (pp29-40)
 SL - TG: Sec4.L05 (pp41-46)
 SL - TG: Sec4.L06 (pp47-54)
 SL - TG: Sec4.L07 (pp55-62)

- SL - TG: Sec4.L08 (pp63-68)
- SL - TG: Sec4.L09 (pp69-80)
- SL - TG: Sec4.L10 (pp81-86)
- SL - TG: Sec4.L11 (pp87-94)
- SL - TG: Sec4.L12 (pp95-100)
- SL - TG: Sec4.L13 (pp101-108)
- SL - TG: Sec4.L14 (pp109-120)
- SL - TG: Sec4.L15 (pp121-130)
- SL - TG: Sec4.L16 (pp131-136)
- SL - TG: Sec4.L17 (pp137-140)
- W - TG: Sec4.L12 (pp113-122)
- W - TG: Sec4.L13 (pp123-128)
- W - TG: Sec4.L14 (pp129-134)

-
- LCB - TG: Sec4.L01 (pp3-10)
 - LCB - TG: Sec4.L02 (pp11-18)
 - LCB - TG: Sec4.L03 (pp19-22)
 - LCB - TG: Sec4.L04 (pp23-28)
 - LCB - TG: Sec4.L05 (pp29-34)
 - LCB - TG: Sec4.L06 (pp35-38)
 - LCB - TG: Sec4.L07 (pp39-46)
 - LCB - TG: Sec4.L08 (pp47-52)
 - LCB - TG: Sec4.L10 (pp63-68)
 - LCB - TG: Sec4.L11 (pp69-74)
 - LCB - TG: Sec4.L12 (pp75-80)
 - LCB - TG: Sec4.L15 (pp89-94)
 - LCB - TG: Sec4.L16 (pp95-96)
 - O - TG: Sec4.L01 (pp3-10)
 - O - TG: Sec4.L02 (pp11-20)
 - O - TG: Sec4.L03 (pp21-36)
 - O - TG: Sec4.L04 (pp36-52)
 - O - TG: Sec4.L05 (pp53-64)
 - O - TG: Sec4.L06 (pp65-74)
 - O - TG: Sec4.L07 (pp75-86)
 - O - TG: Sec4.L08 (pp87-96)
 - O - TG: Sec4.L09 (pp97-104)
 - O - TG: Sec4.L10 (pp105-118)
 - O - TG: Sec4.L11 (pp119-126)
 - O - TG: Sec4.L12 (pp127-134)
 - O - TG: Sec4.L13 (pp135-148)
 - O - TG: Sec4.L14 (pp149-154)
 - O - TG: Sec4.L15 (pp155-168)
 - O - TG: Sec4.L16 (pp169-178)
 - O - TG: Sec4.L17 (pp179-182)
 - S - TG: Sec4.L09 (pp87-96)
 - S - TG: Sec4.L10 (pp97-108)

b. identify that most living things need water, food, light and air (1.4.2)

2. Life Cycles of Organisms

- LCB - TG: Sec4.L01 (pp3-10)
- LCB - TG: Sec4.L02 (pp11-18)
- LCB - TG: Sec4.L03 (pp19-22)
- LCB - TG: Sec4.L04 (pp23-28)
- LCB - TG: Sec4.L05 (pp29-34)
- LCB - TG: Sec4.L06 (pp35-38)
- LCB - TG: Sec4.L07 (pp39-46)
- LCB - TG: Sec4.L08 (pp47-52)
- LCB - TG: Sec4.L09 (pp53-62)
- LCB - TG: Sec4.L10 (pp63-68)
- LCB - TG: Sec4.L11 (pp69-74)
- LCB - TG: Sec4.L12 (pp75-80)
- LCB - TG: Sec4.L13 (pp81-84)
- LCB - TG: Sec4.L14 (pp85-88)
- LCB - TG: Sec4.L15 (pp89-94)
- LCB - TG: Sec4.L16 (pp95-96)

a. recognize changes in life cycle of living organisms (1.4.3)

O - TG: Sec4.L03 (pp21-36)
 O - TG: Sec4.L06 (pp65-74)
 O - TG: Sec4.L11 (pp119-126)
 O - TG: Sec4.L12 (pp127-134)
 O - TG: Sec4.L15 (pp155-168)
 O - TG: Sec4.L16 (pp169-178)

O - TG: Sec4.L03 (pp21-36)
 O - TG: Sec4.L05 (pp53-64)
 O - TG: Sec4.L06 (pp65-74)
 O - TG: Sec4.L13 (pp135-148)
 O - TG: Sec4.L15 (pp155-168)
 S - TG: Sec4.L10 (pp97-108)

b. identify the parts of growing plants as they develop (1.4.4)

3. Organisms and Environments

LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L10 (pp63-68)
 LCB - TG: Sec4.L11 (pp69-74)
 LCB - TG: Sec4.L12 (pp75-80)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 O - TG: Sec4.L16 (pp169-178)

a. depict movement of living things in air, water and on land (1.4.5)

4. Properties of Objects and Materials

C - TG: Sec4.L01 (pp3-20)
 C - TG: Sec4.L04 (pp43-52)
 C - TG: Sec4.L05 (pp53-62)
 C - TG: Sec4.L06 (pp63-70)
 C - TG: Sec4.L07 (pp71-78)
 C - TG: Sec4.L08 (pp79-84)
 C - TG: Sec4.L09 (pp85-94)
 C - TG: Sec4.L11 (pp103-110)
 C - TG: Sec4.L12 (pp111-118)
 C - TG: Sec4.L13 (pp119-128)
 C - TG: Sec4.L14 (pp129-136)
 C - TG: Sec4.L15 (pp137-146)
 C - TG: Sec4.L16 (pp147-154)
 C - TG: Sec4.L17 (pp155-158)
 SL - TG: Sec4.L11 (pp87-94)
 SL - TG: Sec4.L15 (pp121-130)

S - TG: Sec4.L02 (pp17-26)
 S - TG: Sec4.L03 (pp27-36)

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)

SL - TG: Sec4.L01 (pp3-10)
 SL - TG: Sec4.L02 (pp11-18)
 SL - TG: Sec4.L04 (pp29-40)
 SL - TG: Sec4.L05 (pp41-46)
 SL - TG: Sec4.L06 (pp47-54)
 SL - TG: Sec4.L07 (pp55-62)
 SL - TG: Sec4.L08 (pp63-68)
 SL - TG: Sec4.L09 (pp69-80)
 SL - TG: Sec4.L10 (pp81-86)
 SL - TG: Sec4.L11 (pp87-94)
 SL - TG: Sec4.L12 (pp95-100)
 SL - TG: Sec4.L13 (pp101-108)
 SL - TG: Sec4.L14 (pp109-120)
 SL - TG: Sec4.L15 (pp121-130)
 SL - TG: Sec4.L16 (pp131-136)
 SL - TG: Sec4.L17 (pp137-140)

(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
SL - TG: Sec4.L06 (pp47-54) SL - TG: Sec4.L14 (pp109-120)					—	—	—	—
					—	—	—	—
					—	—	—	—
SL - TG: Sec4.L07 (pp55-62)					—	—	—	—
					—	—	—	—
					—	—	—	—
SL - TG: Sec4.L03 (pp19-28) SL - TG: Sec4.L04 (pp29-40) SL - TG: Sec4.L12 (pp95-100) SL - TG: Sec4.L13 (pp101-108) W - TG: Sec4.L04 (pp33-42)					—	—	—	—
					—	—	—	—
					—	—	—	—
W - TG: Sec4.L01 (pp3-10) W - TG: Sec4.L02 (pp11-24) W - TG: Sec4.L03 (pp25-32) W - TG: Sec4.L04 (pp33-42) W - TG: Sec4.L05 (pp43-54) W - TG: Sec4.L06 (pp55-62) W - TG: Sec4.L07 (pp63-70) W - TG: Sec4.L09 (pp83-90) W - TG: Sec4.L10 (pp91-100) W - TG: Sec4.L11 (pp101-112) W - TG: Sec4.L12 (pp113-122) W - TG: Sec4.L13 (pp123-128) W - TG: Sec4.L14 (pp129-134) W - TG: Sec4.L15 (pp135-140) W - TG: Sec4.L16 (pp141-148) W - TG: Sec4.L17 (pp149-150)					—	—	—	—
W - TG: Sec4.L01 (pp3-10) W - TG: Sec4.L02 (pp11-24) W - TG: Sec4.L03 (pp25-32) W - TG: Sec4.L04 (pp33-42) W - TG: Sec4.L05 (pp43-54) W - TG: Sec4.L06 (pp55-62) W - TG: Sec4.L07 (pp63-70) W - TG: Sec4.L09 (pp83-90) W - TG: Sec4.L10 (pp91-100) W - TG: Sec4.L11 (pp101-112) W - TG: Sec4.L12 (pp113-122) W - TG: Sec4.L13 (pp123-128) W - TG: Sec4.L14 (pp129-134) W - TG: Sec4.L15 (pp135-140) W - TG: Sec4.L16 (pp141-148) W - TG: Sec4.L17 (pp149-150)					—	—	—	—

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
W - TG: Sec4.L02 (pp11-24) [sun only]					---	---	---	---
					---	---	---	---
W - TG: Sec4.L13 (pp123-128) W - TG: Sec4.L14 (pp129-134) [day sky only]					---	---	---	---
					---	---	---	---
					---	---	---	---
W - TG: Sec4.L04 (pp33-42)					---	---	---	---
					---	---	---	---
S - TG: Sec4.L01 (pp3-16) S - TG: Sec4.L02 (pp17-26) S - TG: Sec4.L03 (pp27-36) S - TG: Sec4.L04 (pp37-44) S - TG: Sec4.L05 (pp45-56) S - TG: Sec4.L06 (pp57-64) S - TG: Sec4.L07 (pp65-72) S - TG: Sec4.L08 (pp73-86) S - TG: Sec4.L09 (pp87-96) S - TG: Sec4.L10 (pp97-108) S - TG: Sec4.L11 (pp109-114) S - TG: Sec4.L12 (pp115-124) S - TG: Sec4.L13 (pp125-138) S - TG: Sec4.L14 (pp139-148) S - TG: Sec4.L15 (pp149-158) S - TG: Sec4.L16 (pp159-168) S - TG: Sec4.L17 (pp169-172)					---	---	---	---

- 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 | _____ |

GRADE: 2

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Balancing and Weighing Unit, Changes Unit, Chemical Tests Unit, Comparing and Measuring Unit, The Life Cycle of Butterflies Unit, Organisms Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Solids and Liquids Unit, Soils Unit, Sound Unit, Weather Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 3

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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

Part II - Instructional Content Analysis GRADE TWO

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

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

In all STC units, students learn to recognize science as the human’s search for an understanding of the world by asking questions about themselves and their world.

In *Weather*, students read stories about the lives and discoveries of scientists in the following lessons:

W - TG: Sec4.L11 (pp101-112)

W - TG: Sec4.L12 (pp113-122)

In all STC units, students learn primarily through active inquiry and hands-on investigations.

In *Organisms*, students learn to identify that systems are made of parts that interact with one another in the following lessons:

O - TG: Sec4.L04 (pp36-52)

O - TG: Sec4.L05 (pp53-64)

O - TG: Sec4.L07 (pp75-86)

O - TG: Sec4.L08 (pp87-96)

O - TG: Sec4.L09 (pp97-104)

O - TG: Sec4.L11 (pp119-126)

O - TG: Sec4.L12 (pp127-134)

O - TG: Sec4.L13 (pp135-148)

O - TG: Sec4.L14 (pp149-154)

In *Balancing and Weighing*, *Comparing and Measuring*, *Plant Growth and Development*, and *Sound*, students learn to use models as representations of real things in the following lessons:

BW - TG: Sec4.L02 (pp9-14)

BW - TG: Sec4.L03 (pp15-26)

BW - TG: Sec4.L05 (pp35-44)

BW - TG: Sec4.L06 (pp45-54)

CM - TG: Sec4.L13 (pp87-92)

CM - TG: Sec4.L15 (pp99-110)

PGD - TG: Sec4.L13 (pp71-78)

PGD - TG: Sec4.L14 (pp79-88)

So - TG: Sec4.L08 (pp57-62)

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

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	I=In-depth 80%	A=Adequate 80%	M=Minimal 60%	N=Nonexistent Less than 60%	I	A	M	N

	<p>4. <u>Scientific Design and Application</u></p> <ul style="list-style-type: none"> interdependence between science and technology distinguish between natural and man-made objects utilize technology to gather data and communicate designs, results and conclusions 				
<p>In all lessons of <i>Balancing and Weighing, Changes, Chemical Tests, Comparing and Measuring, Organisms, Rocks and Minerals, Solids and Liquids, Soils, Sound, and Weather</i>, students learn to listen to and be tolerant of different viewpoints while working in collaborative groups. In <i>The Life Cycle of Butterflies, and Plant Growth and Development</i>, students learn to listen to and be tolerant of different viewpoints while working in collaborative groups in the following lessons: LCB - TG: Sec4.L01 (pp3-10) LCB - TG: Sec4.L15 (pp89-94) LCB - TG: Sec4.L16 (pp95-96) PGD - TG: Sec4.L01 (pp3-8) PGD - TG: Sec4.L04 (pp25-28) PGD - TG: Sec4.L08 (pp43-46) PGD - TG: Sec4.L11 (pp61-66) PGD - TG: Sec4.L12 (pp67-70) PGD - TG: Sec4.L13 (pp71-78) PGD - TG: Sec4.L14 (pp79-88) In <i>Solids and Liquids</i>, students learn to develop respect and responsibility for the environment by engaging in conservation practices in the following lesson: SL - TG: Sec4.L14 (pp109-120)</p>	<p>5. <u>Science in Personal and Social Perspectives</u></p> <ul style="list-style-type: none"> 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.

