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2012 Biology 1 End-of-Course (EOC) Assessment Form 1		
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; Comparing plant and animal cells—mitochondria; General structures—eukaryotic cells	3
SC.912.L.16.3	DNA replication; Gene mutation; Translation	3
SC.912.L.16.17	Cytokinesis; Role of meiosis—sexual reproduction; Uncontrolled cell growth	3
SC.912.L.18.1	Biochemical reactions and enzymes; Nucleic acids—primary function; Proteins—molecular structure	3
SC.912.L.18.9	Cellular respiration—anaerobic; Cellular respiration—products; Role of ATP	3
SC.912.L.18.12	Properties of water—moderating temperature	1
SC.912.N.1.1	Evaluating scientific explanations; Evaluating scientific investigations; Making inferences	3
Reporting Category Point Total		20
Reporting Category 2. Classification, Heredity, and Evolution		
SC.912.L.15.1	Evidence for evolution—comparative embryology; Evidence for evolution—fossil record; Evidence for evolution—molecular biology	4
SC.912.L.15.6	Changes in organism classification; Distinguishing characteristics—Eukarya	2
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; Inherited variations	3
SC.912.L.16.1	Codominance; Incomplete dominance	2
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	Flowers; Plant roots; Plant structures—photosynthesis	3
SC.912.L.14.52	Significance of pathogenic agents	1
SC.912.L.16.10	Impact of biotechnology—environmental; Impact of biotechnology—society	2
SC.912.L.16.13	Female reproductive organs; Human development fertilization to birth	2
SC.912.L.17.5	Changes in ecosystems—seasonal variations; Changes in ecosystems—succession; Consequences to biodiversity—climate change; Consequences to biodiversity—nonnative species; 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	Analyzing data; Evaluating scientific investigations	2
Reporting Category Point Total		22

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2012 Biology 1 End-of-Course (EOC) Assessment 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	Comparing plant and animal cells—cell wall; General structures—eukaryotic cells; General structures—plant cells	3
SC.912.L.16.3	DNA replication; Gene mutation; Transcription	3
SC.912.L.16.17	Comparing mitosis and meiosis; Cytokinesis; Role of meiosis—asexual reproduction; Uncontrolled cell growth	4
SC.912.L.18.1	Biochemical reactions and enzymes; Lipids—primary function; Nucleic acids—primary function	3
SC.912.L.18.9	Cellular respiration—anaerobic; Role of ATP	2
SC.912.L.18.12	Properties of water—moderating temperature	1
SC.912.N.1.1	Analyzing data; Evaluating scientific explanations; Evaluating scientific investigations	3
Reporting Category Point Total		20
Reporting Category 2. Classification, Heredity, and Evolution		
SC.912.L.15.1	Evidence for evolution—fossil record; Evidence for evolution—molecular biology	3
SC.912.L.15.6	Changes in organism classification; Distinguishing characteristics—Animalia; Understanding classification	3
SC.912.L.15.8	Conditions required for life; Scientific explanations for life on Earth	2
SC.912.L.15.13	Increasing genetic variation; Inherited variations	2
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance; Incomplete dominance	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; Flowers; Plant leaves; 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	2
SC.912.L.16.13	Female reproductive organs; Human development fertilization to birth	2
SC.912.L.17.5	Changes in ecosystems—seasonal variations; Changes in ecosystems—succession; Consequences to biodiversity—climate change; Consequences to biodiversity—human activity; consequences to biodiversity—nonnative species; Life in aquatic systems; Limiting factors	7
SC.912.L.17.9	Energy pathways—energy pyramid	1
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	3
SC.912.N.1.1	Analyzing data; Evaluating scientific investigations	2
Reporting Category Point Total		22

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2012 Biology 1 End-of-Course (EOC) Assessment 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 membrane; Comparing plant and animal cells—cell wall; General structures—eukaryotic cells	3
SC.912.L.16.3	DNA replication; Gene mutation; Translation	3
SC.912.L.16.17	Cytokinesis; Meiosis I and II—prophase; Role of mitosis—asexual reproduction	3
SC.912.L.18.1	Biochemical reactions and enzymes; Carbohydrates—primary function; Nucleic acids—primary function	3
SC.912.L.18.9	Cellular respiration—anaerobic	1
SC.912.L.18.12	Properties of water—moderating temperature; 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—fossil record; Evidence for evolution—molecular biology	3
SC.912.L.15.6	Changes in organism classification; Distinguishing characteristics— Plantae; 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; Increasing genetic variation; Inherited variations	3
SC.912.L.16.1	Analyzing patterns of inheritance; Incomplete dominance	2
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; Flowers; Plant leaves; Plant structures—transpiration	4
SC.912.L.14.52	Significance of pathogenic agents	1
SC.912.L.16.10	Impact of biotechnology—society	2
SC.912.L.16.13	Female reproductive organs; Human development fertilization to birth	2
SC.912.L.17.5	Changes in ecosystems—seasonal variations; Changes in ecosystems—succession; Consequences to biodiversity—climate change; Consequences to biodiversity—human activity; Life in aquatic systems; Limiting factors	6
SC.912.L.17.9	Energy pathways—energy pyramid	2
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	3
SC.912.N.1.1	Analyzing data; Evaluating scientific investigations	2
Reporting Category Point Total		22

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2012 Biology 1 End-of-Course (EOC) Assessment Form 4		
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; General structures—eukaryotic cells	2
SC.912.L.16.3	DNA replication; Gene mutation; Translation	3
SC.912.L.16.17	Comparing mitosis and meiosis; Cytokinesis; Meiosis I and II—prophase; Role of mitosis—asexual reproduction	4
SC.912.L.18.1	Biochemical reactions and enzymes; Lipids—primary function; Nucleic acids—primary function	3
SC.912.L.18.9	Cellular respiration—anaerobic; Photosynthesis and cellular respiration relationship; Role of ATP	3
SC.912.L.18.12	Properties of water—moderating temperature; Properties of water—solvent	2
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	Evidence for evolution—comparative anatomy; Evidence for evolution—fossil record; Evidence for evolution—molecular biology; Trends in hominid evolution—jaw size	4
SC.912.L.15.6	Changes in organism classification; Distinguishing characteristics—Plantae	2
SC.912.L.15.8	Scientific explanations for life on Earth	2
SC.912.L.15.13	Inherited variations; Overproduction of offspring	3
SC.912.L.16.1	Analyzing patterns of inheritance; Codominance	2
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	Flowers; Plant structures—photosynthesis; Plant structures reproduction	3
SC.912.L.14.52	Significance of pathogenic agents	1
SC.912.L.16.10	Impact of biotechnology—environmental; Impact of biotechnology—society	2
SC.912.L.16.13	Female reproductive organs; Human development fertilization to birth	2
SC.912.L.17.5	Changes in ecosystems—seasonal variations; Changes in ecosystems—succession; Consequences to biodiversity—climate change; Consequences to biodiversity—human activity; Life in aquatic systems	5
SC.912.L.17.9	Carbon cycle; Energy pathways—energy pyramid	3
SC.912.L.17.20	Human impact on environmental systems; Using renewable resources	4
SC.912.N.1.1	Analyzing data; Evaluating scientific investigations	2
Reporting Category Point Total		22

What is content focus?

"Content focus" is a term that defines the specific content measured by each 2012 Biology 1 EOC Assessment test item.

The Next Generation Sunshine State Standards (NGSSS) benchmarks and content foci assessed on the 2012 Biology 1 EOC Assessment are not predictive of future Biology 1 EOC Assessments.

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 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 precautions 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.