Note: There are limitations in the use of these reports. To understand their use, please read "How should use of Content Focus Reports be limited?" provided on page 7 of this report.

2011 FCAT Science Grade 5			
Benchmark	**2008 Benchmark Alignment**	**Content Focus**	**Number of Points Possible**
Cluster 1. Physical and Chemical Sciences			
A121	SC.4.P.8.1	Tools	1
A122	SC.3.P.9.1	Phase changes	1
A124	SC.8.P.8.9	Solutions	1
A221	SC.4.E.6.5	Magnification	1
A221	SC.4.E.6.5	Microscopic samples	1
B121	SC.5.P.11.1	Energy flow through a system	1
B122	SC.7.P.11.2	Energy conversions	1
B122	SC.7.P.11.1	Energy transfer	1
B221	SC.4.L.17.3	Sources of energy	1
C121	SC.5.P.13.1	Friction	1
C122	SC.7.P.10.3	Sound through different media	1
C224	SC.8.E.5.9	Effects of forces	1
C224	SC.5.P.13.3	Net force	1
		Reporting Cluster Point Total	**13**
Cluster 2. Earth and Space Sciences			
D123	SC.5.E.7.1	Condensation	1
D123	SC.5.E.7.2	Evaporation	1
D124	SC.6.E.7.4	Earth's surface	1
D124	SC.4.E.6.4	Process of erosion	1
E121	SC.4.E.5.3	Earth year	1
E121	SC.6.E.6.1	Energy available	1
E121	SC.8.E.5.9	Length of day	1
E122	SC.8.E.5.9	Moon phases	2
E124	SC.8.E.5.7	Planet characteristics	1
E221	SC.3.E.5.3	Properties of stars	1
		Reporting Cluster Point Total	**11**

2011 FCAT Science
Grade 5

Benchmark	2008 Benchmark Alignment	Content Focus	Number of Points Possible
Cluster 3. Life and Environmental Sciences			
F121	SC.6.L.14.5	Circulatory system	1
F123	SC.3.L.14.2	Plant characteristics	1
F124	SC.6.L.14.3	Plant cell functions	1
G121	SC.4.L.17.3	Role of organisms	1
G122	SC.5.L.17.1	Structural adaptations	1
G123	SC.3.L.14.2	Plant growth	1
G123	NA	Photosynthesis	1
G125	SC.7.L.17.1	Needs of living things	1
G126	NA	Decomposers	1
G126	NA	Nutrient cycling	1
G221	SC.7.L.17.3	Competition for resources	1
G222	NA	Limits on population	1
G223	SC.5.L.15.1	Habitat changes	1
		Reporting Cluster Point Total	**13**
Cluster 4. Scientific Thinking			
H121	SC.4.N.1.6	Record keeping	1
H121	SC.5.N.1.3	Repetition	1
H121	SC.5.N.2.2	Repetition	1
H121	SC.5.N.2.1	Scientific process	1
H122	SC.5.N.1.1	Data collection	1
H122	SC.5.N.1.1	Experimental design	1
H125	SC.3.N.3.2	Understanding models	1
H221	NA	Predictable events	1
H321	NA	Application of science	1
H321	NA	Science and technology	1
H324	SC.5.N.1.1	Experimental design	2
H324	SC.5.N.1.1	Problem solving	1
H324	SC.5.N.1.1	Scientific process	1
		Reporting Cluster Point Total	**14**

Note: There are limitations in the use of these reports. To understand their use, please read "How should use of Content Focus Reports be limited?" provided on page 7 of this report.

