

	Spring 2013 Biology 1 End-of-Course (EOC) Assessment			
Next Generation Sunshine State Standards (NGSSS)				
NGSSS	Form 1	Number of		
Benchmark	Content Focus	Points Possible		
	Reporting Category 1. Molecular and Cellular Biology			
SC.912.L.14.1	Cell theory	1		
SC.912.L.14.3	Cell wall; Comparing plant and animal cells—chloroplasts; Comparing plant and animal cells—mitochondria; Comparing prokaryotic and eukaryotic cells	4		
SC.912.L.16.3	DNA replication; Gene mutation; Similarities in genetic codes	3		
SC.912.L.16.17	Comparing mitosis and meiosis; Cytokinesis; Meiosis I and II—prophase; Role of meiosis—asexual reproduction	4		
SC.912.L.18.1	Biochemical reactions and enzymes; Carbohydrates—primary function; Proteins—molecular structure	3		
SC.912.L.18.9	Role of ATP	1		
SC.912.L.18.12	Properties of water—cohesive behavior; Properties of water—solvent	2		
SC.912.N.1.1	Evaluating scientific explanations; Making inferences	2		
	Reporting Category Point Total	20		
	Reporting Category 2. Classification, Heredity, and Evolution			
SC.912.L.15.1	Evaluating scientific claims—evolution; Evidence for evolution—comparative embryology; Evidence for evolution—molecular biology	3		
SC.912.L.15.6	Distinguishing characteristics—Animalia; Distinguishing characteristics—Fungi; Distinguishing characteristics—Protista	3		
SC.912.L.15.8	Evaluating scientific claims—origin of life; Scientific explanations for life on Earth	2		
SC.912.L.15.13	Genetic drift; Inherited variations	2		
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance; Polygenic inheritance	3		
SC.912.N.1.1	Evaluating scientific investigations	1		
	Reporting Category Point Total	14		
	Reporting Category 3. Organisms, Populations, and Ecosystems			
SC.912.L.14.7	Cones; Plant leaves; Plant structures—reproduction; Plant structures—transpiration	4		
SC.912.L.14.52	Significance of pathogenic agents	1		
SC.912.L.16.10	Impact of biotechnology—environmental; Impact of biotechnology—individual	3		
SC.912.L.16.13	Human development fertilization to birth	1		
SC.912.L.17.5	Changes in ecosystems—succession; Consequences to biodiversity—human activity; Life in aquatic systems	5		
SC.912.L.17.9	Carbon cycle; Energy pathways—energy pyramid; Energy pathways—food web	3		
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	4		
SC.912.N.1.1	Designing scientific investigations	1		
	Reporting Category Point Total	22		



Spring 2013 Biology 1 End-of-Course (EOC) Assessment				
Next Generation Sunshine State Standards (NGSSS) Form 2				
NGSSS Benchmark	Content Focus	Number of Points Possible		
	Reporting Category 1. Molecular and Cellular Biology			
SC.912.L.14.1	Cell theory and advances in science	1		
SC.912.L.14.3	Cell membrane; Cell wall; Comparing plant and animal cells—cilia; Comparing plant and animal cells—mitochondria; Comparing prokaryotic and eukaryotic cells	5		
SC.912.L.16.3	DNA replication; Gene mutation	3		
SC.912.L.16.17	Comparing mitosis and meiosis; Meiosis I and II—prophase; Role of mitosis— asexual reproduction; Uncontrolled cell growth	4		
SC.912.L.18.1	Biochemical reactions and enzymes; Carbohydrates—primary function; Proteins—molecular structure	3		
SC.912.L.18.9	Photosynthesis and cellular respiration relationship	1		
SC.912.L.18.12	Properties of water—solvent	1		
SC.912.N.1.1	Evaluating scientific explanations	2		
	Reporting Category Point Total	20		
	Reporting Category 2. Classification, Heredity, and Evolution			
SC.912.L.15.1	Evaluating scientific claims—evolution; Evidence for evolution—comparative embryology; Trends in hominid evolution—skull shape	3		
SC.912.L.15.6	Distinguishing characteristics—Animalia; Distinguishing characteristics—Plantae; Understanding classification	3		
SC.912.L.15.8	Scientific explanations for life on Earth	2		
SC.912.L.15.13	Genetic drift; Increasing genetic variation	2		
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance; Predicting inherited patterns	3		
SC.912.N.1.1	Evaluating scientific investigations	1		
	Reporting Category Point Total	14		
	Reporting Category 3. Organisms, Populations, and Ecosystems			
SC.912.L.14.7	Plant leaves; Plant structures—reproduction; Plant structures—transpiration; Vascular tissue	4		
SC.912.L.14.52	Significance of genetic factors	1		
SC.912.L.16.10	Impact of biotechnology—environmental; Impact of biotechnology—individual	3		
SC.912.L.16.13	Human development fertilization to birth	1		
SC.912.L.17.5	Changes in ecosystems—succession; Consequences to biodiversity—human activity; Life in aquatic systems; Limiting factors	7		
SC.912.L.17.9	Energy pathways—food web	1		
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	4		
SC.912.N.1.1	Defending conclusions	1		
Reporting Category Point Total				



Spring 2013 Biology 1 End-of-Course (EOC) Assessment
Next Generation Sunshine State Standards (NGSSS)
Form 2