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1. Characteristics of Organisms

- a. identify that plants and animals have different structures (2.4.1)

LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L02 (pp11-18)
 LCB - TG: Sec4.L03 (pp19-22)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L05 (pp29-34)
 LCB - TG: Sec4.L06 (pp35-38)
 LCB - TG: Sec4.L07 (pp39-46)
 LCB - TG: Sec4.L08 (pp47-52)
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L10 (pp63-68)
 LCB - TG: Sec4.L12 (pp75-80)
 LCB - TG: Sec4.L11 (pp69-74)
 LCB - TG: Sec4.L13 (pp81-84)
 LCB - TG: Sec4.L14 (pp85-88)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 O - TG: Sec4.L01 (pp3-10)
 O - TG: Sec4.L06 (pp65-74)
 O - TG: Sec4.L08 (pp87-96)
 O - TG: Sec4.L09 (pp97-104)
 O - TG: Sec4.L10 (pp105-118)
 O - TG: Sec4.L13 (pp135-148)
 O - TG: Sec4.L14 (pp149-154)
 O - TG: Sec4.L15 (pp155-168)
 PGD - TG: Sec4.L02 (pp9-12)
 PGD - TG: Sec4.L03 (pp13-24)
 PGD - TG: Sec4.L04 (pp25-28)
 PGD - TG: Sec4.L05 (pp29-34)
 PGD - TG: Sec4.L06 (pp33-38)
 PGD - TG: Sec4.L07 (pp39-42)
 PGD - TG: Sec4.L08 (pp43-46)
 PGD - TG: Sec4.L09 (pp47-54)

PGD - TG: Sec4.L10 (pp55-60)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)

[extension only]

PGD - TG: Sec4.L16 (pp95-98)
PGD - TG: Sec4.L17 (pp99-100)
S - TG: Sec4.L09 (pp87-96)
S - TG: Sec4.L10 (pp97-108)

LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L02 (pp11-18)
LCB - TG: Sec4.L03 (pp19-22)
LCB - TG: Sec4.L04 (pp23-28)
LCB - TG: Sec4.L05 (pp29-34)
LCB - TG: Sec4.L06 (pp35-38)
LCB - TG: Sec4.L07 (pp39-46)
LCB - TG: Sec4.L08 (pp47-52)
LCB - TG: Sec4.L09 (pp53-62)
LCB - TG: Sec4.L10 (pp63-68)
LCB - TG: Sec4.L11 (pp69-74)
LCB - TG: Sec4.L13 (pp81-84)
LCB - TG: Sec4.L14 (pp85-88)
LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96)
O - TG: Sec4.L03 (pp21-36)
O - TG: Sec4.L04 (pp36-52)
O - TG: Sec4.L05 (pp53-64)
O - TG: Sec4.L06 (pp65-74)
O - TG: Sec4.L07 (pp75-86)
O - TG: Sec4.L08 (pp87-96)
O - TG: Sec4.L09 (pp97-104)
O - TG: Sec4.L10 (pp105-118)
O - TG: Sec4.L13 (pp135-148)
O - TG: Sec4.L14 (pp149-154)
O - TG: Sec4.L15 (pp155-168)
O - TG: Sec4.L16 (pp169-178)
PGD - TG: Sec4.L01 (pp3-9)
PGD - TG: Sec4.L02 (pp9-12)
PGD - TG: Sec4.L03 (pp13-24)
PGD - TG: Sec4.L04 (pp25-28)
PGD - TG: Sec4.L05 (pp29-34)
PGD - TG: Sec4.L06 (pp33-38)
PGD - TG: Sec4.L07 (pp39-42)
PGD - TG: Sec4.L08 (pp43-46)
PGD - TG: Sec4.L09 (pp47 -54)
PGD - TG: Sec4.L10 (pp55-60)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
PGD - TG: Sec4.L16 (pp95-98)
PGD - TG: Sec4.L17 (pp99-100)
S - TG: Sec4.L09 (pp87-96)
S - TG: Sec4.L10 (pp97-108)

b. identify the structures of physical characteristics of living things and explain their functions (2.4.2)

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	I=In-depth 80%	A=Adequate 80%	M=Minimal 60%	N=Nonexistent Less than 60%	I	A	M

2. Life Cycles of Organisms

LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L02 (pp11-18)
 LCB - TG: Sec4.L03 (pp19-22)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L05 (pp29-34)
 LCB - TG: Sec4.L06 (pp35-38)
 LCB - TG: Sec4.L07 (pp39-46)
 LCB - TG: Sec4.L08 (pp47-52)
[extension only]
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L11 (pp69-74)
 LCB - TG: Sec4.L12 (pp75-80)
[extension only]
 LCB - TG: Sec4.L13 (pp81-84)
[extension only]
 LCB - TG: Sec4.L14 (pp85-88)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 O - TG: Sec4.L11 (pp119-126)
 O - TG: Sec4.L12 (pp127-134)
 O - TG: Sec4.L15 (pp155-168)
 O - TG: Sec4.L16 (pp169-178)
 PGD - TG: Sec4.L06 (pp33-38)

a. sequence pictures of events to illustrate the changes in the life cycle of plants and animals (2.4.3)

LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L02 (pp11-18)
 LCB - TG: Sec4.L03 (pp19-22)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L05 (pp29-34)
 LCB - TG: Sec4.L06 (pp35-38)
 LCB - TG: Sec4.L07 (pp39-46)
 LCB - TG: Sec4.L08 (pp47-52)
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L11 (pp69-74)
 LCB - TG: Sec4.L12 (pp75-80)
 LCB - TG: Sec4.L13 (pp81-84)
 LCB - TG: Sec4.L14 (pp85-88)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 O - TG: Sec4.L11 (pp119-126)
 O - TG: Sec4.L12 (pp127-134)
 O - TG: Sec4.L16 (pp169-178)

b. relate observations of the butterfly's life cycle to student's own growth and change (2.4.4)

3. Organisms and Environments

LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L02 (pp11-18)
 LCB - TG: Sec4.L03 (pp19-22)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L05 (pp29-34)
 LCB - TG: Sec4.L06 (pp35-38)
 LCB - TG: Sec4.L07 (pp39-46)
 LCB - TG: Sec4.L08 (pp47-52)
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L10 (pp63-68)
 LCB - TG: Sec4.L11 (pp69-74)
 O - TG: Sec4.L04 (pp36-52)

a. observe and compare simple models of different kinds of habitats, including a forest and a stream (2.4.5)

- O - TG: Sec4.L05 (pp53-64)
 - O - TG: Sec4.L11 (pp119-126)
 - O - TG: Sec4.L12 (pp127-134)
 - O - TG: Sec4.L03 (pp21-36)
-

4. Properties of Objects and Materials

- C - TG: Sec4.L01 (pp3-20)
 - C - TG: Sec4.L02 (pp21-30)
 - C - TG: Sec4.L03 (pp31-42)
 - C - TG: Sec4.L04 (pp43-52)
 - C - TG: Sec4.L13 (pp119-128)
 - C - TG: Sec4.L17 (pp155-158)
 - SL - TG: Sec4.L01 (pp3-10)
 - SL - TG: Sec4.L02 (pp11-18)
 - SL - TG: Sec4.L03 (pp19-28)
 - SL - TG: Sec4.L04 (pp29-40)
 - SL - TG: Sec4.L05 (pp41-46)
 - SL - TG: Sec4.L06 (pp47-54)
 - SL - TG: Sec4.L07 (pp55-62)
 - SL - TG: Sec4.L08 (pp63-68)
 - SL - TG: Sec4.L09 (pp69-80)
 - SL - TG: Sec4.L10 (pp81-86)
 - SL - TG: Sec4.L11 (pp87-94)
 - SL - TG: Sec4.L12 (pp95-100)
 - SL - TG: Sec4.L13 (pp101-108)
 - SL - TG: Sec4.L14 (pp109-120)
 - SL - TG: Sec4.L15 (pp121-130)
 - SL - TG: Sec4.L16 (pp131-136)
 - SL - TG: Sec4.L17 (pp137-140)
 - W - TG: Sec4.L11 (pp101-112)
-

- a. identify materials as a solid, a liquid or a gas (2.4.6)

- C - TG: Sec4.L01 (pp3-20)
 - C - TG: Sec4.L02 (pp21-30)
 - C - TG: Sec4.L03 (pp31-42)
 - C - TG: Sec4.L04 (pp43-52)
 - C - TG: Sec4.L05 (pp53-62)
 - C - TG: Sec4.L06 (pp63-70)
 - C - TG: Sec4.L07 (pp71-78)
 - C - TG: Sec4.L08 (pp79-84)
 - C - TG: Sec4.L09 (pp85-94)
 - C - TG: Sec4.L11 (pp103-110)
 - C - TG: Sec4.L12 (pp111-118)
 - C - TG: Sec4.L13 (pp119-128)
 - C - TG: Sec4.L14 (pp129-136)
 - C - TG: Sec4.L15 (pp137-146)
 - C - TG: Sec4.L16 (pp147-154)
 - C - TG: Sec4.L17 (pp155-158)
 - SL - TG: Sec4.L01 (pp3-10)
 - SL - TG: Sec4.L02 (pp11-18)
 - SL - TG: Sec4.L04 (pp29-40)
 - SL - TG: Sec4.L05 (pp41-46)
 - SL - TG: Sec4.L06 (pp47-54)
 - SL - TG: Sec4.L07 (pp55-62)
 - SL - TG: Sec4.L08 (pp63-68)
 - SL - TG: Sec4.L09 (pp69-80)
 - SL - TG: Sec4.L10 (pp81-86)
 - SL - TG: Sec4.L11 (pp87-94)
 - SL - TG: Sec4.L12 (pp95-100)
 - SL - TG: Sec4.L13 (pp101-108)
 - SL - TG: Sec4.L14 (pp109-120)
 - SL - TG: Sec4.L15 (pp121-130)
 - SL - TG: Sec4.L16 (pp131-136)
 - SL - TG: Sec4.L17 (pp137-140)
 - W - TG: Sec4.L11 (pp101-112)
-

- b. recognize that matter can change from one state to another (2.4.6)

SL - TG: Sec4.L01 (pp3-10)
 SL - TG: Sec4.L02 (pp11-18)
 SL - TG: Sec4.L03 (pp19-28)
 SL - TG: Sec4.L04 (pp29-40)
 SL - TG: Sec4.L05 (pp41-46)
 SL - TG: Sec4.L06 (pp47-54)
 SL - TG: Sec4.L07 (pp55-62)
 SL - TG: Sec4.L08 (pp63-68)
 SL - TG: Sec4.L09 (pp69-80)
 SL - TG: Sec4.L10 (pp81-86)
 SL - TG: Sec4.L11 (pp87-94)
 SL - TG: Sec4.L12 (pp95-100)
 SL - TG: Sec4.L13 (pp101-108)
 SL - TG: Sec4.L14 (pp109-120)
 SL - TG: Sec4.L15 (pp121-130)
 SL - TG: Sec4.L16 (pp131-136)
 SL - TG: Sec4.L17 (pp137-140)

- c. demonstrate that solids, liquids and gases take up space (2.4.7)

5. Light, Heat, Electricity and Magnetism

RM - TG: Sec4.L11 (pp79-84)
 RM - TG: Sec4.L15 (pp103-112)
 SL - TG: Sec4.L07 (pp55-62)

- 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

SL - TG: Sec4.L03 (pp19-28)
 SL - TG: Sec4.L04 (pp29-40)

- 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)

So - TG: Sec4.L01 (pp11-16)
 So - TG: Sec4.L02 (pp17-22)
 So - TG: Sec4.L03 (pp23-27)
 So - TG: Sec4.L04 (pp28-32)
 So - TG: Sec4.L05 (pp33-38)
 So - TG: Sec4.L06 (pp39-48)
 So - TG: Sec4.L07 (pp49-56)
 So - TG: Sec4.L08 (pp57-62)
 So - TG: Sec4.L09 (pp63-66)
 So - TG: Sec4.L10 (pp67-72)
 So - TG: Sec4.L11 (pp73-78)
 So - TG: Sec4.L12 (pp79-84)
 So - TG: Sec4.L13 (pp85-90)
 So - TG: Sec4.L14 (pp91-102)
 So - TG: Sec4.L15 (pp103-112)
 So - TG: Sec4.L16 (pp113-116)
 So - TG: Sec4.L17 (pp117-118)

7. Changes In Earth and Sky

W - TG: Sec4.L04 (pp33-42)

- 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)

W - TG: Sec4.L10 (pp91-100)
 W - TG: Sec4.L11 (pp101-112)

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

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

GRADE: 3

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Animal Studies Unit, Balancing and Weighing Unit, Changes Unit, Chemical Tests Unit, Electric Circuits Unit, Land and Water Unit, The Life Cycle of Butterflies Unit, Motion and Design Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Soils Unit, Sound Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 4

**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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

Part II - Instructional Content Analysis GRADE THREE

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

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

In *Animal Studies* and *Ecosystems*, students learn to recognize that scientific explanations may lead to new discoveries in the following lessons:

AS - TG: Sec4.L16 (pp165-168)

EC - TG: Sec4.L01 (pp3-6).

In *Motion and Design*, students learn to study the lives and discoveries of scientists in different cultures and backgrounds in the following lessons:

MD - TG: Sec4.L02 (pp15-24)

MD - TG: Sec4.L05 (pp47-56)

MD - TG: Sec4.L10 (pp91-100)

MD - TG: Sec4.L14 (pp125-138).

In all STC units, students learn primarily through active inquiry and hands-on investigations.

2. History and the Nature of Science

- the history of science and the evolution of scientific knowledge
- science as a human endeavor encompassing the contributions of diverse cultures and scientists
- the nature of science

3. Science as Inquiry

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

In *Land and Water* and *Motion and Design*, students learn that systems are made of parts that interact with one another in the following lessons:

LW - TG: Sec4.L02 (pp11-28)

LW - TG: Sec4.L03 (pp29-36)

LW - TG: Sec4.L08 (pp85-98)

LW - TG: Sec4.L09 (pp99-108)

LW - TG: Sec4.L10 (pp109-118)

LW - TG: Sec4.L11 (pp119-128)

LW - TG: Sec4.L12 (pp129-142)

LW - TG: Sec4.L14 (pp153-162)

LW - TG: Sec4.L15 (pp163-172)

MD - TG: Sec4.L03 (pp25-34)

MD - TG: Sec4.L05 (pp47-56)

MD - TG: Sec4.L09 (pp81-90)

MD - TG: Sec4.L11 (pp101-108)

MD - TG: Sec4.L12 (pp109-116).

In *Balancing and Weighing*, *Ecosystems*, *Land and Water*, *Plant Growth and Development*, and *Sound*, students learn to use models as representations of real things in the following lessons:

4. 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

BW - TG: Sec4.L02 (pp9-14)
BW - TG: Sec4.L03 (pp15-26)
BW - TG: Sec4.L05 (pp35-44)
BW - TG: Sec4.L06 (pp45-54)
EC - TG: Sec4.L02 (pp7-14)
EC - TG: Sec4.L03 (pp15-20)
EC - TG: Sec4.L04 (pp21-24)
EC - TG: Sec4.L05 (pp25-32)
EC - TG: Sec4.L06 (pp33-38)
EC - TG: Sec4.L07 (pp39-44)
EC - TG: Sec4.L08 (pp45-48)
EC - TG: Sec4.L09 (pp49-52)
EC - TG: Sec4.L10 (pp53-58)
EC - TG: Sec4.L11 (pp59-64)
EC - TG: Sec4.L12 (pp65-68)
EC - TG: Sec4.L13 (pp69-72)
EC - TG: Sec4.L14 (pp73-76)
EC - TG: Sec4.L15 (pp77-80)
EC - TG: Sec4.L16 (pp81-84)
LW - TG: Sec4.L02 (pp11-28)
LW - TG: Sec4.L03 (pp29-36)
LW - TG: Sec4.L04 (pp37-50)
LW - TG: Sec4.L09 (pp99-108)
LW - TG: Sec4.L10 (pp109-118)
LW - TG: Sec4.L12 (pp129-142)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
So - TG: Sec4.L08 (pp57-62).

In all lessons of *Changes*, *Chemical Tests*, *The Life Cycle of Butterflies*, *Plant Growth and Development*, and *Sound*, students learn to group or order objects according to an established scheme.

In *Animal Studies*, *Balancing and Weighing*, *Ecosystems*, *Land and Water*, *Motion and Design*, and *Rocks and Minerals*, students learn to group or order objects according to an established scheme in the following lessons:

AS - TG: Sec4.L01 (pp3-10)
AS - TG: Sec4.L02 (pp11-20)
AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L10 (pp107-114)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
AS - TG: Sec4.L17 (pp169-172)
BW - TG: Sec4.L03 (pp15-26)
BW - TG: Sec4.L04 (pp27-34)
BW - TG: Sec4.L05 (pp35-44)
BW - TG: Sec4.L06 (pp45-54)
BW - TG: Sec4.L08 (pp61-72)
BW - TG: Sec4.L09 (pp73-78)
BW - TG: Sec4.L10 (pp79-88)
BW - TG: Sec4.L11 (pp89-100)
BW - TG: Sec4.L12 (pp101-106)
BW - TG: Sec4.L13 (pp107-114)
BW - TG: Sec4.L14 (pp115-122)
BW - TG: Sec4.L15 (pp123-128)
BW - TG: Sec4.L16 (pp129-136)

EC - TG: Sec4.L04 (pp21-24)
EC - TG: Sec4.L07 (pp39-44)
LW - TG: Sec4.L08 (pp85-98)
MD - TG: Sec4.L02 (pp15-24)
MD - TG: Sec4.L12 (pp109-116)
MD - TG: Sec4.L13 (pp117-124)
RM - TG: Sec4.L01 (pp3-12)
RM - TG: Sec4.L02 (pp13-18)
RM - TG: Sec4.L05 (pp35-42)
RM - TG: Sec4.L06 (pp43-50)
RM - TG: Sec4.L07 (pp51-56)
RM - TG: Sec4.L08 (pp57-62)
RM - TG: Sec4.L09 (pp63-70)
RM - TG: Sec4.L10 (pp71-78)
RM - TG: Sec4.L12 (pp85-90)
RM - TG: Sec4.L13 (pp91-94)
RM - TG: Sec4.L14 (pp95-102)
RM - TG: Sec4.L15 (pp103-112).