2011 FCAT Science Grade 8			
Benchmark	**2008 Benchmark Alignment**	**Content Focus**	**Number of Points Possible**
Cluster 1. Physical and Chemical Sciences			
A131	SC.5.P.11.2	Properties of metals	1
A131	SC.8.P.8.3	Volume	1
A135	SC.8.P.9.2	Chemical changes	1
A231	SC.7.P.10.3	Wave properties	1
A232	SC.912.P.10.13	Static electricity	1
B131	SC.5.P.10.1	Forms of energy	1
B131	SC.7.P.10.2	Solar energy	1
B136	SC.7.P.10.3	Waves	1
B231	SC.7.P.11.2	Transfer of energy	1
C131	NA	Speed	1
C231	SC.6.P.13.3	Gravitational force	1
C236	SC.6.P.13.3	Net force	1
C237	SC.6.P.13.2	Gravity	1
		Reporting Cluster Point Total	**13**
Cluster 2. Earth and Space Sciences			
D131	SC.6.E.6.1	Changes to Earth's surface	1
D134	SC.6.E.6.1	Erosion	1
D135	NA	Earth's processes	1
D135	SC.7.E.6.2	Earth's processes	1
E131	SC.8.E.5.1	Planetary relationships	1
E131	SC.8.E.5.3	Planetary relationships	1
E131	SC.8.E.5.7	Planetary relationships	1
E131	SC.8.E.5.1	Relative distance	1
E134	SC.8.E.5.5	Origin of stars	1
E231	SC.8.E.5.2	Galaxies	1
E231	SC.8.E.5.4	Galaxies	1
		Reporting Cluster Point Total	**11**

2011 FCAT Science
Grade 8

Benchmark	2008 Benchmark Alignment	Content Focus	Number of Points Possible
Cluster 3. Life and Environmental Sciences			
F131	SC.6.L.14.5	Skeletal system	1
F132	SC.6.L.14.2	Cell as basic unit of life	1
F134	SC.6.L.14.1	Structural organization—animals	1
F136	SC.6.L.14.5	Cell structure and function	1
F137	NA	Animal behavior	1
F231	SC.912.L.16.17	Sexual reproduction	1
F232	SC.7.L.16.2	Punnett squares	1
F233	SC.7.L.17.1	Behavioral adaptations	1
F233	SC.5.L.17.1	Physical adaptations	1
G133	SC.6.L.15.1	Classification	1
G134	SC.7.L.17.1	Producers	1
G231	SC.4.E.6.3	Nonrenewable resources	1
G232	SC.912.L.17.8	Competition for resources	1
G232	SC.7.L.17.3	Population changes	1
		Reporting Cluster Point Total	**14**
Cluster 4. Scientific Thinking			
H131	SC.8.N.1.1	Scientific discoveries	1
H131	SC.7.N.2.1	Scientific discoveries	1
H132	SC.8.N.1.1	Experimental questions	1
H132	SC.8.E.5.10	Scientific discoveries	1
H134	SC.8.N.1.2	Reliability of data	1
H134	SC.5.N.1.3	Repetition	1
H134	SC.8.N.1.2	Replication	1
H135	SC.5.N.1.4	Controls	1
H135	SC.7.N.1.4	Roles of variables	1
H231	SC.8.N.1.1	Predictable events	2
H331	NA	Lab safety	1
H334	SC.8.E.5.10	Constraints on designs	1
		Reporting Cluster Point Total	**13**

Note: There are limitations in the use of these reports. To understand their use, please read "How should use of Content Focus Reports be limited?" provided on page 7 of this report.

2011 FCAT Science Grade 11			
Benchmark	**2008 Benchmark Alignment**	**Content Focus**	**Number of Points Possible**
Cluster 1. Physical and Chemical Sciences			
A141	SC.912.P.8.4	Electrical charge	1
A143	SC.912.P.12.11	Phase changes	1
A144	NA	Surface area and rate of diffusion	1
A242	SC.912.P.8.7	Elements	1
A243	SC.912.P.10.11	Nuclear fusion	1
A245	SC.912.P.8.5	Electron configuration	1
A246	SC.912.P.10.18	Wavelength	1
B141	SC.912.L.18.10	Energy conversions	1
B147	SC.912.P.10.3	Efficiency	1
C141	SC.912.P.12.2	Relative motion	1
C141	SC.912.P.12.2	Speed	1
C241	SC.912.P.12.4	Gravitational force	1
C245	SC.912.P.10.13	Electrical attraction	1
		Reporting Cluster Point Total	**13**
Cluster 2. Earth and Space Sciences			
D141	SC.912.E.7.4	Climate patterns	1
D141	SC.912.E.7.6	Hurricanes	1
D142	SC.912.E.6.3	Divergent boundary	1
D143	SC.912.E.6.2	Geological activity	1
D143	SC.7.E.6.3	Traces of life	1
D241	SC.912.L.17.8	Ecosystems	1
E141	SC.6.E.7.9	Conditions for life	1
E141	SC.912.E.5.6	Solar eclipse	1
E241	SC.912.E.5.3	Stellar evolution	2
E242	SC.912.E.5.2	Galaxies	1
E243	SC.912.E.5.11	Astronomical distance	1
		Reporting Cluster Point Total	**12**