Form 3			
NGSSS Benchmark	Content Focus	Number of Points Possible	
	Reporting Category 1. Molecular and Cellular Biology		
SC.912.L.14.1	Cell theory and advances in science	1	
SC.912.L.14.3	Cell wall; Comparing plant and animal cells—cell wall; Comparing plant and animal cells—mitochondria; General structures—plant cells	4	
SC.912.L.16.3	DNA replication; Translation	2	
SC.912.L.16.17	Comparing mitosis and meiosis; Meiosis I and II—prophase; Role of meiosis— sexual reproduction; Uncontrolled cell growth	4	
SC.912.L.18.1	Biochemical reactions and enzymes; Carbohydrates—primary function; Proteins—molecular structure	3	
SC.912.L.18.9	Cellular respiration—aerobic; Role of ATP	2	
SC.912.L.18.12	Properties of water—cohesive behavior; Properties of water—solvent	2	
SC.912.N.1.1	Analyzing data; Evaluating scientific explanations	2	
	Reporting Category Point Total	20	
	Reporting Category 2. Classification, Heredity, and Evolution		
SC.912.L.15.1	Evaluating scientific claims—evolution; Evidence for evolution—comparative anatomy; Evidence for evolution—comparative embryology	3	
SC.912.L.15.6	Distinguishing characteristics—Animalia; Distinguishing characteristics—Fungi; Understanding classification	3	
SC.912.L.15.8	Conditions required for life; Scientific explanations for life on Earth	2	
SC.912.L.15.13	Genetic drift; Increasing genetic variation	2	
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance; Polygenic inheritance	3	
SC.912.N.1.1	Evaluating scientific investigations	1	
	Reporting Category Point Total	14	
	Reporting Category 3. Organisms, Populations, and Ecosystems		
SC.912.L.14.7	Plant leaves; Plant structures—reproduction; Vascular tissue	5	
SC.912.L.14.52	Significance of pathogenic agents	1	
SC.912.L.16.10	Impact of biotechnology—environmental	2	
SC.912.L.16.13	Female reproductive organs	1	
SC.912.L.17.5	Changes in ecosystems—climate change; Changes in ecosystems— succession; Consequences to biodiversity—human activity; Life in aquatic systems; Limiting factors	6	
SC.912.L.17.9	Energy pathways—food web	2	
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	4	
SC.912.N.1.1	Evaluating scientific investigations	1	
	Reporting Category Point Total	22	



Spring 2013 Biology 1 End-of-Course (EOC) Assessment				
Next Generation Sunshine State Standards (NGSSS)				
Form 4 NGSSS Number of				
Benchmark	Content Focus	Number of Points Possible		
	Reporting Category 1. Molecular and Cellular Biology			
SC.912.L.14.1	Evaluating scientific claims—cell theory	1		
SC.912.L.14.3	Cell wall; Comparing plant and animal cells—mitochondria; Comparin prokaryotic and eukaryotic cells	3		
SC.912.L.16.3	DNA replication; Gene mutation	3		
SC.912.L.16.17	Comparing mitosis and meiosis; Meiosis I and II—prophase; Mitosis—anaphase	3		
SC.912.L.18.1	Biochemical reactions and enzymes; Carbohydrates—primary function; Proteins—molecular structure	3		
SC.912.L.18.9	Photosynthesis—reactants	1		
SC.912.L.18.12	Properties of water—cohesive behavior; Properties of water—solvent	2		
SC.912.N.1.1	Defending conclusions; Designing scientific investigations; Evaluating scientific explanations; Making inferences	4		
	Reporting Category Point Total	20		
	Reporting Category 2. Classification, Heredity, and Evolution			
SC.912.L.15.1	Evaluating scientific claims—evolution; Evidence for evolution—biogeography; Evidence for evolution—comparative embryology; Evidence for evolution— fossil record	4		
SC.912.L.15.6	Distinguishing characteristics—Animalia; Distinguishing characteristics—Eukarya; Understanding classification	3		
SC.912.L.15.8	Scientific explanations for life on Earth	2		
SC.912.L.15.13	Genetic drift	1		
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance; Sex-linked inheritance	3		
SC.912.N.1.1	Evaluating scientific investigations	1		
	Reporting Category Point Total	14		
	Reporting Category 3. Organisms, Populations, and Ecosystems			
SC.912.L.14.7	Dermal tissue; Plant leaves; Plant roots; Plant structures—reproduction	4		
SC.912.L.14.52	Significance of pathogenic agents	1		
SC.912.L.16.10	Impact of biotechnology—environmental; Impact of biotechnology—society	3		
SC.912.L.16.13	Female reproductive organs; Male reproductive organs	2		
SC.912.L.17.5	Changes in ecosystems—succession; Consequences to biodiversity—human activity; Consequences to biodiversity—nonnative species; Life in aquatic systems	5		
SC.912.L.17.9	Energy pathways—food web	2		
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	4		
SC.912.N.1.1	Evaluating scientific investigations	1		
	Reporting Category Point Total	22		



## What is content focus?

"Content focus" is a term that defines the specific content measured by each Spring 2013 Biology 1 EOC Assessment test item.

The Next Generation Sunshine State Standards (NGSSS) benchmarks and content foci assessed on the Spring 2013 Biology 1 EOC Assessment are not predictive of future Biology 1 EOC Assessments.

## What cautions should be considered when using Content Focus Reports?

Content Focus Reports should not be used to make decisions about instruction at the individual student level. Some reporting categories 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 category may not be justified and may be an inefficient use of instructional time. Content focus data should not be used as sole indicators to determine remedial needs of students.

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

- The number of items in a reporting category may vary from one year to another. Consequently, users should not compare performance data such as mean percent correct.
- Mean content area scores for each test form might be different; therefore, users should not compare content area scores across test forms.
- 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.

## How may content area scores be used?

Guidance on how content area scores may be used by schools and districts is provided on pages 10-11 of <u>Understanding Florida End-of-Course Assessment Reports, Spring 2013</u> (PDF).