In *Changes, Chemical Tests, The Life Cycle of Butterflies, Plant Growth and Development, and Sound*, students learn to find patterns of constancy and regularity in all lessons.

In *Animal Studies, Balancing and Weighing, Ecosystems, Land and Water, Motion and Design, and, Rocks and Minerals*, students learn to find patterns of constancy and regularity in the following lessons:

AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L10 (pp107-114)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
BW - TG: Sec4.L12 (pp101-106)
EC - TG: Sec4.L04 (pp21-24)
EC - TG: Sec4.L07 (pp39-44)
LW - TG: Sec4.L04 (pp37-50)
LW - TG: Sec4.L08 (pp85-98)
LW - TG: Sec4.L09 (pp99-108)
LW - TG: Sec4.L12 (pp129-142)
MD - TG: Sec4.L02 (pp15-24)
MD - TG: Sec4.L07 (pp65-72)
MD - TG: Sec4.L12 (pp109-116)
MD - TG: Sec4.L13 (pp117-124)
RM - TG: Sec4.L03 (pp19-26)
RM - TG: Sec4.L04 (pp27-34)
RM - TG: Sec4.L11 (pp79-84)
RM - TG: Sec4.L16 (pp113-126)
RM - TG: Sec4.L17 (pp127-128)

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
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In *Ecosystems and Motion and Design*, students learn to cite examples of the uses of science and technology in common daily events and in the community in the following lessons:
 EC - TG: Sec4.L01 (pp3-6)
 EC - TG: Sec4.L02 (pp7-14)
 EC - TG: Sec4.L16 (pp81-84)
 MD - TG: Sec4.L01 (pp1-14)
 MD - TG: Sec4.L05 (pp47-56)
 MD - TG: Sec4.L09 (pp81-90).
 In all lessons of *Balancing and Weighing, Changes, Chemical Tests, Electric Circuits, Land and Water, The Life Cycle of Butterflies, Motion and Design, Plant Growth and Development, Rocks and Minerals, Soils, and Sound*, students learn to explain simple problems and identify specific solutions.
 In *Animal Studies*, students learn to explain simple problems and identify specific solutions in the following lessons:
 AS - TG: Sec4.L12 (pp123-134)
 AS - TG: Sec4.L17 (pp169-172).

In all lessons of *Animal Studies, Balancing and Weighing, Changes, Chemical Tests, Electric Circuits, Land and Water, Motion and Design, Rocks and Minerals, Soils, and Sound*, students learn to listen and be tolerant of different viewpoints by engaging in collaborative activities.
 In *The Life Cycle of Butterflies and Plant Growth and Development*, students learn to listen and be tolerant of different viewpoints by engaging in collaborative activities in the following lessons:
 LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 PGD - TG: Sec4.L01 (pp3-8)
 PGD - TG: Sec4.L04 (pp25-28)
 PGD - TG: Sec4.L08 (pp43-46)
 PGD - TG: Sec4.L11 (pp61-66)
 PGD - TG: Sec4.L12 (pp67-70)
 PGD - TG: Sec4.L13 (pp71-78)
 PGD - TG: Sec4.L14 (pp79-88)

5. 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

6. 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

CATS 3

In *Land and Water*, students learn to develop respect and responsibility for the environment by engaging in conservation practices in the following lessons:

LW - TG: Sec4.L14 (pp153-162)

LW - TG: Sec4.L15 (pp163-172)



**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>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M

1. Characteristics of Organisms

- AS - TG: Sec4.L01 (pp3-10)
 AS - TG: Sec4.L02 (pp11-20)
 AS - TG: Sec4.L03 (pp21-36)
 AS - TG: Sec4.L04 (pp37-48)
 AS - TG: Sec4.L05 (pp49-64)
 AS - TG: Sec4.L06 (pp65-74)
 AS - TG: Sec4.L08 (pp87-96)
 AS - TG: Sec4.L09 (pp97-106)
 AS - TG: Sec4.L10 (pp107-114)
 AS - TG: Sec4.L11 (pp115-122)
 AS - TG: Sec4.L12 (pp123-134)
 AS - TG: Sec4.L13 (pp135-142)
 AS - TG: Sec4.L14 (pp143-156)
 AS - TG: Sec4.L15 (pp157-164)
 AS - TG: Sec4.L16 (pp165-168)
 AS - TG: Sec4.L17 (pp169-172)
- a. identify the structures of living things and explain their functions (3.4.1)
- LCB - TG: Sec4.L01 (pp3-10)
 LCB - TG: Sec4.L02 (pp11-18)
 LCB - TG: Sec4.L03 (pp19-22)
 LCB - TG: Sec4.L04 (pp23-28)
 LCB - TG: Sec4.L05 (pp29-34)
 LCB - TG: Sec4.L06 (pp35-38)
 LCB - TG: Sec4.L07 (pp39-46)
 LCB - TG: Sec4.L08 (pp47-52)
 LCB - TG: Sec4.L09 (pp53-62)
 LCB - TG: Sec4.L10 (pp63-68)
 LCB - TG: Sec4.L11 (pp69-74)
 LCB - TG: Sec4.L12 (pp75-80)
 LCB - TG: Sec4.L13 (pp81-84)
 LCB - TG: Sec4.L14 (pp85-88)
 LCB - TG: Sec4.L15 (pp89-94)
 LCB - TG: Sec4.L16 (pp95-96)
 PGD - TG: Sec4.L01 (pp3-9)

PGD - TG: Sec4.L02 (pp9-12)
PGD - TG: Sec4.L03 (pp13-24)
PGD - TG: Sec4.L04 (pp25-28)
PGD - TG: Sec4.L05 (pp29-34)
PGD - TG: Sec4.L06 (pp33-38)
PGD - TG: Sec4.L07 (pp39-42)
PGD - TG: Sec4.L08 (pp43-46)
PGD - TG: Sec4.L09 (pp47-54)
PGD - TG: Sec4.L10 (pp55-60)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
PGD - TG: Sec4.L16 (pp95-98)
PGD - TG: Sec4.L17 (pp99-100)
S - TG: Sec4.L10 (pp9 -108)

AS - TG: Sec4.L03 (pp21-36)
AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L05 (pp49-64)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L08 (pp87-96)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
AS - TG: Sec4.L15 (pp157-164)
LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L02 (pp11-18)
LCB - TG: Sec4.L03 (pp19-22)
LCB - TG: Sec4.L04 (pp23-28)
LCB - TG: Sec4.L05 (pp29-34)
LCB - TG: Sec4.L06 (pp35-38)
LCB - TG: Sec4.L07 (pp39-46)
LCB - TG: Sec4.L08 (pp47-52)
LCB - TG: Sec4.L09 (pp53-62)
LCB - TG: Sec4.L10 (pp63-68)
LCB - TG: Sec4.L11 (pp69-74)
LCB - TG: Sec4.L13 (pp81-84)
LCB - TG: Sec4.L14 (pp85-88)
LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96)
PGD - TG: Sec4.L01 (pp3-9)
PGD - TG: Sec4.L02 (pp9-12)
PGD - TG: Sec4.L03 (pp13-24)
PGD - TG: Sec4.L04 (pp25-28)
PGD - TG: Sec4.L05 (pp29-34)
PGD - TG: Sec4.L06 (pp33-38)
PGD - TG: Sec4.L07 (pp39-42)
PGD - TG: Sec4.L08 (pp43-46)
PGD - TG: Sec4.L09 (pp47-54)
PGD - TG: Sec4.L10 (pp55-60)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
PGD - TG: Sec4.L14 (pp79-88)
PGD - TG: Sec4.L15 (pp89-94)
PGD - TG: Sec4.L17 (pp99-100)
S - TG: Sec4.L10 (pp9 -108)

b. identify the systems of living things
and explain their functions (3.4.1)

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

2. Life Cycles of Organisms

- a. observe, measure and record changes in living things (3.4.2)

AS - TG: Sec4.L01 (pp3-10)
AS - TG: Sec4.L02 (pp11-20)
AS - TG: Sec4.L03 (pp21-36)
AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L05 (pp49-64)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L07 (pp75 -86)
AS - TG: Sec4.L08 (pp87-96)
AS - TG: Sec4.L09 (pp97-106)
AS - TG: Sec4.L10 (pp107-114)
AS - TG: Sec4.L11 (pp115-122)
AS - TG: Sec4.L12 (pp123-134)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
AS - TG: Sec4.L15 (pp157-164)
AS - TG: Sec4.L16 (pp165-168)
AS - TG: Sec4.L17 (pp169-172)
LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L02 (pp11-18)
LCB - TG: Sec4.L03 (pp19-22)
LCB - TG: Sec4.L04 (pp23-28)
LCB - TG: Sec4.L05 (pp29-34)
LCB - TG: Sec4.L06 (pp35-38)
LCB - TG: Sec4.L07 (pp39-46)
LCB - TG: Sec4.L08 (pp47-52)
LCB - TG: Sec4.L09 (pp53-62)
LCB - TG: Sec4.L11 (pp69-74)
LCB - TG: Sec4.L12 (pp75-80)
LCB - TG: Sec4.L13 (pp81-84)
LCB - TG: Sec4.L14 (pp85-88)
LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96)
PGD - TG: Sec4.L05 (pp29-34)
PGD - TG: Sec4.L06 (pp33-38)
PGD - TG: Sec4.L07 (pp39-42)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L15 (pp89-94)
PGD - TG: Sec4.L16 (pp95-98)
S - TG: Sec4.L02 (pp17-26)
S - TG: Sec4.L03 (pp27-36)
S - TG: Sec4.L04 (pp37-44)
S - TG: Sec4.L05 (pp45-56)
S - TG: Sec4.L06 (pp57-64)
S - TG: Sec4.L07 (pp65-72)
S - TG: Sec4.L08 (pp73-86)
S - TG: Sec4.L09 (pp87-96)
S - TG: Sec4.L10 (pp97-108)
S - TG: Sec4.L11 (pp109-114)
S - TG: Sec4.L12 (pp115-124)
S - TG: Sec4.L13 (pp125-138)
S - TG: Sec4.L14 (pp139-148)
S - TG: Sec4.L15 (pp149-158)
S - TG: Sec4.L16 (pp159-168)

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

3. Organisms and Environments

- AS - TG: Sec4.L01 (pp3-10)
- AS - TG: Sec4.L02 (pp11-20)
- AS - TG: Sec4.L03 (pp21-36)
- AS - TG: Sec4.L04 (pp37-48)
- AS - TG: Sec4.L05 (pp49-64)
- AS - TG: Sec4.L06 (pp65-74)
- AS - TG: Sec4.L07 (pp75 -86)
- AS - TG: Sec4.L08 (pp87-96)
- AS - TG: Sec4.L09 (pp97-106)
- AS - TG: Sec4.L10 (pp107-114)
- AS - TG: Sec4.L11 (pp115-122)
- AS - TG: Sec4.L12 (pp123-134)
- AS - TG: Sec4.L13 (pp135-142)
- AS - TG: Sec4.L14 (pp143-156)
- AS - TG: Sec4.L15 (pp157-164)
- AS - TG: Sec4.L16 (pp165-168)
- AS - TG: Sec4.L17 (pp169-172)
- LCB - TG: Sec4.L01 (pp3-10)
- LCB - TG: Sec4.L02 (pp11-18)
- LCB - TG: Sec4.L03 (pp19-22)
- LCB - TG: Sec4.L04 (pp23-28)
- LCB - TG: Sec4.L05 (pp29-34)
- LCB - TG: Sec4.L06 (pp35-38)
- LCB - TG: Sec4.L08 (pp47-52)
- LCB - TG: Sec4.L09 (pp53-62)
- LCB - TG: Sec4.L10 (pp63-68)
- LCB - TG: Sec4.L11 (pp69-74)
- LCB - TG: Sec4.L12 (pp75-80)
- LCB - TG: Sec4.L13 (pp81-84)
- LCB - TG: Sec4.L14 (pp85-88)
- LCB - TG: Sec4.L15 (pp89-94)
- LCB - TG: Sec4.L16 (pp95-96)
- PGD - TG: Sec4.L01 (pp3-9)
- PGD - TG: Sec4.L04 (pp25-28)
- PGD - TG: Sec4.L05 (pp29-34)
- PGD - TG: Sec4.L06 (pp33-38)
- PGD - TG: Sec4.L07 (pp39-42)
- PGD - TG: Sec4.L08 (pp43-46)
- PGD - TG: Sec4.L09 (pp47-54)
- PGD - TG: Sec4.L10 (pp55-60)
- PGD - TG: Sec4.L12 (pp67-70)
- PGD - TG: Sec4.L13 (pp71-78)
- PGD - TG: Sec4.L14 (pp79-88)
- PGD - TG: Sec4.L14 (pp79-88)
- PGD - TG: Sec4.L15 (pp89-94)
- PGD - TG: Sec4.L16 (pp95-98)
- PGD - TG: Sec4.L17 (pp99-100)
- S - TG: Sec4.L02 (pp17-26)

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)

- AS - TG: Sec4.L01 (pp3-10)
- AS - TG: Sec4.L02 (pp11-20)
- AS - TG: Sec4.L03 (pp21-36)
- AS - TG: Sec4.L04 (pp37-48)
- AS - TG: Sec4.L05 (pp49-64)
- AS - TG: Sec4.L06 (pp65-74)

AS - TG: Sec4.L07 (pp75 -86)
AS - TG: Sec4.L08 (pp87-96)
AS - TG: Sec4.L09 (pp97-106)
AS - TG: Sec4.L10 (pp107-114)
AS - TG: Sec4.L11 (pp115-122)
AS - TG: Sec4.L12 (pp123-134)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
AS - TG: Sec4.L15 (pp157-164)
AS - TG: Sec4.L16 (pp165-168)
LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L02 (pp11-18)
LCB - TG: Sec4.L03 (pp19-22)
LCB - TG: Sec4.L04 (pp23-28)
LCB - TG: Sec4.L05 (pp29-34)
LCB - TG: Sec4.L06 (pp35-38)
LCB - TG: Sec4.L08 (pp47-52)
LCB - TG: Sec4.L09 (pp53-62)
LCB - TG: Sec4.L10 (pp63-68)
LCB - TG: Sec4.L11 (pp69-74)
LCB - TG: Sec4.L12 (pp75-80)
LCB - TG: Sec4.L13 (pp81-84)
LCB - TG: Sec4.L14 (pp85-88)
LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96)

4. Properties of Objects and Materials

- a. relate the buoyancy of an object to its density (3.4.3)

AS - TG: Sec4.L01 (pp3-10)
AS - TG: Sec4.L02 (pp11-20)
AS - TG: Sec4.L03 (pp21-36)
AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L05 (pp49-64)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L07 (pp75 -86)
AS - TG: Sec4.L08 (pp87-96)
AS - TG: Sec4.L09 (pp97-106)
AS - TG: Sec4.L10 (pp107-114)
AS - TG: Sec4.L11 (pp115-122)
AS - TG: Sec4.L12 (pp123-134)
AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
AS - TG: Sec4.L15 (pp157-164)
AS - TG: Sec4.L16 (pp165-168)
LCB - TG: Sec4.L01 (pp3-10)
LCB - TG: Sec4.L02 (pp11-18)
LCB - TG: Sec4.L03 (pp19-22)
LCB - TG: Sec4.L04 (pp23-28)
LCB - TG: Sec4.L05 (pp29-34)
LCB - TG: Sec4.L06 (pp35-38)
LCB - TG: Sec4.L08 (pp47-52)
LCB - TG: Sec4.L09 (pp53-62)
LCB - TG: Sec4.L10 (pp63-68)
LCB - TG: Sec4.L11 (pp69-74)
LCB - TG: Sec4.L12 (pp75-80)
LCB - TG: Sec4.L13 (pp81-84)
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LCB - TG: Sec4.L15 (pp89-94)
LCB - TG: Sec4.L16 (pp95-96)

