

The Biology EOC

- The Biology 1 EOC assessment is delivered via computer-based test.
- The assessment is given in one 160 session with a 10 minute break after the first 80 minutes. Any student not finished by the end of the 160 minutes may continue working but, the test must be completed within the same school day.
- There are multiple forms of the assessment. There is a maximum of 66 multiple-choice items on each test form.
- Students are provided with four-page, hard-copy work folders to use as scratch paper. Used folders are secure materials that must be turned in after testing.

Biology EOC Study Guide

This Study Guide was developed by Volusia County teachers to help our students prepare for the Florida Biology End-Of-Course Exam. The Florida EOC is broken down by the following Measurement Topics (MT)...

Molecular and Cell Biology	Classification, Heredity, Evolution	Organisms, Populations, Ecosystems
35% of EOC	25% of EOC	40% of EOC
<ul style="list-style-type: none"> • The Nature of Science • Theories, Laws, Models • Properties of Water, Macromolecules, Enzymes • The Cell Theory • Cell Structure & Function • Cell Membrane & Transport • Photosynthesis & Cellular Respiration • DNA, RNA, Protein Synthesis • Mitosis, Meiosis 	<ul style="list-style-type: none"> • The Nature of Science • Theories, Laws, Models • Taxonomy • Genetics • Origins of Life • Evolution • Mechanisms of Change 	<ul style="list-style-type: none"> • The Nature of Science • Theories, Laws, Models • Energy in Ecosystems • Population Dynamics • Human Impact on the Environment • Plants • Biotechnology • Fetal Development • Parts of the Brain • Cardiovascular System • Immune System

UNIT 1: CELL THEORY
Practice Test

STUDENT:			TEACHER:			
#	BENCHMARK	CONTENT FOCUS	MY ANSWER	CORRECT	INCORRECT	ADDITIONAL HELP NEEDED
1	SC.912.L.14.1	Cell Theory				
2	SC.912.L.14.1	Cell Theory				
3	SC.912.L.14.1	Cell Theory				
4	SC.912.L.14.1	Cell Theory				
5	SC.912.L.14.3	Cell Structure & Function				
6	SC.912.L.14.3	Cell Structure & Function				
7	SC.912.L.14.3	Cell Structure & Function				
8	SC.912.L.14.3	Cell Structure & Function				
9	SC.912.L.14.3	Cell Structure & Function				
10	SC.912.L.14.3	Cell Structure & Function				
11	SC.912.L.14.3	Cell Structure & Function				
12	SC.912.L.14.3	Cell Structure & Function				
13	SC.912.L.14.3	Cell Structure & Function				
14	SC.912.L.14.3	Cell Structure & Function				
15	SC.912.L.14.3	Cell Structure & Function				
16	SC.912.L.14.3	Cell Structure & Function				
17	SC.912.L.14.3	Cell Structure & Function				
18	SC.912.L.14.3	Cell Structure & Function				
19	SC.912.L.14.3	Cell Structure & Function				
20	SC.912.L.14.3	Cell Structure & Function				
21	SC.912.L.14.3	Cell Structure & Function				
22	SC.912.L.14.3	Cell Structure & Function				
23	SC.912.L.14.3	Cell Structure & Function				
24	SC.912.L.14.3	Cell Structure & Function				
25	SC.912.L.14.2	Cell Structure & Function				
26	SC.912.L.14.2	Cell Structure & Function				
27	SC.912.L.14.3	Cell Structure & Function				
28	SC.912.L.14.3	Cell Structure & Function				
29	SC.912.L.14.3	Cell Structure & Function				
30	SC.912.L.14.2	Cell Structure & Function				
31	SC.912.L.14.2	Cell Structure & Function				
32	SC.912.L.14.2	Cell Structure & Function				
33	SC.912.L.14.2	Cell Structure & Function				
34	SC.912.L.14.2	Cell Structure & Function				
35	SC.912.N.1.1	Nature of Science				
36	SC.912.N.1.1	Nature of Science				
37	SC.912.N.1.1	Nature of Science				
38	SC.912.N.1.1	Nature of Science				