2011 FCAT Science Grade 11			
Benchmark	**2008 Benchmark Alignment**	**Content Focus**	**Number of Points Possible**
Cluster 3. Life and Environmental Sciences			
F141	SC.912.L.17.2	Biochemical processes	1
F141	SC.912.L.18.10	Cellular respiration	1
F241	SC.912.L.16.1	Genotypes	1
F241	SC.912.L.16.2	Punnett squares	1
F242	SC.912.L.16.5	Proteins	1
F243	SC.912.L.15.15	Mutation	1
F243	SC.912.L.15.1	Structural adaptations—animals	1
F243	NA	Structural adaptations—plants	1
G141	SC.912.L.15.13	Predator/prey relationships	1
G141	SC.912.L.17.6	Symbiosis	1
G143	SC.912.E.7.1	Phosphorous cycling	1
G241	SC.912.E.7.1	Coal formation	1
G242	SC.912.L.17.8	Limiting factors	1
G242	SC.912.L.17.4	Succession	1
G243	SC.912.L.17.5	Natural selection	1
		Reporting Cluster Point Total	**15**
Cluster 4. Scientific Thinking			
H141	SC.912.N.1.1	Data analysis	1
H141	SC.912.N.1.1	Designing experiments	2
H141	SC.912.N.1.1	Role of controls	1
H142	SC.912.N.2.4	Changes to scientific theory	1
H142	SC.912.N.3.1	Changes to scientific theory	1
H147	SC.912.N.1.1	Ethical responsibilities	1
H241	SC.912.N.1.1	Scientific reasoning	1
H341	SC.912.N.3.5	Modeling	1
H342	NA	Technological advances	1
H343	SC.912.N.4.1	Public issues	1
		Reporting Cluster Point Total	**11**

What is content focus?
"Content focus" is a term that defines the specific content measured by each 2011 Florida Comprehensive Assessment Test® (FCAT) test item.

Why do these reports include content foci for "2008 Benchmark Alignment"?
These tables cross-reference the content foci from the 2011 FCAT with the Next Generation Sunshine State Standards (NGSSS) for Science, adopted in February 2008. Please note that since there is not a one-to-one correspondence between the Sunshine State Standards adopted in 1996 and the NGSSS, many of the 2008 benchmarks will not include the same content foci nor assess the same concepts as the Science Standards that were adopted in 1996.

The 2008 benchmark alignment column shows the benchmarks that most closely align with the test item. The test items in FCAT 2.0 and Florida End-of-Course (EOC) Assessments may not include the same content foci. Test items that assess the NGSSS will be worded differently and may have different content foci. In this report, the NA (Not Applicable) designation indicates that the item is no longer viable for FCAT 2.0 or EOC assessments because there is no corresponding NGSSS benchmark.

The 2008 benchmark alignment column does not reflect the composition of FCAT 2.0 or EOC assessments. The content foci in this report reflect the 2011 FCAT, not the NGSSS.

How should use of Content Focus Reports be limited?
Content Focus Reports should not be used to make decisions about instruction at the individual student level. Some reporting clusters have too few test items to report reliable or meaningful scores at the student level. While well-intended, providing remedial instruction in a specific reporting cluster may not be justified and may be an inefficient use of instructional time. In all cases, content focus data should not be used as sole indicators to determine remedial needs of students.

When interpreting content focus data, the following precautions and information should also be considered:

- The number of items in a reporting cluster may vary from one year to another. Consequently, users should not compare performance data such as mean percent correct.
- The number of items in a reporting cluster will vary by grade level. Consequently, users should not compare content area scores across grade levels.
- The difficulty of the items measuring each benchmark will vary from one year to the next. Consequently, users should not compare content area scores across years.
- The analysis is based on state-level data that are not intended to provide specific classroom, school, or district interpretations.
- Scale score values cannot accurately be determined using Content Focus Reports for a number of reasons. For instance, test scores are generated from students' performance on the entirety of the test, which accounts for the difficulty (also called cognitive complexity) of test items.