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
AS - TG: Sec4.L01 (pp3-10)								
AS - TG: Sec4.L02 (pp11-20)								
AS - TG: Sec4.L03 (pp21-36)								
AS - TG: Sec4.L04 (pp37-48)								
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AS - TG: Sec4.L06 (pp65-74)								
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AS - TG: Sec4.L11 (pp115-122)								
AS - TG: Sec4.L12 (pp123-134)								
AS - TG: Sec4.L13 (pp135-142)								
AS - TG: Sec4.L14 (pp143-156)								
AS - TG: Sec4.L15 (pp157-164)								
AS - TG: Sec4.L16 (pp165-168)								
LCB - TG: Sec4.L01 (pp3-10)								
LCB - TG: Sec4.L02 (pp11-18)								
LCB - TG: Sec4.L03 (pp19-22)								
LCB - TG: Sec4.L04 (pp23-28)								
LCB - TG: Sec4.L05 (pp29-34)								
LCB - TG: Sec4.L06 (pp35-38)								
LCB - TG: Sec4.L08 (pp47-52)								
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LCB - TG: Sec4.L10 (pp63-68)								
LCB - TG: Sec4.L11 (pp69-74)								
LCB - TG: Sec4.L12 (pp75-80)								
LCB - TG: Sec4.L13 (pp81-84)								
LCB - TG: Sec4.L14 (pp85-88)								
LCB - TG: Sec4.L15 (pp89-94)								
LCB - TG: Sec4.L16 (pp95-96)								
C - TG: Sec4.L04 (pp43-52)								
C - TG: Sec4.L06 (pp63-70)								
C - TG: Sec4.L11 (pp103-110)								
C - TG: Sec4.L15 (pp137-146)								
CT - TG: Sec4.L01 (pp3-12)								
CT - TG: Sec4.L02 (pp13-22)								
CT - TG: Sec4.L03 (pp23-34)								
CT - TG: Sec4.L04 (pp35-44)								
CT - TG: Sec4.L05 (pp45-56)								
CT - TG: Sec4.L06 (pp57-58)								
CT - TG: Sec4.L07 (pp69-78)								
CT - TG: Sec4.L08 (pp79-84)								
CT - TG: Sec4.L09 (pp85-92)								
CT - TG: Sec4.L10 (pp93-100)								
CT - TG: Sec4.L11 (pp101-106)								
CT - TG: Sec4.L12 (pp107-114)								
CT - TG: Sec4.L13 (pp115-124)								
CT - TG: Sec4.L14 (pp125-134)								
CT - TG: Sec4.L15 (pp135-148)								
CT - TG: Sec4.L16 (pp149-154)								
CT - TG: Sec4.L17 (pp155-158)								
RM - TG: Sec4.L01 (pp3-12)								
RM - TG: Sec4.L02 (pp13-18)								
RM - TG: Sec4.L03 (pp19-26)								
RM - TG: Sec4.L04 (pp27-34)								

b. identify physical properties (3.4.3)

c. identify chemical properties (3.4.6)

RM - TG: Sec4.L05 (pp35-42)
 RM - TG: Sec4.L06 (pp43-50)
 RM - TG: Sec4.L07 (pp51-56)
 RM - TG: Sec4.L08 (pp57-62)
 RM - TG: Sec4.L09 (pp63-70)
 RM - TG: Sec4.L10 (pp71-78)
 RM - TG: Sec4.L11 (pp79-84)
 RM - TG: Sec4.L12 (pp85-90)
 RM - TG: Sec4.L13 (pp91-94)
 RM - TG: Sec4.L14 (pp95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)
 S - TG: Sec4.L01 (pp3-16)
 S - TG: Sec4.L03 (pp27-36)
 S - TG: Sec4.L04 (pp37-44)
 S - TG: Sec4.L05 (pp45-56)
 S - TG: Sec4.L06 (pp57-64)
 S - TG: Sec4.L07 (pp65-72)
 S - TG: Sec4.L08 (pp73-86)

d. relate changes in states of matter to changes in temperature (3.4.6)

C - TG: Sec4.L01 (pp3-20)
 C - TG: Sec4.L02 (pp21-30)
 C - TG: Sec4.L03 (pp31-42)
 C - TG: Sec4.L04 (pp43-52)
 C - TG: Sec4.L06 (pp63-70)
 C - TG: Sec4.L11 (pp103-110)
 C - TG: Sec4.L15 (pp137-146)
 CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L02 (pp13-22)
 CT - TG: Sec4.L03 (pp23-34)
 CT - TG: Sec4.L04 (pp35-44)
 CT - TG: Sec4.L05 (pp45-56)
 CT - TG: Sec4.L06 (pp57-58)
 CT - TG: Sec4.L07 (pp69-78)
 CT - TG: Sec4.L08 (pp79-84)
 CT - TG: Sec4.L09 (pp85-92)
 CT - TG: Sec4.L10 (pp93-100)
 CT - TG: Sec4.L11 (pp101-106)
 CT - TG: Sec4.L12 (pp107-114)
 CT - TG: Sec4.L13 (pp115-124)
 CT - TG: Sec4.L14 (pp125-134)
 CT - TG: Sec4.L15 (pp135-148)
 CT - TG: Sec4.L16 (pp149-154)
 CT - TG: Sec4.L17 (pp155-158)
 RM - TG: Sec4.L01 (pp3-12)
 RM - TG: Sec4.L02 (pp13-18)
 RM - TG: Sec4.L03 (pp19-26)
 RM - TG: Sec4.L04 (pp27-34)
 RM - TG: Sec4.L05 (pp35-42)
 RM - TG: Sec4.L06 (pp43-50)
 RM - TG: Sec4.L07 (pp51-56)
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 RM - TG: Sec4.L10 (pp71-78)
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 RM - TG: Sec4.L13 (pp91-94)
 RM - TG: Sec4.L14 (pp95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)
 S - TG: Sec4.L01 (pp3-16)

S - TG: Sec4.L03 (pp27-36)
 S - TG: Sec4.L04 (pp37-44)
 S - TG: Sec4.L05 (pp45-56)
 S - TG: Sec4.L06 (pp57-64)
 S - TG: Sec4.L07 (pp65-72)
 S - TG: Sec4.L08 (pp73-86)

C - TG: Sec4.L04 (pp43-52)
 C - TG: Sec4.L06 (pp63-70)
 C - TG: Sec4.L07 (pp71-78)
 C - TG: Sec4.L08 (pp79-84)
 C - TG: Sec4.L11 (pp103-110)
 C - TG: Sec4.L15 (pp137-146)
 CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L02 (pp13-22)
 CT - TG: Sec4.L03 (pp23-34)
 CT - TG: Sec4.L04 (pp35-44)
 CT - TG: Sec4.L05 (pp45-56)
 CT - TG: Sec4.L06 (pp57-58)
 CT - TG: Sec4.L07 (pp69-78)
 CT - TG: Sec4.L08 (pp79-84)
 CT - TG: Sec4.L09 (pp85-92)
 CT - TG: Sec4.L10 (pp93-100)
 CT - TG: Sec4.L11 (pp101-106)
 CT - TG: Sec4.L12 (pp107-114)
 CT - TG: Sec4.L13 (pp115-124)
 CT - TG: Sec4.L14 (pp125-134)
 CT - TG: Sec4.L15 (pp135-148)
 CT - TG: Sec4.L16 (pp149-154)
 CT - TG: Sec4.L17 (pp155-158)
 RM - TG: Sec4.L01 (pp3-12)
 RM - TG: Sec4.L02 (pp13-18)
 RM - TG: Sec4.L03 (pp19-26)
 RM - TG: Sec4.L04 (pp27-34)
 RM - TG: Sec4.L05 (pp35-42)
 RM - TG: Sec4.L06 (pp43-50)
 RM - TG: Sec4.L07 (pp51-56)
 RM - TG: Sec4.L08 (pp57-62)
 RM - TG: Sec4.L09 (pp63-70)
 RM - TG: Sec4.L10 (pp71-78)
 RM - TG: Sec4.L11 (pp79-84)
 RM - TG: Sec4.L12 (pp85-90)
 RM - TG: Sec4.L13 (pp91-94)
 RM - TG: Sec4.L14 (pp95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)
 S - TG: Sec4.L01 (pp3-16)
 S - TG: Sec4.L03 (pp27-36)
 S - TG: Sec4.L04 (pp37-44)
 S - TG: Sec4.L05 (pp45-56)
 S - TG: Sec4.L06 (pp57-64)
 S - TG: Sec4.L07 (pp65-72)
 S - TG: Sec4.L08 (pp73-86)

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

5. Light, Heat, Electricity and Magnetism

C - TG: Sec4.L04 (pp43-52)
 C - TG: Sec4.L06 (pp63-70)
 C - TG: Sec4.L11 (pp103-110)
 C - TG: Sec4.L15 (pp137-146)
 CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L02 (pp13-22)

a. investigate the absorption, reflection and refraction of light by objects (3.4.6)

- CT - TG: Sec4.L03 (pp23-34)
- CT - TG: Sec4.L04 (pp35-44)
- CT - TG: Sec4.L05 (pp45-56)
- CT - TG: Sec4.L06 (pp57-58)
- CT - TG: Sec4.L07 (pp69-78)
- CT - TG: Sec4.L08 (pp79-84)
- CT - TG: Sec4.L09 (pp85-92)
- CT - TG: Sec4.L10 (pp93-100)
- CT - TG: Sec4.L11 (pp101-106)
- CT - TG: Sec4.L12 (pp107-114)
- CT - TG: Sec4.L13 (pp115-124)
- CT - TG: Sec4.L14 (pp125-134)
- CT - TG: Sec4.L15 (pp135-148)
- CT - TG: Sec4.L16 (pp149-154)
- CT - TG: Sec4.L17 (pp155-158)
- RM - TG: Sec4.L01 (pp3-12)
- RM - TG: Sec4.L02 (pp13-18)
- RM - TG: Sec4.L03 (pp19-26)
- RM - TG: Sec4.L04 (pp27-34)
- RM - TG: Sec4.L05 (pp35-42)
- RM - TG: Sec4.L06 (pp43-50)
- RM - TG: Sec4.L07 (pp51-56)
- RM - TG: Sec4.L08 (pp57-62)
- RM - TG: Sec4.L09 (pp63-70)
- RM - TG: Sec4.L10 (pp71-78)
- RM - TG: Sec4.L11 (pp79-84)
- RM - TG: Sec4.L12 (pp85-90)
- RM - TG: Sec4.L13 (pp91-94)
- RM - TG: Sec4.L14 (pp95-102)
- RM - TG: Sec4.L15 (pp103-112)
- RM - TG: Sec4.L16 (pp113-126)
- RM - TG: Sec4.L17 (pp127-128)
- S - TG: Sec4.L01 (pp3-16)
- S - TG: Sec4.L03 (pp27-36)
- S - TG: Sec4.L04 (pp37-44)
- S - TG: Sec4.L05 (pp45-56)
- S - TG: Sec4.L06 (pp57-64)
- S - TG: Sec4.L07 (pp65-72)
- S - TG: Sec4.L08 (pp73-86)

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- C - TG: Sec4.L01 (pp3-20)
 - C - TG: Sec4.L02 (pp21-30)
 - C - TG: Sec4.L03 (pp31-42)
 - C - TG: Sec4.L05 (pp53-62)
 - C - TG: Sec4.L06 (pp63-70)
 - C - TG: Sec4.L07 (pp71-78)
 - C - TG: Sec4.L08 (pp79-84)
 - C - TG: Sec4.L09 (pp85-94)
 - C - TG: Sec4.L10 (pp95-102)
 - C - TG: Sec4.L11 (pp103-110)
 - C - TG: Sec4.L12 (pp111-118)
 - C - TG: Sec4.L13 (pp119-128)
 - C - TG: Sec4.L14 (pp129-136)
 - C - TG: Sec4.L15 (pp137-146)
 - C - TG: Sec4.L16 (pp147-154)
 - C - TG: Sec4.L17 (pp155-158)
 - LW - TG: Sec4.L02 (pp11-28)
-

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

- MD - TG: Sec4.L03 (pp25-34)
 - MD - TG: Sec4.L04 (pp35-46)
 - MD - TG: Sec4.L05 (pp47-56)
 - MD - TG: Sec4.L06 (pp57-64)
 - MD - TG: Sec4.L07 (pp65-72)
-

a. recognize that it takes work to move objects over a distance (3.4.11)

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	<i>(IMR Committee) Responses</i>							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
RM - TG: Sec4.L03 (pp19-26)					---	---	---	---
LW - TG: Sec4.L02 (pp11-28) LW - TG: Sec4.L03 (pp29-36) LW - TG: Sec4.L04 (pp37-50) LW - TG: Sec4.L05 (pp51-62) LW - TG: Sec4.L11 (pp119-128)					---	---	---	---
RM - TG: Sec4.L03 (pp19-26)					---	---	---	---

INSTRUCTIONAL MATERIALS ADOPTION

Score Sheet

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

GRADE: 4

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Animal Studies Unit, Chemical Tests Unit, Ecosystems Unit, Electric Circuits Unit, Floating and Sinking Unit, Food Chemistry Unit, Land and Water Unit, Microworlds Unit, Motion and Design Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Sound Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 5

**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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

Part II - Instructional Content Analysis GRADE FOUR

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

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

In *Animal Studies, Electric Circuits, and Ecosystems*, students learn to contrast changes in scientific knowledge resulting from new discoveries in the following lessons:

- AS - TG: Sec4.L16 (pp165-168)
- EC - TG: Sec4.L01 (pp3-6)
- E - TG: Sec4.L01 (pp3-12)

In *Motion and Design* and *Microworlds*, students learn about the lives and discoveries of scientists of different cultures and backgrounds in the following lessons:

- MD - TG: Sec4.L02 (pp15-24)
- MD - TG: Sec4.L05 (pp47-56)
- MD - TG: Sec4.L10 (pp91-100)
- MD - TG: Sec4.L14 (pp125-138)
- M - TG: Sec4.L05 (pp25-30)

In *Motion and Design*, students learn to explore science careers in the following lesson:

- MD - TG: Sec4.L14 (pp125-138)

In all STC units, students learn primarily through active inquiry and hands-on investigations.

In *Ecosystems, Land and Water*, and *Motion and Design*, students learn that systems are made of parts that interact with one another in the following lessons:

- E - TG: Sec4.L02 (pp13-24)
- E - TG: Sec4.L03 (pp25-38)
- E - TG: Sec4.L04 (pp39-52)
- E - TG: Sec4.L05 (pp53-60)
- E - TG: Sec4.L06 (pp61-74)
- E - TG: Sec4.L07 (pp75-82)
- LW - TG: Sec4.L02 (pp11-28)
- LW - TG: Sec4.L03 (pp29-36)
- LW - TG: Sec4.L08 (pp85-98)
- LW - TG: Sec4.L09 (pp99-108)
- LW - TG: Sec4.L10 (pp109-118)
- LW - TG: Sec4.L11 (pp119-128)

1. History and the Nature of Science

- the history of science and the evolution 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

LW - TG: Sec4.L12 (pp129-142)
 LW - TG: Sec4.L14 (pp153-162)
 LW - TG: Sec4.L15 (pp163-172)
 MD - TG: Sec4.L03 (pp25-34)
 MD - TG: Sec4.L05 (pp47-56)
 MD - TG: Sec4.L09 (pp81-90)
 MD - TG: Sec4.L11 (pp101-108)
 MD - TG: Sec4.L12 (pp109-116)
 In *Electric Circuits, Ecosystems, Floating and Sinking, Land and Water, Plant Growth and Development, and Sound*, students learn to use models as representations of real things in the following lessons:
 EC - TG: Sec4.L02 (pp7-14)
 EC - TG: Sec4.L03 (pp15-20)
 EC - TG: Sec4.L04 (pp21-24)
 EC - TG: Sec4.L05 (pp25-32)
 EC - TG: Sec4.L06 (pp33-38)
 EC - TG: Sec4.L07 (pp39-44)
 EC - TG: Sec4.L08 (pp45-48)
 EC - TG: Sec4.L09 (pp49-52)
 EC - TG: Sec4.L10 (pp53-58)
 EC - TG: Sec4.L11 (pp59-64)
 EC - TG: Sec4.L12 (pp65-68)
 EC - TG: Sec4.L13 (pp69-72)
 EC - TG: Sec4.L14 (pp73-76)
 EC - TG: Sec4.L15 (pp77-80)
 EC - TG: Sec4.L16 (pp81-84)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 FS - TG: Sec4.L07 (pp55-60)
 FS - TG: Sec4.L08 (pp61-68)
 FS - TG: Sec4.L15 (pp119-128)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L03 (pp29-36)
 LW - TG: Sec4.L04 (pp37-50)
 LW - TG: Sec4.L09 (pp99-108)
 LW - TG: Sec4.L10 (pp109-118)
 LW - TG: Sec4.L12 (pp129-142)
 PGD - TG: Sec4.L13 (pp71-78)
 PGD - TG: Sec4.L14 (pp79-88)
 So - TG: Sec4.L08 (pp57-62)
 In *Ecosystems and Microworlds*, students learn to observe changes that occur within the environment and question the causes of change in the following lessons:
 E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L17 (pp169-171)

M - TG: Sec4.L14 (pp75-78)

M - TG: Sec4.L15 (pp79-82)

M - TG: Sec4.L16 (pp83-86)

In all lessons of *Chemical Tests*, *Food Chemistry*, *Microworlds*, *Plant Growth and Development*, and *Sound*, students learn to group or order objects according to an established scheme.