**UNIT 2: Macromolecule
Sample Questions**

STUDENT:			TEACHER:			
#	BENCHMARK	CONTENT FOCUS	My Answer	Correct	Incorrect	Additional Help Needed
39	SC.912.L.18.12	Water				
40	SC.912.L.18.12	Water				
41	SC.912.L.18.12	Water				
42	SC.912.L.14.12	Water				
43	SC.912.L.18.12	Water				
44	SC.912.L.18.12	Water				
45	SC.912.L.18.12	Water				
46	SC.912.L.18.12	Water				
47	SC.912.L.18.12	Water				
48	SC.912.L.18.1	Macromolecules				
49	SC.912.L.18.1	Macromolecules				
50	SC.912.L.18.1	Macromolecules				
51	SC.912.L.18.1	Macromolecules				
52	SC.912.L.18.1	Macromolecules				
53	SC.912.L.18.1	Macromolecules				
54	SC.912.L.18.1	Macromolecules				
55	SC.912.L.18.1	Macromolecules				
56	SC.912.L.18.1	Macromolecules				
57	SC.912.L.18.1	Macromolecules				
58	SC.912.L.18.1	Macromolecules				
59	SC.912.L.18.11	Macromolecules				
60	SC.912.L.18.11	Macromolecules				
61	SC.912.L.18.11	Enzymes				
62	SC.912.L.18.11	Enzymes				
63	SC.912.L.18.11	Enzymes				
64	SC.912.L.18.11	Enzymes				
65	SC.912.L.18.11	Enzymes				
66	SC.912.L.18.11	Enzymes				
67	SC.912.L.18.11	Enzymes				
68	SC.912.L.18.9	Enzymes				
69	SC.912.L.18.9	Enzymes				
70	SC.912.L.18.9	Photosynthe. & Cell respiration				
71	SC.912.L.18.9	Photosynthe. & Cell respiration				
72	SC.912.L.18.9	Photosynthe. & Cell respiration				
73	SC.912.L.18.9	Photosynthe. & Cell respiration				
74	SC.912.L.18.7	Photosynthesis				
75	SC.912.L.18.7	Photosynthesis				
76	SC.912.L.18.7	Photosynthesis				
77	SC.912.L.18.7	Photosynthesis				

#	BENCHMARK	CONTENT FOCUS	My Answer	Correct	Incorrect	Additional Help Needed
78	SC.912.L.18.7	Photosynthesis				
79	SC.912.L.18.7	Photosynthesis				
80	SC.912.L.18.7	Photosynthesis				
81	SC.912.L.18.8	Photosynthesis				
82	SC.912.L.18.8	Photosynthesis				
83	SC.912.L.18.10	Cellular Respiration				
84	SC.912.L.18.10	Cellular Respiration				
85	SC.912.L.18.10	Cellular Respiration				
86	SC.912.L.18.10	ATP				
87	SC.912.L.18.10	ATP				
88	SC.912.N.1.1.1	Nature of Science				

UNIT 3: CLASSIFICATION AND PLANTS**Sample Questions**

STUDENT:

TEACHER:

#	BENCHMARK	CONTENT FOCUS	My Answer	Correct	Incorrect	Additional Help Needed
89	SC.912.L.15.6	Classification				
90	SC.912.L.15.6	Classification				
91	SC.912.L.15.6	Classification				
92	SC.912.L.15.6	Classification				
93	SC.912.L.15.6	Classification				
94	SC.912.L.14.7	Plants				
95	SC.912.L.14.7	Plants				
96	SC.912.L.14.7	Plants				
97	SC.912.L.14.7	Plants				
98	SC.912.L.14.7	Plants				
99	SC.912.L.14.7	Plants				
100	SC.912.L.14.7	Plants				
101	SC.912.L.14.7	Plants				
102	SC.912.L.14.7	Plants				
103	SC.912.L.14.7	Plants				
104	SC.912.L.14.7	Plants				
105	SC.912.N.1.1	Nature of Science				

**UNIT 4: ECOLOGY
SAMPLE QUESTIONS**

STUDENT:			TEACHER:			
#	BENCHMARK	CONTENT FOCUS	MY ANSWER	CORRECT	INCORRECT	ADDITIONAL HELP NEEDED
106	SC.912.L.17.9	Ecology				
107	SC.912.L.17.9	Ecology				
108	SC.912.L.17.9	Ecology				
109	SC.912.L.17.9	Ecology				
110	SC.912.L.17.9	Ecology				
111	SC.912.L.17.9	Ecology				
112	SC.912.L.17.9	Ecology				
113	SC.912.L.17.9	Ecology				
114	SC.912.L.17.9	Ecology				
115	SC.912.L.17.9	Ecology				
116	SC.912.L.17.9	Ecology				
117	SC.912.L.17.2	Abiotic Aquatic Factors				
118	SC.912.L.17.5	Interdependence & Pop				
119	SC.912.L.17.5	Interdependence & Pop				
120	SC.912.L.17.5	Interdependence & Pop				
121	SC.912.L.17.5	Interdependence & Pop				
122	SC.912.L.17.5	Interdependence & Pop				
123	SC.912.L.17.5	Interdependence & Pop				
124	SC.912.L.17.5	Interdependence & Pop				
125	SC.912.L.17.5	Population				
126	SC.912.L.17.5	Population				
127	SC.912.L.17.5	Population				
128	SC.912.L.17.5	Population				
129	SC.912.L.17.4	Changes in an Ecosystem				
130	SC.912.L.17.4	Changes in an Ecosystem				
131	SC.912.L.17.4	Changes in an Ecosystem				
132	SC.912.L.17.4	Changes in an Ecosystem				
133	SC.912.L.17.20	Human Impact				
134	SC.912.L.17.20	Human Impact				
135	SC.912.L.17.20	Human Impact				
136	SC.912.L.17.20	Human Impact				
137	SC.912.L.17.20	Human Impact				
138	SC.912.L.17.20	Human Impact				
139	SC.912.L.17.20	Human Impact				
140	SC.912.L.17.20	Human Impact				
141	SC.912.L.17.20	Human Impact				
142	SC.912.L.17.20	Human Impact				
143	SC.912.L.17.20	Human Impact				
144	SC.912.E.7.1	Carbon and Water Cycle				
145	SC.912.E.7.1	Carbon and Water Cycle				
146	SC.912.E.7.1	Carbon and Water Cycle				
147	SC.912.E.7.1	Carbon and Water Cycle				