In *Animal Studies*, *Electric Circuits*, *Floating and Sinking*, *Land and Water*, *Motion and Design*, and *Rocks and Minerals*, students learn to group or order objects according to an established scheme in the following lessons:

AS - TG: Sec4.L01 (pp3-10)

AS - TG: Sec4.L02 (pp11-20)

AS - TG: Sec4.L04 (pp37-48)

AS - TG: Sec4.L06 (pp65-74)

AS - TG: Sec4.L10 (pp107-114)

AS - TG: Sec4.L13 (pp135-142)

AS - TG: Sec4.L14 (pp143-156)

AS - TG: Sec4.L17 (pp169-172)

EC - TG: Sec4.L04 (pp21-24)

EC - TG: Sec4.L07 (pp39-44)

FS - TG: Sec4.L03 (pp21-30)

FS - TG: Sec4.L07 (pp55-60)

LW - TG: Sec4.L08 (pp85-98)

MD - TG: Sec4.L02 (pp15-24)

MD - TG: Sec4.L12 (pp109-116)

MD - TG: Sec4.L13 (pp117-124)

RM - TG: Sec4.L01 (pp3-12)

RM - TG: Sec4.L02 (pp13-18)

RM - TG: Sec4.L05 (pp35-42)

RM - TG: Sec4.L06 (pp43-50)

RM - TG: Sec4.L07 (pp51-56)

RM - TG: Sec4.L08 (pp57-62)

RM - TG: Sec4.L09 (pp63-70)

RM - TG: Sec4.L10 (pp71-78)

RM - TG: Sec4.L12 (pp85-90)

RM - TG: Sec4.L13 (pp91-94)

RM - TG: Sec4.L14 (pp95-102)

RM - TG: Sec4.L15 (pp103-112)

In all lessons of *Chemical Tests*, *Food Chemistry*, *Microworlds*, *Plant Growth and Development*, and *Sound*, students learn to find patterns of constancy or regularity.

In *Animal Studies*, *Electric Circuits*, *Land and Water*, *Motion and Design*, and *Rocks and Minerals*, students learn to find patterns of constancy or regularity in the following lessons:

AS - TG: Sec4.L04 (pp37-48)

AS - TG: Sec4.L06 (pp65-74)

AS - TG: Sec4.L10 (pp107-114)

AS - TG: Sec4.L13 (pp135-142)

AS - TG: Sec4.L14 (pp143-156)

EC - TG: Sec4.L04 (pp21-24)

EC - TG: Sec4.L07 (pp39-44)

LW - TG: Sec4.L04 (pp37-50)
 LW - TG: Sec4.L08 (pp85-98)
 LW - TG: Sec4.L09 (pp99-108)
 LW - TG: Sec4.L12 (pp129-142)
 MD - TG: Sec4.L02 (pp15-24)
 MD - TG: Sec4.L07 (pp65-72)
 MD - TG: Sec4.L12 (pp109-116)
 MD - TG: Sec4.L13 (pp117-124)
 RM - TG: Sec4.L03 (pp19-26)
 RM - TG: Sec4.L04 (pp27-34)
 RM - TG: Sec4.L11 (pp79-84)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)

In *Electric Circuits, Food Chemistry, and Land and Water*, students learn to identify and explain simple problems or tasks to be completed in the following lessons:

EC - TG: Sec4.L09 (pp49-52)
 EC - TG: Sec4.L15 (pp77-80)
 EC - TG: Sec4.L16 (pp81-84)
 FC - TG: Sec4.L14 (pp125-130)
 LW - TG: Sec4.L06 (pp63-74)
 LW - TG: Sec4.L15 (pp163-172)
 LW - TG: Sec4.L16 (pp173-182)

In *Motion and Design*, students learn to use an appropriate engineering design to solve a problem in the following lessons:

MD - TG: Sec4.L01 (pp1-14)
 MD - TG: Sec4.L13 (pp117-124)
 MD - TG: Sec4.L14 (pp125-138)
 MD - TG: Sec4.L15 (pp139-144)
 MD - TG: Sec4.L17 (pp153-156)

In *Ecosystems*, students learn to recognize that a solution to one scientific problem often creates new problems in the following lessons:

E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L16 (pp165-168)

In all lessons of *Animal Studies, Chemical Tests, Ecosystems, Electric Circuits, Floating and Sinking, Food Chemistry, Land and Water, and Motion and Design*, students learn to listen to and be tolerant of different viewpoints by engaging in collaborative activities. In *Microworlds, Plant Growth and Development, Rocks and Minerals, and Sound*, students learn to listen to and be tolerant of different viewpoints by engaging in collaborative activities in the following lessons:

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
-

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
-

CATS 4

E - TG: Sec4.L08 (pp83-94)
E - TG: Sec4.L09 (pp95-98)
E - TG: Sec4.L12 (pp117-124)
E - TG: Sec4.L13 (pp125-132)
E - TG: Sec4.L14 (pp133-144)
E - TG: Sec4.L15 (pp145-164)
E - TG: Sec4.L16 (pp165-168)
M - TG: Sec4.L01 (pp3-8)
M - TG: Sec4.L03 (pp15-20)
M - TG: Sec4.L17 (pp87-88)
PGD - TG: Sec4.L01 (pp3-8)
PGD - TG: Sec4.L04 (pp25-28)
PGD - TG: Sec4.L08 (pp43-46)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
RM - TG: Sec4.L01 (pp3-12)
RM - TG: Sec4.L02 (pp13-18)
RM - TG: Sec4.L03 (pp19-26)
RM - TG: Sec4.L04 (pp27-34)
RM - TG: Sec4.L05 (pp35-42)
RM - TG: Sec4.L06 (pp43-50)
RM - TG: Sec4.L09 (pp63-70)
RM - TG: Sec4.L10 (pp71-78)
RM - TG: Sec4.L11 (pp79-84)
RM - TG: Sec4.L13 (pp91-94)
RM - TG: Sec4.L15 (pp103-112)
RM - TG: Sec4.L16 (pp113-126)
RM - TG: Sec4.L17 (pp127-128)
So - TG: Sec4.L02 (pp17-22)
So - TG: Sec4.L04 (pp28-32)
So - TG: Sec4.L05 (pp33-38)
So - TG: Sec4.L07 (pp49-56)
So - TG: Sec4.L09 (pp63-66)
So - TG: Sec4.L10 (pp67-72)
So - TG: Sec4.L12 (pp79-84)
So - TG: Sec4.L13 (pp85-90)
So - TG: Sec4.L15 (pp103-112)
So - TG: Sec4.L16 (pp113-116)
So - TG: Sec4.L17 (pp117-118)
In *Ecosystems* and *Land and Water*,
students learn to develop respect
and responsibility for the
environment by engaging in
conservation practices in the
following lessons:
E - TG: Sec4.L16 (pp165-168)
LW - TG: Sec4.L14 (pp153-162)
LW - TG: Sec4.L15 (pp163-172)

**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>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N

1. Characteristics of Organisms

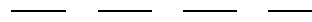
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AS - TG: Sec4.L04 (pp37-48)
AS - TG: Sec4.L05 (pp49-64)
AS - TG: Sec4.L06 (pp65-74)
AS - TG: Sec4.L07 (pp75-86)
AS - TG: Sec4.L08 (pp87-96)
AS - TG: Sec4.L09 (pp97-106)
AS - TG: Sec4.L10 (pp107-114)
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AS - TG: Sec4.L13 (pp135-142)
AS - TG: Sec4.L14 (pp143-156)
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E - TG: Sec4.L04 (pp39-52)
E - TG: Sec4.L05 (pp53-60)
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E - TG: Sec4.L07 (pp75-82)
PGD - TG: Sec4.L02 (pp9-12)
PGD - TG: Sec4.L03 (pp13-24)
PGD - TG: Sec4.L04 (pp25-28)
PGD - TG: Sec4.L05 (pp 29-34)
PGD - TG: Sec4.L06 (pp33-38)
PGD - TG: Sec4.L07 (pp39-42)
PGD - TG: Sec4.L08 (pp43-46)
PGD - TG: Sec4.L09 (pp 47-54)
PGD - TG: Sec4.L10 (pp 55-60)
PGD - TG: Sec4.L11 (pp61-66)
PGD - TG: Sec4.L12 (pp67-70)
PGD - TG: Sec4.L13 (pp71-78)
PGD - TG: Sec4.L14 (pp79-88)
PGD - TG: Sec4.L14 (pp89-94)
PGD - TG: Sec4.L16 (pp95-98)

- a. describe the different characteristics of plants and animals which help them to survive in different niches and environments (4.4.1)

PGD - TG: Sec4.L17 (pp99-100)

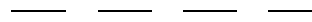
- AS - TG: Sec4.L01 (pp3-10)
- AS - TG: Sec4.L02 (pp11-20)
- AS - TG: Sec4.L03 (pp21-36)
- AS - TG: Sec4.L04 (pp37-48)
- AS - TG: Sec4.L05 (pp49-64)
- AS - TG: Sec4.L06 (pp65-74)
- AS - TG: Sec4.L07 (pp75 -86)
- AS - TG: Sec4.L08 (pp87-96)
- AS - TG: Sec4.L09 (pp97-106)
- AS - TG: Sec4.L10 (pp107-114)
- AS - TG: Sec4.L12 (pp123-134)
- AS - TG: Sec4.L13 (pp135-142)
- AS - TG: Sec4.L14 (pp143-156)
- AS - TG: Sec4.L15 (pp157-164)
- AS - TG: Sec4.L16 (pp165-168)
- AS - TG: Sec4.L17 (pp169-172)
- M - TG: Sec4.L14 (pp75-78)
- M - TG: Sec4.L15 (pp79-82)
- M - TG: Sec4.L16 (pp83-86)
- E - TG: Sec4.L01 (pp3-12)
- E - TG: Sec4.L02 (pp13-24)
- E - TG: Sec4.L04 (pp39-52)
- E - TG: Sec4.L05 (pp53-60)
- E - TG: Sec4.L06 (pp61-74)
- E - TG: Sec4.L07 (pp75-82)
- E - TG: Sec4.L08 (pp83-94)
- E - TG: Sec4.L09 (pp95-98)
- E - TG: Sec4.L10 (pp99-110)
- E - TG: Sec4.L11 (pp111-116)
- E - TG: Sec4.L12 (pp117-124)
- E - TG: Sec4.L13 (pp125-132)
- E - TG: Sec4.L14 (pp133-144)
- E - TG: Sec4.L15 (pp145-164)
- E - TG: Sec4.L16 (pp165-168)
- E - TG: Sec4.L17 (pp169-171)
- PGD - TG: Sec4.L04 (pp25-28)
- PGD - TG: Sec4.L05 (pp29-34)
- PGD - TG: Sec4.L06 (pp33-38)
- PGD - TG: Sec4.L07 (pp39-42)
- PGD - TG: Sec4.L11 (pp61-66)
- PGD - TG: Sec4.L12 (pp67-70)
- PGD - TG: Sec4.L15 (pp89-94)
- PGD - TG: Sec4.L16 (pp95-98)
- PGD - TG: Sec4.L17 (pp99-100)

b. associate the behaviors of living organisms to external and internal influences (4.4.2)



- AS - TG: Sec4.L01 (pp3-10)
- AS - TG: Sec4.L02 (pp11-20)
- AS - TG: Sec4.L03 (pp21-36)
- AS - TG: Sec4.L04 (pp37-48)
- AS - TG: Sec4.L05 (pp 49-64)
- AS - TG: Sec4.L06 (pp65-74)
- AS - TG: Sec4.L07 (pp75 -86)
- AS - TG: Sec4.L08 (pp87-96)
- AS - TG: Sec4.L09 (pp97-106)
- AS - TG: Sec4.L10 (pp107-114)
- AS - TG: Sec4.L12 (pp123-134)
- AS - TG: Sec4.L13 (pp135-142)
- AS - TG: Sec4.L14 (pp143-156)
- AS - TG: Sec4.L15 (pp157-164)
- AS - TG: Sec4.L16 (pp165-168)
- AS - TG: Sec4.L17 (pp169-172)
- E - TG: Sec4.L01 (pp3-12)

c. identify and classify variations in structures of living things and explain their functions (4.4.3)



E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L16 (pp165-168)
 E - TG: Sec4.L17 (pp169-171)
 M - TG: Sec4.L14 (pp75-78)
 M - TG: Sec4.L15 (pp79-82)
 M - TG: Sec4.L16 (pp83-86)
 PGD - TG: Sec4.L02 (pp9-12)
 PGD - TG: Sec4.L03 (pp13-24)
 PGD - TG: Sec4.L04 (pp25-28)
 PGD - TG: Sec4.L05 (pp 29-34)
 PGD - TG: Sec4.L06 (pp33-38)
 PGD - TG: Sec4.L07 (pp39-42)
 PGD - TG: Sec4.L08 (pp43-46)
 PGD - TG: Sec4.L09 (pp 47 -54)
 PGD - TG: Sec4.L10 (pp 55-60)
 PGD - TG: Sec4.L11 (pp61-66)
 PGD - TG: Sec4.L12 (pp67-70)
 PGD - TG: Sec4.L13 (pp71-78)
 PGD - TG: Sec4.L14 (pp79-88)
 PGD - TG: Sec4.L16 (pp95-98)
 PGD - TG: Sec4.L17 (pp99-100)

d. identify and classify variations in systems of living things and explain their functions (4.4.3)

AS - TG: Sec4.L09 (pp97-106)
 AS - TG: Sec4.L10 (pp107-114)
 AS - TG: Sec4.L03 (pp21-36)
 AS - TG: Sec4.L04 (pp37-48)
 AS - TG: Sec4.L05 (pp49-64)
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 AS - TG: Sec4.L08 (pp87-96)
 AS - TG: Sec4.L13 (pp135-142)
 AS - TG: Sec4.L14 (pp143-156)
 AS - TG: Sec4.L15 (pp157-164)
 E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L02 (pp13-24)
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 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
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 E - TG: Sec4.L16 (pp165-168)
 E - TG: Sec4.L17 (pp169-171)
 M - TG: Sec4.L14 (pp75-78)
 M - TG: Sec4.L15 (pp79-82)
 M - TG: Sec4.L16 (pp83-86)

PGD - TG: Sec4.L02 (pp9-12)
 PGD - TG: Sec4.L03 (pp13-24)
 PGD - TG: Sec4.L04 (pp25-28)
 PGD - TG: Sec4.L05 (pp 29-34)
 PGD - TG: Sec4.L06 (pp33-38)
 PGD - TG: Sec4.L07 (pp39-42)
 PGD - TG: Sec4.L08 (pp43-46)
 PGD - TG: Sec4.L09 (pp47-54)
 PGD - TG: Sec4.L10 (pp 55-60)
 PGD - TG: Sec4.L11 (pp61-66)
 PGD - TG: Sec4.L12 (pp67-70)
 PGD - TG: Sec4.L13 (pp71-78)
 PGD - TG: Sec4.L14 (pp79-88)
 PGD - TG: Sec4.L16 (pp95-98)
 PGD - TG: Sec4.L17 (pp99-100)

E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 PGD - TG: Sec4.L02 (pp9-12)
 PGD - TG: Sec4.L03 (pp13-24)
 PGD - TG: Sec4.L04 (pp25-28)
 PGD - TG: Sec4.L05 (pp29-34)
 PGD - TG: Sec4.L06 (pp33-38)
 PGD - TG: Sec4.L07 (pp39-42)
 PGD - TG: Sec4.L08 (pp43-46)
 PGD - TG: Sec4.L09 (pp47-54)
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 PGD - TG: Sec4.L11 (pp61-66)
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 PGD - TG: Sec4.L12 (pp67-70)
 PGD - TG: Sec4.L13 (pp71-78)
 PGD - TG: Sec4.L14 (pp79-88)
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 PGD - TG: Sec4.L15 (pp89-94)
 PGD - TG: Sec4.L16 (pp95-98)
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PGD - TG: Sec4.L03 (pp13-24)

E - TG: Sec4.L04 (pp39-52)
 PGD - TG: Sec4.L13 (pp71-78)

AS - TG: Sec4.L01 (pp3-10)
 AS - TG: Sec4.L02 (pp11-20)
 AS - TG: Sec4.L03 (pp21-36)
 AS - TG: Sec4.L05 (pp49-64)
 AS - TG: Sec4.L08 (pp87-96)
 AS - TG: Sec4.L10 (pp107-114)
 AS - TG: Sec4.L12 (pp123-134)
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 AS - TG: Sec4.L15 (pp157-164)
 AS - TG: Sec4.L16 (pp165-168)
 AS - TG: Sec4.L17 (pp169-172)
 E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)

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)

E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L16 (pp165-168)
 E - TG: Sec4.L17 (pp169-171)
 PGD - TG: Sec4.L03 (pp13-24)

3. Organisms and Environments

E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L16 (pp165-168)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L17 (pp169-171)
 PGD - TG: Sec4.L16 (pp95-98)

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)

AS - TG: Sec4.L01 (pp3-10)
 AS - TG: Sec4.L02 (pp11-20)
 AS - TG: Sec4.L03 (pp21-36)
 AS - TG: Sec4.L04 (pp37-48)
 AS - TG: Sec4.L05 (pp49-64)
 AS - TG: Sec4.L06 (pp65-74)
 AS - TG: Sec4.L07 (pp75 -86)
 AS - TG: Sec4.L08 (pp87-96)
 AS - TG: Sec4.L09 (pp97-106)
 AS - TG: Sec4.L10 (pp107-114)
 AS - TG: Sec4.L11 (pp115-122)
 AS - TG: Sec4.L12 (pp123-134)
 AS - TG: Sec4.L13 (pp135-142)
 AS - TG: Sec4.L14 (pp143-156)
 AS - TG: Sec4.L15 (pp157-164)
 AS - TG: Sec4.L16 (pp165-168)
 AS - TG: Sec4.L17 (pp169-172)
 E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L17 (pp169-171)

4. Properties of Objects and Materials

CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L02 (pp13-22)
 CT - TG: Sec4.L03 (pp23-34)
 CT - TG: Sec4.L04 (pp35-44)

a. investigate how properties can be used to identify substances (4.4.9)

CT - TG: Sec4.L17 (pp155-158)
 FS - TG: Sec4.L02 (pp13-20)
 FS - TG: Sec4.L03 (pp21-30)
 FS - TG: Sec4.L05 (pp39-48)
 FS - TG: Sec4.L06 (pp49-54)
 FS - TG: Sec4.L07 (pp55-60)
 FS - TG: Sec4.L09 (pp69-78)
 FS - TG: Sec4.L10 (pp79-86)
 FS - TG: Sec4.L11 (pp87-94)
 FS - TG: Sec4.L12 (pp95-102)
 FS - TG: Sec4.L13 (pp103-112)
 FS - TG: Sec4.L14 (pp113-118)
 FS - TG: Sec4.L15 (pp119-128)
 RM - TG: Sec4.L01 (pp 3-12)
 RM - TG: Sec4.L02 (pp 13-18)
 RM - TG: Sec4.L03 (pp 19-26)
 RM - TG: Sec4.L04 (pp 27-34)
 RM - TG: Sec4.L05 (pp 35-42)
 RM - TG: Sec4.L06 (pp 43-50)
 RM - TG: Sec4.L07 (pp 51-56)
 RM - TG: Sec4.L08 (pp 57-62)
 RM - TG: Sec4.L09 (pp 63-70)
 RM - TG: Sec4.L10 (pp 71-78)
 RM - TG: Sec4.L11 (pp 79-84)
 RM - TG: Sec4.L12 (pp 85-90)
 RM - TG: Sec4.L13 (pp 91-94)
 RM - TG: Sec4.L14 (pp 95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)

CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L03 (pp23-34)
 CT - TG: Sec4.L04 (pp35-44)
 CT - TG: Sec4.L05 (pp45-56)
 CT - TG: Sec4.L06 (pp57-58)
 CT - TG: Sec4.L07 (pp69-78)
 CT - TG: Sec4.L08 (pp79-84)
 CT - TG: Sec4.L09 (pp85-92)
 CT - TG: Sec4.L10 (pp93-100)
 CT - TG: Sec4.L14 (pp125-134)
 CT - TG: Sec4.L15 (pp135-148)
 CT - TG: Sec4.L17 (pp155-158)

CT - TG: Sec4.L01 (pp3-12)
 CT - TG: Sec4.L03 (pp23-34)
 CT - TG: Sec4.L04 (pp35-44)
 CT - TG: Sec4.L05 (pp45-56)
 CT - TG: Sec4.L06 (pp57-58)
 CT - TG: Sec4.L07 (pp69-78)
 CT - TG: Sec4.L08 (pp79-84)
 CT - TG: Sec4.L09 (pp85-92)
 CT - TG: Sec4.L13 (pp115-124)
 CT - TG: Sec4.L14 (pp125-134)
 CT - TG: Sec4.L15 (pp135-148)
 CT - TG: Sec4.L16 (pp149-154)
 CT - TG: Sec4.L17 (pp155-158)
 FC - TG: Sec4.L12 (pp107-116)
 FC - TG: Sec4.L13 (pp117-124)
 FC - TG: Sec4.L14 (pp125-130)
 FC - TG: Sec4.L16 (pp149-154)
 RM - TG: Sec4.L01 (pp3-12)
 RM - TG: Sec4.L02 (pp13-18)
 RM - TG: Sec4.L03 (pp19-26)

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)

RM - TG: Sec4.L04 (pp27-34)
 RM - TG: Sec4.L05 (pp35-42)
 RM - TG: Sec4.L06 (pp43-50)
 RM - TG: Sec4.L10 (pp71-78)
 RM - TG: Sec4.L12 (pp85-90)
 RM - TG: Sec4.L13 (pp91-94)
 RM - TG: Sec4.L14 (pp95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)

CT - TG: Sec4.L10 (pp93-100)
 FC - TG: Sec4.L02 (pp11-22)
 FC - TG: Sec4.L03 (pp23-38)
 FC - TG: Sec4.L04 (pp39-48)
 FC - TG: Sec4.L05 (pp49-56)
 FC - TG: Sec4.L06 (pp57-68)
 FC - TG: Sec4.L07 (pp69-78)
 FC - TG: Sec4.L08 (pp79-84)
 FC - TG: Sec4.L09 (pp85-94)
 FC - TG: Sec4.L10 (pp95-100)
 FC - TG: Sec4.L11 (pp101-106)
 FC - TG: Sec4.L12 (pp107-116)
 FC - TG: Sec4.L13 (pp117-124)
 FC - TG: Sec4.L14 (pp125-130)
 FC - TG: Sec4.L16 (pp149-154)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L03 (pp29-36)
 LW - TG: Sec4.L05 (pp51-62)
 LW - TG: Sec4.L06 (pp63-74)
 M - TG: Sec4.L01 (pp3-8)
 M - TG: Sec4.L03 (pp15-20)
 M - TG: Sec4.L04 (pp21-24)
 M - TG: Sec4.L05 (pp25-30)
 M - TG: Sec4.L06 (pp31-36)
 M - TG: Sec4.L07 (pp37-42)
 M - TG: Sec4.L08 (pp43-48)
 M - TG: Sec4.L09 (pp49-54)
 M - TG: Sec4.L10 (pp55-60)
 M - TG: Sec4.L11 (pp61-66)
 M - TG: Sec4.L12 (pp67-70)
 M - TG: Sec4.L13 (pp71-74)
 M - TG: Sec4.L14 (pp75-78)
 M - TG: Sec4.L15 (pp79-82)
 M - TG: Sec4.L16 (pp83-86)
 M - TG: Sec4.L17 (pp87-88)
 RM - TG: Sec4.L01 (pp3-12)
 RM - TG: Sec4.L02 (pp13-18)
 RM - TG: Sec4.L03 (pp19-26)
 RM - TG: Sec4.L04 (pp27-34)
 RM - TG: Sec4.L05 (pp35-42)
 RM - TG: Sec4.L06 (pp43-50)
 RM - TG: Sec4.L08 (pp57-62)
 RM - TG: Sec4.L09 (pp63-70)
 RM - TG: Sec4.L10 (pp71-78)
 RM - TG: Sec4.L12 (pp85-90)
 RM - TG: Sec4.L13 (pp91-94)
 RM - TG: Sec4.L14 (pp95-102)
 RM - TG: Sec4.L15 (pp103-112)
 RM - TG: Sec4.L16 (pp113-126)
 RM - TG: Sec4.L17 (pp127-128)

e. identify various changes in states of matter to heat loss or gain (4.4.12)

MD - TG: Sec4.L09 (pp81-90) MD - TG: Sec4.L10 (pp91-100) MD - TG: Sec4.L11 (pp101-108) MD - TG: Sec4.L12 (pp109-116) MD - TG: Sec4.L13 (pp117-124) MD - TG: Sec4.L14 (pp125-138) MD - TG: Sec4.L15 (pp139-144) MD - TG: Sec4.L16 (pp145-152) MD - TG: Sec4.L17 (pp153-156)		_____ _____ _____ _____
So - TG: Sec4.L01 (pp11-16) So - TG: Sec4.L02 (pp17-22) So - TG: Sec4.L03 (pp23-27) So - TG: Sec4.L04 (pp28-32) So - TG: Sec4.L05 (pp33-38) So - TG: Sec4.L06 (pp39-48) So - TG: Sec4.L07 (pp49-56) So - TG: Sec4.L08 (pp57-62) So - TG: Sec4.L09 (pp63-66) So - TG: Sec4.L10 (pp67-72) So - TG: Sec4.L11 (pp73-78) So - TG: Sec4.L12 (pp79-84) So - TG: Sec4.L13 (pp85-90) So - TG: Sec4.L14 (pp91-102) So - TG: Sec4.L15 (pp103-112) So - TG: Sec4.L16 (pp113-116) So - TG: Sec4.L17 (pp117-118)	c. explore that sounds are produced by vibrating objects and columns of air (4.4.23)	_____ _____ _____ _____
So - TG: Sec4.L01 (pp11-16) So - TG: Sec4.L02 (pp17-22) So - TG: Sec4.L04 (pp28-32) So - TG: Sec4.L05 (pp33-38) So - TG: Sec4.L06 (pp39-48) So - TG: Sec4.L07 (pp49-56) So - TG: Sec4.L08 (pp57-62) So - TG: Sec4.L09 (pp63-66) So - TG: Sec4.L10 (pp67-72) So - TG: Sec4.L12 (pp79-84) So - TG: Sec4.L13 (pp85-90) So - TG: Sec4.L14 (pp91-102) So - TG: Sec4.L15 (pp103-112) So - TG: Sec4.L15 (pp113-116) So - TG: Sec4.L17 (pp117-118)	d. explore the relationship between frequency of vibration (4.4.24)	_____ _____ _____ _____
E - TG: Sec4.L08 (pp83-94) LW - TG: Sec4.L03 (pp29-36) LW - TG: Sec4.L04 (pp37-50) LW - TG: Sec4.L05 (pp51-62) LW - TG: Sec4.L06 (pp63-74) LW - TG: Sec4.L07 (pp75-84) LW - TG: Sec4.L10 (pp109-118) LW - TG: Sec4.L11 (pp119-128) LW - TG: Sec4.L12 (pp129-142) LW - TG: Sec4.L13 (pp143-152) LW - TG: Sec4.L14 (pp153-162) LW - TG: Sec4.L15 (pp163-172) LW - TG: Sec4.L16 (pp173-182)	7. <u>Changes in Earth and Sky</u> 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)	_____ _____ _____ _____

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
E - TG: Sec4.L08 (pp83-94) RM - TG: Sec4.L03 (pp19-26)								
LW - TG: Sec4.L03 (pp29-36)								
RM - TG: Sec4.L03 (pp 19-26) RM - TG: Sec4.L03 (pp 19-26)								

d. investigate the cause and effects of volcanoes, earthquakes and landslides (4.4.28)

e. interpret a weather chart or map (4.4.29)

8. Objects in the Sky

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. Properties of Earth Materials

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 _____

GRADE: 5

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Animal Studies Unit, Ecosystems Unit, Electric Circuits Unit, Floating and Sinking Unit, Food Chemistry Unit, Land and Water Unit, Microworlds Unit, Motion and Design Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

**Part II – Instructional Content Analysis
GRADE FIVE**

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

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

1. History and the Nature of Science

In all lessons of *Animal Studies, Electric Circuits, Ecosystems, Food Chemistry, Floating and Sinking, Land and Water, Motion and Design, and Microworlds*, students learn that scientists formulate and test their explanations of nature using observations and experiments.

In *Motion and Design* and *Microworlds*, students learn of the careers and contributions of men and women of diverse cultures to the development of science in the following lessons:
 MD - TG: Sec4.L02 (pp15-24)
 MD - TG: Sec4.L05 (pp47-56)
 MD - TG: Sec4.L10 (pp91-100)
 MD - TG: Sec4.L14 (pp125-138)
 M - TG: Sec4.L05 (pp25-30)

- 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

In all STC units, students learn primarily through active inquiry and hands-on investigations.

In *Animal Studies, Electric Circuits, Ecosystems, Food Chemistry, Floating and Sinking, Land and Water, Motion and Design, and Microworlds*, students learn to cooperate and collaborate to ask questions, find answers, solve problems, and conduct investigations in all lessons.