**UNIT 5: DNA, Mitosis, Meiosis and Genetics Sample Questions
Answer Key**

STUDENT:			TEACHER:			
#	BENCHMARK	CONTENT FOCUS	My Answer	Correct	Incorrect	Need Additional Help
148	SC.912.L.16.1	Mendel's Law of Segregation				
149	SC.912.L.16.1	Mendel's Law of Segregation				
150	SC.912.L.16.1	Mendel's Law of Segregation				
151	SC.912.L.16.1	Mendel's Law of Segregation				
152	SC.912.L.16.1	Mendel's Law of Segregation				
153	SC.912.L.16.1	Mendel's Law of Segregation				
154	SC.912.L.16.1	Mendel's Law of Segregation				
155	SC.912.L.16.1	Mendel's Law of Segregation				
156	SC.912.L.16.1	Mendel's Law of Segregation				
157	SC.912.L.16.1	Mendel's Law of Segregation				
158	SC.912.L.16.1	Mendel's Law of Segregation				
159	SC.912.L.16.3	DNA				
160	SC.912.L.16.3	DNA				
161	SC.912.L.16.3	DNA				
162	SC.912.L.16.3	DNA				
163	SC.912.L.16.3	DNA				
164	SC.912.L.16.3	DNA				
165	SC.912.L.16.3	DNA				
166	SC.912.L.16.3	DNA				
167	SC.912.L.16.3	DNA				
168	SC.912.L.16.3	DNA				
169	SC.912.L.16.3	DNA				
170	SC.912.L.16.3	DNA				
171	SC.912.L.16.3	DNA				
172	SC.912.L.16.3	DNA				
173	SC.912.L.16.17	Mitosis vs. Meiosis				
174	SC.912.L.16.17	Mitosis vs. Meiosis				
175	SC.912.L.16.17	Mitosis vs. Meiosis				
176	SC.912.L.16.17	Mitosis vs. Meiosis				
177	SC.912.L.16.17	Mitosis vs. Meiosis				
178	SC.912.L.16.17	Mitosis vs. Meiosis				
179	SC.912.L.16.17	Mitosis vs. Meiosis				
180	SC.912.L.16.17	Mitosis vs. Meiosis				
181	SC.912.L.16.17	Mitosis vs. Meiosis				
182	SC.912.L.16.17	Mitosis vs. Meiosis				
183	SC.912.L.16.17	Mitosis vs. Meiosis				

UNIT 6: Evolution and Human Health
Sample Questions

STUDENT:			TEACHER:			
#	BENCHMARK	CONTENT FOCUS	MY ANSWER	CORRECT	INCORRECT	ADDITIONAL HELP NEEDED
184	SC.912.L.16.10	Biotechnology				
185	SC.912.L.16.10	Biotechnology				
186	SC.912.L.16.10	Biotechnology				
187	SC.912.L.16.10	Biotechnology				
188	SC.912.L.16.10	Biotechnology				
189	SC.912.L.14.26	Parts of the Brain				
190	SC.912.L.14.26	Parts of the Brain				
191	SC.912.L.15.1	Evolution				
192	SC.912.L.15.1	Evolution				
193	SC.912.L.15.1	Evolution				
194	SC.912.L.15.1	Evolution				
195	SC.912.L.15.1	Evolution				
196	SC.912.L.15.1	Evolution				
197	SC.912.I.15.8	Origin of Life				
198	SC.912.I.15.8	Origin of Life				
199	SC.912.I.15.8	Origin of Life				
200	SC.912.I.15.8	Origin of Life				
201	SC.912.I.15.13	Natural Selection				
202	SC.912.I.15.13	Natural Selection				
203	SC.912.I.15.13	Natural Selection				
204	SC.912.I.15.13	Natural Selection				
205	SC.912.I.15.13	Natural Selection				
206	SC.912.I.15.13	Natural Selection				
207	SC.912.I.15.13	Natural Selection				
208	SC.912.I.15.13	Natural Selection				
209	SC.912.I.16.13	Reproduction				
210	SC.912.I.16.13	Reproduction				
211	SC.912.I.16.13	Reproduction				
212	SC.912.I.16.13	Reproduction				
213	SC.912.I.16.13	Reproduction				
214	SC.912.I.16.13	Reproduction				
215	SC.912.I.16.13	Reproduction				
216	SC.912.I.16.13	Reproduction				
217	SC.912.I.16.13	Reproduction				
218	SC.912.I.16.13	Reproduction				
219	SC.912.I.16.13	Reproduction				
220	SC.912.I.14.36	Blood Flow				
221	SC.912.I.14.36	Blood Flow				
222	SC.912.I.14.36	Blood Flow				
223	SC.912.I.14.36	Immune				
224	SC.912.I.14.52	Immune				
225	SC.912.I.14.52	Immune				