- 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

_____	_____	_____	_____
_____	_____	_____	_____

(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
<p>In <i>Food Chemistry, Floating and Sinking, Land and Water, and Motion and Design</i>, students learn to formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection in the following lessons:</p> <p>FC - TG: Sec4.L05 (pp49-56) FS - TG: Sec4.L09 (pp69-78) FS - TG: Sec4.L11 (pp87-94) FS - TG: Sec4.L17 (pp135-136) LW - TG: Sec4.L05 (pp51-62) LW - TG: Sec4.L10 (pp109-118) LW - TG: Sec4.L13 (pp143-152) LW - TG: Sec4.L14 (pp153-162) LW - TG: Sec4.L17 (pp182-186) MD - TG: Sec4.L03 (pp25-34)</p>								
<p>In all lessons of <i>Animal Studies, Electric Circuits, Ecosystems, Food Chemistry, Floating and Sinking, Land and Water, Motion and Design, and Microworlds</i>, students learn to apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe.</p>								
<p>In all lessons of <i>Electric Circuits, Ecosystems, Floating and Sinking, and Microworlds</i>, students learn to use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world.</p> <p>In <i>Animal Studies, Food Chemistry, Land and Water, and Motion and Design</i> students learn to use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world in the following lessons:</p> <p>AS - TG: Sec4.L02 (pp11-20) AS - TG: Sec4.L03 (pp21-36) AS - TG: Sec4.L04 (pp37-48) AS - TG: Sec4.L05 (pp49-64) AS - TG: Sec4.L06 (pp65-74) AS - TG: Sec4.L07 (pp75 -86) AS - TG: Sec4.L08 (pp87-96) AS - TG: Sec4.L09 (pp97-106) AS - TG: Sec4.L10 (pp107-114)</p>								

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

AS - TG: Sec4.L12 (pp123-134)
 AS - TG: Sec4.L13 (pp135-142)
 AS - TG: Sec4.L14 (pp143-156)
 AS - TG: Sec4.L15 (pp157-164)
 FC - TG: Sec4.L02 (pp11-22)
 LW - TG: Sec4.L04 (pp37-50)
 LW - TG: Sec4.L06 (pp63-74)
 LW - TG: Sec4.L07 (pp75-84)
 LW - TG: Sec4.L08 (pp85-98)
 LW - TG: Sec4.L09 (pp99-108)
 LW - TG: Sec4.L10 (pp109-118)
 LW - TG: Sec4.L11 (pp119-128)
 LW - TG: Sec4.L12 (pp129-142)
 LW - TG: Sec4.L13 (pp143-152)
 LW - TG: Sec4.L14 (pp153-162)
 LW - TG: Sec4.L15 (pp163-172)
 LW - TG: Sec4.L16 (pp173-182)
 MD - TG: Sec4.L02 (pp15-24)
 MD - TG: Sec4.L03 (pp25-34)
 MD - TG: Sec4.L06 (pp57-64)
 MD - TG: Sec4.L08 (pp73-80)
 MD - TG: Sec4.L09 (pp81-90)
 MD - TG: Sec4.L11 (pp101-108)
 MD - TG: Sec4.L12 (pp109-116)
 MD - TG: Sec4.L13 (pp117-124)
 MD - TG: Sec4.L14 (pp125-138)
 MD - TG: Sec4.L16 (pp145-152)

In *Animal Studies, Electrical Circuits, and Ecosystems*, students learn to demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms in the following lessons:

AS - TG: Sec4.L04 (pp37-48)
 AS - TG: Sec4.L06 (pp65-74)
 EC - TG: Sec4.L01 (pp3-6)
 EC - TG: Sec4.L02 (pp7-14)
 EC - TG: Sec4.L08 (pp45-48)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L16 (pp165-168)

- f. demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms

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	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
In all lessons of <i>Animal Studies, Electrical Circuits, Ecosystems, Food Chemistry, Floating and Sinking, Land and Water, Motion and Design</i> , and <i>Microworlds</i> , students learn to utilize experimentation to demonstrate scientific processes and thinking skills.								
In all lessons of <i>Food Chemistry, Floating and Sinking</i> , and <i>Microworlds</i> , students learn to construct and use charts, graphs and tables to organize, display, interpret, analyze and explain data.								
In <i>Animal Studies, Electric Circuits, Ecosystems, Land and Water</i> , and <i>Motion and Design</i> , students learn to construct and use charts, graphs, and tables to organize, display, interpret, analyze, and explain data in the following lessons: AS - TG: Sec4.L04 (pp37-48) AS - TG: Sec4.L05 (pp49-64) AS - TG: Sec4.L06 (pp65-74) AS - TG: Sec4.L08 (pp87-96) EC - TG: Sec4.L03 (pp15-20) EC - TG: Sec4.L04 (pp21-24) EC - TG: Sec4.L06 (pp33-38) EC - TG: Sec4.L07 (pp39-44) EC - TG: Sec4.L08 (pp45-48) EC - TG: Sec4.L09 (pp49-52) EC - TG: Sec4.L10 (pp53-58) EC - TG: Sec4.L11 (pp59-64) EC - TG: Sec4.L12 (pp65-68) EC - TG: Sec4.L14 (pp73-76) EC - TG: Sec4.L15 (pp77-80) E - TG: Sec4.L02 (pp13-24) E - TG: Sec4.L03 (pp25-38) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L08 (pp83-94) E - TG: Sec4.L09 (pp95-98) E - TG: Sec4.L10 (pp99-110) E - TG: Sec4.L11 (pp111-116) E - TG: Sec4.L12 (pp117-124) E - TG: Sec4.L14 (pp133-144) LW - TG: Sec4.L01 (pp3-10) LW - TG: Sec4.L02 (pp11-28) LW - TG: Sec4.L04 (pp37-50) LW - TG: Sec4.L05 (pp51-62) LW - TG: Sec4.L08 (pp85-98)								

LW - TG: Sec4.L09 (pp99-108)
 LW - TG: Sec4.L12 (pp129-142)
 LW - TG: Sec4.L13 (pp143-152)
 LW - TG: Sec4.L16 (pp173-182)
 MD - TG: Sec4.L02 (pp15-24)
 MD - TG: Sec4.L04 (pp35-46)
 MD - TG: Sec4.L08 (pp73-80)
 MD - TG: Sec4.L11 (pp101-108)
 MD - TG: Sec4.L14 (pp125-138)
 MD - TG: Sec4.L15 (pp139-144)
 MD - TG: Sec4.L16 (pp145-152)

3. Unifying Themes

In *Ecosystems, Land and Water*, and *Motion and Design*, students learn to compare and contrast the relationship between the parts of a system to the whole system in the following lessons:

E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L03 (pp29-36)
 LW - TG: Sec4.L08 (pp85-98)
 LW - TG: Sec4.L09 (pp99-108)
 LW - TG: Sec4.L10 (pp109-118)
 LW - TG: Sec4.L11 (pp119-128)
 LW - TG: Sec4.L12 (pp129-142)
 LW - TG: Sec4.L14 (pp153-162)
 LW - TG: Sec4.L15 (pp163-172)
 MD - TG: Sec4.L03 (pp25-34)
 MD - TG: Sec4.L05 (pp47-56)
 MD - TG: Sec4.L09 (pp81-90)
 MD - TG: Sec4.L11 (pp101-108)
 MD - TG: Sec4.L12 (pp109-116)

In all lessons of *Electric Circuits*, students learn to construct a variety of useful models of an object, event or process.

In *Ecosystems, Floating and Sinking*, and *Land and Water*, students learn to construct a variety of useful models of an object, event or process in the following lessons:

E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 FS - TG: Sec4.L07 (pp55-60)
 FS - TG: Sec4.L08 (pp61-68)
 FS - TG: Sec4.L15 (pp119-128)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L03 (pp29-36)
 LW - TG: Sec4.L04 (pp37-50)
 LW - TG: Sec4.L09 (pp99-108)

- 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

LW - TG: Sec4.L10 (pp109-118)

LW - TG: Sec4.L12 (pp129-142)

In *Land and Water*, students learn to compare and contrast changes that occur in an object or a system to its original state in the following lessons:

LW - TG: Sec4.L04 (pp37-50)

LW - TG: Sec4.L09 (pp99-108)

LW - TG: Sec4.L12 (pp129-142)

In *Land and Water* and *Microworlds*, students learn to identify the influence that a variation in scale will have on the way an object or system works in the following lessons:

LW - TG: Sec4.L01 (pp3-10)

M - TG: Sec4.L01 (pp3-8)

M - TG: Sec4.L03 (pp15-20)

M - TG: Sec4.L05 (pp25-30)

M - TG: Sec4.L06 (pp31-36)

M - TG: Sec4.L07 (pp37-42)

M - TG: Sec4.L17 (pp87-88)

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. Scientific Design and Application

a. research everyday applications and interactions of science and technology

b. implement engineering solutions for given tasks and measure their effectiveness

In *Motion and Design*, students learn to implement engineering solutions for given tasks and measure their effectiveness in the following lessons:

MD - TG: Sec4.L01 (pp1-14)

MD - TG: Sec4.L13 (pp117-124)

MD - TG: Sec4.L14 (pp125-138)

MD - TG: Sec4.L15 (pp139-144)

MD - TG: Sec4.L17 (pp153-156)

5. Science in Personal and Social Perspectives

a. explore the connections between science, technology, society and career opportunities

In *Food Chemistry*, students learn to use scientific reasoning and the knowledge of science and technology to make informed personal decisions at the local and global levels in the following lessons:

FC - TG: Sec4.L01 (pp3-10)

FC - TG: Sec4.L17 (pp155-156)

In *Motion and Design*, students learn to evaluate and critically analyze mass media reports of scientific developments and events in the following lessons:

MD - TG: Sec4.L02 (pp15-24)

MD - TG: Sec4.L05 (pp47-56)

MD - TG: Sec4.L10 (pp91-100)

MD - TG: Sec4.L14 (pp125-138)

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

In *Ecosystems*, students learn to critically analyze the effects and impacts of science and technology on global and local problems in the following lessons:

- E - TG: Sec4.L08 (pp83-94)
- E - TG: Sec4.L09 (pp95-98)
- E - TG: Sec4.L12 (pp117-124)
- E - TG: Sec4.L13 (pp125-132)
- E - TG: Sec4.L14 (pp133-144)
- E - TG: Sec4.L15 (pp145-164)
- E - TG: Sec4.L16 (pp165-168)

- 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>I=In-depth</i> 80%	<i>A=Adequate</i> 80%	<i>M=Minimal</i> 60%	<i>N=Nonexistent</i> 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)

E - TG: Sec4.L01 (pp3-12)

- AS - TG: Sec4.L01 (pp3-10)
- AS - TG: Sec4.L02 (pp11-20)
- AS - TG: Sec4.L03 (pp21-36)
- AS - TG: Sec4.L04 (pp37-48)
- AS - TG: Sec4.L05 (pp49-64)
- AS - TG: Sec4.L06 (pp65-74)
- AS - TG: Sec4.L07 (pp75 -86)
- AS - TG: Sec4.L08 (pp87-96)
- AS - TG: Sec4.L09 (pp97-106)
- AS - TG: Sec4.L10 (pp107-114)
- AS - TG: Sec4.L12 (pp123-134)
- AS - TG: Sec4.L13 (pp135-142)
- AS - TG: Sec4.L14 (pp143-156)
- AS - TG: Sec4.L15 (pp157-164)
- AS - TG: Sec4.L16 (pp165-168)
- AS - TG: Sec4.L17 (pp169-172)
- M - TG: Sec4.L12 (pp67-70)
- M - TG: Sec4.L13 (pp71-74)
- M - TG: Sec4.L14 (pp75-78)
- M - TG: Sec4.L15 (pp79-82)
- M - TG: Sec4.L16 (pp83-86)

_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

(Vendor/Publisher) SPECIFIC LOCATION OF CONTENT WITHIN PRODUCT	(IMR Committee) Responses							
	<i>I=In-depth 80%</i>	<i>A=Adequate 80%</i>	<i>M=Minimal 60%</i>	<i>N=Nonexistent Less than 60%</i>	I	A	M	N
M - TG: Sec4.L12 (pp67-70) M - TG: Sec4.L13 (pp71-74) M - TG: Sec4.L14 (pp75-78) M - TG: Sec4.L16 (pp83-86)					—	—	—	—
					—	—	—	—
AS - TG: Sec4.L03 (pp21-36) AS - TG: Sec4.L04 (pp37-48) AS - TG: Sec4.L05 (pp49-64) AS - TG: Sec4.L06 (pp65-74) AS - TG: Sec4.L08 (pp87-96) AS - TG: Sec4.L13 (pp135-142) AS - TG: Sec4.L14 (pp143-156) AS - TG: Sec4.L15 (pp157-164)					—	—	—	—
					—	—	—	—
AS - TG: Sec4.L01 (pp3-10) AS - TG: Sec4.L02 (pp11-20) AS - TG: Sec4.L03 (pp21-36) AS - TG: Sec4.L04 (pp37-48) AS - TG: Sec4.L06 (pp65-74) AS - TG: Sec4.L07 (pp75 - 86) AS - TG: Sec4.L08 (pp87-96) AS - TG: Sec4.L09 (pp97-106) AS - TG: Sec4.L10 (pp107-114) AS - TG: Sec4.L11 (pp115-122) AS - TG: Sec4.L12 (pp123-134) AS - TG: Sec4.L13 (pp135-142) AS - TG: Sec4.L14 (pp143-156) AS - TG: Sec4.L15 (pp157-164) AS - TG: Sec4.L16 (pp165-168) AS - TG: Sec4.L17 (pp169-172) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L08 (pp83-94) E - TG: Sec4.L09 (pp95-98) E - TG: Sec4.L10 (pp99-110) E - TG: Sec4.L11 (pp111-116) E - TG: Sec4.L12 (pp117-124) E - TG: Sec4.L13 (pp125-132) E - TG: Sec4.L14 (pp133-144) E - TG: Sec4.L15 (pp145-164) E - TG: Sec4.L16 (pp165-168)					—	—	—	—
					—	—	—	—
E - TG: Sec4.L03 (pp25-38) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L12 (pp117-124)					—	—	—	—
					—	—	—	—

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

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)	_____	_____	_____	_____				
FS - TG: Sec4.L01 (pp3-12) FS - TG: Sec4.L02 (pp13-20) FS - TG: Sec4.L03 (pp21-30) FS - TG: Sec4.L04 (pp31-38) FS - TG: Sec4.L05 (pp39-48) FS - TG: Sec4.L06 (pp49-54) FS - TG: Sec4.L07 (pp55-60) FS - TG: Sec4.L08 (pp61-68) FS - TG: Sec4.L09 (pp69-78) FS - TG: Sec4.L10 (pp79-86) FS - TG: Sec4.L11 (pp87-94) FS - TG: Sec4.L12 (pp95-102) FS - TG: Sec4.L13 (pp103-112) FS - TG: Sec4.L14 (pp113-118) FS - TG: Sec4.L15 (pp119-128) FS - TG: Sec4.L16 (pp129-134) FS - TG: Sec4.L17 (pp135-136)	d. compare the relative density of substances by their ability to float and sink (SC.5.4.12)	_____	_____	_____	_____				

6. Light, Heat, Electricity and Magnetism

EC - TG: Sec4.L01 (pp3-6) EC - TG: Sec4.L02 (pp7-14) EC - TG: Sec4.L03 (pp15-20) EC - TG: Sec4.L04 (pp21-24) EC - TG: Sec4.L05 (pp25-32) EC - TG: Sec4.L06 (pp33-38) EC - TG: Sec4.L07 (pp39-44) EC - TG: Sec4.L08 (pp45-48) EC - TG: Sec4.L09 (pp49-52) EC - TG: Sec4.L10 (pp53-58) EC - TG: Sec4.L11 (pp59-64) EC - TG: Sec4.L12 (pp65-68) EC - TG: Sec4.L13 (pp69-72) EC - TG: Sec4.L14 (pp73-76) EC - TG: Sec4.L15 (pp77-80) EC - TG: Sec4.L16 (pp81-84) EC - TG: Sec4.L17 (pp85-86)	a. analyze diagrams of electrical circuits (SC.5.4.13)	_____	_____	_____	_____				
EC - TG: Sec4.L01 (pp3-6) EC - TG: Sec4.L02 (pp7-14) EC - TG: Sec4.L03 (pp15-20) EC - TG: Sec4.L04 (pp21-24) EC - TG: Sec4.L05 (pp25-32)	b. use SI (metric) measurement units of volts, amps and watts as they apply to electricity (SC.5.4.14)	_____	_____	_____	_____				

EC - TG: Sec4.L06 (pp33-38)
 EC - TG: Sec4.L07 (pp39-44)
 EC - TG: Sec4.L08 (pp45-48)
 EC - TG: Sec4.L09 (pp49-52)
 EC - TG: Sec4.L10 (pp53-58)
 EC - TG: Sec4.L11 (pp59-64)
 EC - TG: Sec4.L12 (pp65-68)
 EC - TG: Sec4.L13 (pp69-72)
 EC - TG: Sec4.L14 (pp73-76)
 EC - TG: Sec4.L15 (pp77-80)
 EC - TG: Sec4.L16 (pp81-84)
 EC - TG: Sec4.L17 (pp85-86)

c. investigate the properties of an
 electromagnet (SC.5.4.15)

7. Position and Motion of Objects

FS - TG: Sec4.L04 (pp31-38)
 FS - TG: Sec4.L05 (pp39-48)
 MD - TG: Sec4.L03 (pp25-34)
 MD - TG: Sec4.L07 (pp65-72)
 MD - TG: Sec4.L08 (pp73-80)
 MD - TG: Sec4.L09 (pp81-90)
 MD - TG: Sec4.L10 (pp91-100)
 MD - TG: Sec4.L11 (pp101-108)
 MD - TG: Sec4.L12 (pp109-116)
 MD - TG: Sec4.L13 (pp117-124)
 MD - TG: Sec4.L15 (pp139-144)
 MD - TG: Sec4.L16 (pp145-152)

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

LW - TG: Sec4.L01 (pp3-10)
[crust only]

LW - TG: Sec4.L01 (pp3-10)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L04 (pp37-50)
 LW - TG: Sec4.L07 (pp75-84)
 LW - TG: Sec4.L08 (pp85-98)
 LW - TG: Sec4.L10 (pp109-118)
 LW - TG: Sec4.L11 (pp119-128)
 LW - TG: Sec4.L12 (pp129-142)
 LW - TG: Sec4.L13 (pp143-152)
 LW - TG: Sec4.L15 (pp163-172)
 LW - TG: Sec4.L16 (pp173-182)
 LW - TG: Sec4.L17 (pp183-185)

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)

LW - TG: Sec4.L01 (pp3-10)
 LW - TG: Sec4.L02 (pp11-28)
 LW - TG: Sec4.L10 (pp109-118)
 LW - TG: Sec4.L11 (pp119-128)
 LW - TG: Sec4.L12 (pp129-142)

c. describe how weather and climate
 are changed by natural landforms
 (SC.5.4.19)

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LW - TG: Sec4.L08 (pp85-98) LW - TG: Sec4.L15 (pp163-172)								

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 _____

GRADE: 6

VENDOR: Carolina Biological Supply Company

COURSE: _____

TITLE: Science and Technology for Children®: Ecosystems Unit, Floating and Sinking Unit, Food Chemistry Unit, Microworlds Unit

COPYRIGHT DATE: 2004

UNIT ISBN: See Attachment 7

**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		
<u>X</u>	_____	_____	<p>I. INTER-ETHNIC</p> <p>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).</p>	
<u>X</u>	_____	_____	<p>II. EQUAL OPPORTUNITY</p> <p>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).</p>	

**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

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

1. History and the Nature of Science

In all STC units, students learn that scientists use observation and experiments to develop and test their explanations of natural phenomena.

In *Microworlds*, students gain an understanding of careers and contributions of men and women of diverse cultures to the development of science in the following lesson:
M - TG: Sec4.L05 (pp25-30)

- 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

In all STC units, students learn primarily through active inquiry and hands-on investigations.

In *Ecosystems, Food Chemistry, Floating and Sinking*, and *Microworlds*, students learn to cooperate and collaborate to ask questions, find answers, solve problem, conduct investigations to further an appreciation for scientific discovery in all lessons.

In *Food Chemistry* and *Floating and Sinking*, students learn to formulate conclusions through close observations, logical reasoning, objectivity, perseverance and integrity in data collection in the following lessons:
FC - TG: Sec4.L05 (pp49-56)
FS - TG: Sec4.L09 (pp69-78)
FS - TG: Sec4.L11 (pp87-94)
FS - TG: Sec4.L17 (pp135-136)

- 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

_____	_____	_____	_____
_____	_____	_____	_____

(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
In all lessons of <i>Ecosystems</i> , <i>Food Chemistry</i> , <i>Floating and Sinking</i> , and <i>Microworlds</i> , students learn to apply skepticism, careful methods, logical reasoning and creativity in investigating the observable universe.					—	—	—	—
In all lessons of <i>Floating and Sinking</i> and <i>Microworlds</i> , students learn to use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world. In <i>Food Chemistry</i> , students learn to use a variety of materials and scientific instruments to conduct explorations, investigations and experiments of the natural world in the following lesson: FC - TG: Sec4.L02 (pp11-22)					—	—	—	—
In all lessons of <i>Ecosystems</i> , students learn to demonstrate safe techniques for handling, manipulating and caring for science materials, equipment, natural specimens and living organisms.					—	—	—	—
In all lessons of <i>Ecosystems</i> , <i>Food Chemistry</i> , <i>Floating and Sinking</i> , and <i>Microworlds</i> , students learn to utilize experimentation to demonstrate scientific processes and thinking skills in all lessons.					—	—	—	—
In all lessons of <i>Ecosystems</i> , <i>Food Chemistry</i> , <i>Floating and Sinking</i> , and <i>Microworlds</i> , students learn to construct and use charts, graphs and tables to organize, display, interpret, analyze and explain data in all lessons.					—	—	—	—

3. Unifying Themes

(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

5. Science in Personal and Social Perspectives

In *Food Chemistry*, students learn to use scientific reasoning and the knowledge of science and technology to make informed personal decisions at the local and global levels in the following lessons:

FC - TG: Sec4.L01 (pp3-10)
FC - TG: Sec4.L17 (pp155-156)

In *Ecosystems*, students learn to critically analyze the effects and impacts of science and technology on global and local problems in the following lessons:

E - TG: Sec4.L08 (pp83-94)
E - TG: Sec4.L09 (pp95-98)
E - TG: Sec4.L12 (pp117-124)
E - TG: Sec4.L13 (pp125-132)
E - TG: Sec4.L14 (pp133-144)
E - TG: Sec4.L15 (pp145-164)
E - TG: Sec4.L16 (pp165-168)

- 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>I=In-depth</i> 80%	<i>A=Adequate</i> 80%	<i>M=Minimal</i> 60%	<i>N=Nonexistent</i> Less than 60%	I	A	M

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)

E - TG: Sec4.L01 (pp3-12)
 E - TG: Sec4.L02 (pp13-24)
 E - TG: Sec4.L03 (pp25-38)
 E - TG: Sec4.L04 (pp39-52)
 E - TG: Sec4.L05 (pp53-60)
 E - TG: Sec4.L06 (pp61-74)
 E - TG: Sec4.L07 (pp75-82)
 E - TG: Sec4.L08 (pp83-94)
 E - TG: Sec4.L09 (pp95-98)
 E - TG: Sec4.L10 (pp99-110)
 E - TG: Sec4.L11 (pp111-116)
 E - TG: Sec4.L12 (pp117-124)
 E - TG: Sec4.L13 (pp125-132)
 E - TG: Sec4.L14 (pp133-144)
 E - TG: Sec4.L15 (pp145-164)
 E - TG: Sec4.L17 (pp169-171)

(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
E - TG: Sec4.L01 (pp3-12) E - TG: Sec4.L02 (pp13-24) E - TG: Sec4.L03 (pp25-38) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L08 (pp83-94) E - TG: Sec4.L09 (pp95-98) E - TG: Sec4.L10 (pp99-110) E - TG: Sec4.L11 (pp111-116) E - TG: Sec4.L12 (pp117-124) E - TG: Sec4.L17 (pp169-171) M - TG: Sec4.L14 (pp75-78) M - TG: Sec4.L15 (pp79-82) M - TG: Sec4.L16 (pp83-86)								
E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) M - TG: Sec4.L14 (pp75-78) M - TG: Sec4.L15 (pp79-82) M - TG: Sec4.L16 (pp83-86)								
E - TG: Sec4.L01 (pp3-12) E - TG: Sec4.L02 (pp13-24) E - TG: Sec4.L03 (pp25-38) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L12 (pp117-124) E - TG: Sec4.L17 (pp169-171)								
M - TG: Sec4.L11 (pp61-66) M - TG: Sec4.L12 (pp67-70) M - TG: Sec4.L13 (pp71-74) M - TG: Sec4.L14 (pp75-78) M - TG: Sec4.L15 (pp79-82) M - TG: Sec4.L16 (pp83-86)								
E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74)								
E - TG: Sec4.L01 (pp3-12) E - TG: Sec4.L02 (pp13-24) E - TG: Sec4.L03 (pp25-38) E - TG: Sec4.L04 (pp39-52) E - TG: Sec4.L05 (pp53-60) E - TG: Sec4.L06 (pp61-74) E - TG: Sec4.L07 (pp75-82) E - TG: Sec4.L12 (pp117-124) E - TG: Sec4.L14 (pp133-144) E - TG: Sec4.L15 (pp145-164) E - TG: Sec4.L17 (pp169-171) M - TG: Sec4.L14 (pp75-78) M - TG: Sec4.L15 (pp79-82)								

M - TG: Sec4.L16 (pp83-86)				
E - TG: Sec4.L08 (pp83-94)				
E - TG: Sec4.L09 (pp95-98)				
E - TG: Sec4.L10 (pp99-110)				
E - TG: Sec4.L11 (pp111-116)				
<hr/>				
FS - TG: Sec4.L02 (pp13-20)				
FS - TG: Sec4.L03 (pp21-30)				
FS - TG: Sec4.L05 (pp39-48)				
FS - TG: Sec4.L06 (pp49-54)				
FS - TG: Sec4.L07 (pp55-60)				
FS - TG: Sec4.L09 (pp69-78)				
FS - TG: Sec4.L10 (pp79-86)				
FS - TG: Sec4.L11 (pp87-94)				
FS - TG: Sec4.L12 (pp95-102)				
FS - TG: Sec4.L13 (pp103-112)				
FS - TG: Sec4.L14 (pp113-118)				
FS - TG: Sec4.L15 (pp119-128)				
<hr/>				
	b.	analyze the ecological consequences of human interactions with the environment (SC.6.4.9)		
<hr/>				
5. Structure and Properties of Matter				
	a.	classify and investigate properties and processes (changes) as either physical or chemical (SC.6.4.10)		
<hr/>				
	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)		
<hr/>				
FS - TG: Sec4.L13 (pp103-112)	c.	investigate the formation and separation of simple mixtures (SC.6.4.12)		
<hr/>				
E - TG: Sec4.L08 (pp83-94)	d.	use indicators to identify substances as acidic, basic or neutral (SC.6.4.13)		
E - TG: Sec4.L11 (pp111-116)				
E - TG: Sec4.L12 (pp117-124)				
FC - TG:Sec4.L3 (pp23-38)				
FC - TG:Sec4.L4 (pp39-48)				
FC - TG:Sec4.L6 (pp57-68)				
FC - TG:Sec4.L7 (pp69-78)				
FC - TG:Sec4.L9 (pp85-94)				
FC - TG:Sec4.L10 (pp95-100)				
FC - TG:Sec4.L12 (pp107-116)				
FC - TG:Sec4.L13 (pp117-124)				
FC - TG:Sec4.L16 (pp149-154)				
<hr/>				
	e.	identify the symbols of elements (SC.6.4.14)		
<hr/>				
	f.	use the periodic table to identify elements as solids, liquids and gases, metals or nonmetals (SC.6.4.15)		
<hr/>				
	g.	describe properties of matter (SC.6.4.16)		
<hr/>				
6. Energy				
	a.	investigate the properties of the electromagnetic spectrum (SC.6.4.17)		
<hr/>				

Attachment 1

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: Kindergarten

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Comparing and Measuring Unit,
Organisms Unit, Solids and Liquids Unit, Weather Unit

COPYRIGHT DATE: 2004

UNIT TITLE	UNIT ISBN
Comparing and Measuring	0-89278-990-5
Organisms	0-89278-999-9
Solids and Liquids	0-89278-993-X
Weather	0-89278-996-4

Attachment 2

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 1

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Balancing and Weighing Unit, Changes Unit, Comparing and Measuring Unit, The Life Cycle of Butterflies Unit, Organisms Unit, Soils Unit, Solids and Liquids Unit, Weather Unit

COPYRIGHT DATE: 2004

UNIT TITLE	UNIT ISBN
Balancing and Weighing	0-89278-978-6
Changes	0-89278-981-6
Comparing and Measuring	0-89278-990-5
The Life Cycle of Butterflies	0-89278-987-5
Organisms	0-89278-999-9
Soils	0-89278-984-0
Solids and Liquids	0-89278-993-X
Weather	0-89278-996-4

Attachment 3

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 2

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Balancing and Weighing Unit, Changes Unit, Chemical Tests Unit, Comparing and Measuring Unit, The Life Cycle of Butterflies Unit, Organisms Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Solids and Liquids Unit, Soils Unit, Sound Unit, Weather Unit

COPYRIGHT DATE: 2004

UNIT TITLE	UNIT ISBN
Balancing and Weighing	0-89278-978-6
Changes	0-89278-981-6
Chemical Tests	0-89278-969-7
Comparing and Measuring	0-89278-990-5
The Life Cycle of Butterflies	0-89278-987-5
Organisms	0-89278-999-9
Plant Growth and Development	0-89278-975-1
Rocks and Minerals	0-89278-972-7
Soils	0-89278-984-0
Solids and Liquids	0-89278-993-X
Sound	0-89278-966-2
Weather	0-89278-996-4

Attachment 4

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 3

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Animal Studies Unit, Balancing and Weighing Unit, Changes Unit, Chemical Tests Unit, Electric Circuits Unit, Land and Water Unit, The Life Cycle of Butterflies Unit, Motion and Design Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Soils Unit, Sound Unit

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UNIT TITLE	UNIT ISBN
Animal Studies	0-89278-963-8
Balancing and Weighing	0-89278-978-6
Changes	0-89278-981-6
Chemical Tests	0-89278-969-7
Electric Circuits	0-89278-957-3
Land and Water	0-89278-960-3
The Life Cycle of Butterflies	0-89278-987-5
Motion and Design	0-89278-957-9
Plant Growth and Development	0-89278-975-1
Rocks and Minerals	0-89278-972-7
Soils	0-89278-984-0
Sound	0-89278-966-2

Attachment 5

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 4

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Animal Studies Unit, Chemical Tests Unit, Ecosystems Unit, Electric Circuits Unit, Floating and Sinking Unit, Food Chemistry Unit, Land and Water Unit, Microworlds Unit, Motion and Design Unit, Plant Growth and Development Unit, Rocks and Minerals Unit, Sound Unit

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UNIT TITLE	UNIT ISBN
Animal Studies	0-89278-963-8
Chemical Tests	0-89278-969-7
Ecosystems	0-89278-948-4
Electric Circuits	0-89278-957-3
Floating and Sinking	0-89278-942-5
Food Chemistry	0-89278-945-X
Land and Water	0-89278-960-3
Microworlds	0-89278-951-4
Motion and Design	0-89278-957-9
Plant Growth and Development	0-89278-975-1
Rocks and Minerals	0-89278-972-7
Sound	0-89278-966-2

Attachment 6

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 5

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Animal Studies Unit, Ecosystems Unit, Electric Circuits Unit, Floating and Sinking Unit, Food Chemistry Unit, Land and Water Unit, Microworlds Unit, Motion and Design Unit

COPYRIGHT DATE: 2004

UNIT TITLE	UNIT ISBN
Animal Studies	0-89278-963-8
Ecosystems	0-89278-948-4
Electric Circuits	0-89278-957-3
Floating and Sinking	0-89278-942-5
Food Chemistry	0-89278-945-X
Land and Water	0-89278-960-3
Microworlds	0-89278-951-4
Motion and Design	0-89278-957-9

Attachment 7

INSTRUCTIONAL MATERIALS ADOPTION

GRADE: 6

VENDOR: Carolina Biological Supply Company

COURSE:

TITLE: Science and Technology for Children®: Ecosystems Unit, Floating and Sinking Unit, Food Chemistry Unit, Microworlds Unit

COPYRIGHT DATE: 2004

UNIT TITLE	UNIT ISBN
Ecosystems	0-89278-948-4
Floating and Sinking	0-89278-942-5
Food Chemistry	0-89278-945-X
Microworlds	0-89278-951-4