**Biology Regular and Honors Pacing, Quarter 3**

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| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| **Jan 20 MLK DAY** | **21 Non-student / Teacher work day** | 22  SC.912.L.16.9  What is the universal genetic code?  Why do almost all organisms have the same genetic code? | 23  SC.912.L.16.3  How does DNA replicate? | 24  SC.912.L.16.3  How does DNA replicate? |
| 27  SC.912.L.16.5  How are proteins made from DNA?  Required Topic Lab | 28  SC.912.L.16.5  How are proteins made from DNA?  Required Topic Lab  **Biology JIT Training @ 5pm at Middleton** | 29  SC.912.L.16.4  What is a mutation? When does a mutation result in a phenotypic change? (Mutation activity suggested) | 30  SC.912.L.16.4  When does a mutation result in a phenotypic change? | 31  SC.912.L.16.8  What is cancer? |
| Feb 3  SC.912.L.16.10  What is biotechnology and some of its uses?  What are some of the impacts, positive and negative, of the use of biotechnology including societal, medical, and environmental? (USE CIS) | 4  SC.912.L.16.10  What is biotechnology and some of its uses?  What are some of the impacts, positive and negative, of the use of biotechnology including societal, medical, and environmental? (USE CIS) | 5  Unit 6 (Molecular Genetics) Assessment | 6  SC.912.L.15.13  What is the theory of evolution by natural selection?  Integrate NOS | **7 Fair Day** |
| 10  SC.912.L.15.13  Under what conditions does natural selection occur? Required Topic Lab  Integrate NOS | 11  SC.912.L.15.13  Under what conditions does natural selection occur? Required Topic Lab  Integrate NOS | 12  SC.912.L.15.13  Under what conditions does natural selection occur? Required Topic Lab  Integrate NOS  (CERR) | 13  SC.912.L.15.14  How do genetic drift and gene flow contribute to changes in the gene pool? | 14  SC.912.L.15.14  What is speciation and how do new species form? |
| **EOC Mini Deadline** |
| 17  SC.912.L.15.14  What is speciation and how do new species form?  SC.912.L.15.3  How does extinction influence speciation? | 18  SC.912.L.15.15  How is evolution defined in genetic terms?  What causes a populations’ gene pool to change? | 19  SC.912.L.15.1  What are the main lines of scientific evidence that support the scientific theory of evolution by natural selection?  Integrate NOS | 20  SC.912.L.15.1  What are the main lines of scientific evidence that support the scientific theory of evolution by natural selection?  What is convergent evolution?  SC.912.L.15.2  How is molecular evidence used to trace the process of evolution? (1/2 day for Bio H) | 21  SC.912.L.15.10  What are some basic trends in hominid evolution? |
| **24**  **FCAT Writing** | **25**  **FCAT Writing** | 26  **School-based SAT**  SC.912.L.15.10  What is the trend in cranial capacity from our earliest ancestors to H. sapiens.  How has language and tool use evolved in relation to brain size? Integrate NOS | 27  SC.912.L.15.2  What conditions are required for a population to be in Hardy-Weinberg equilibrium and why are these conditions not likely to appear in nature?  How does the Hardy-Weinberg equation predict population genotypes from the observed phenotypes? | 28  Unit 7 (Evolution) Assessment |
| Remediation and Enrichment | Remediation and Enrichment  **Biology JIT Training @ 5pm at Middleton** |
| March 3  SC.912.L.15.8  What are the scientific hypotheses about how and where life began on earth?  Integrate NOS | 4  SC.912.L.15.8  What situations and conditions contributed to the origin of life on Earth.  How has the research into biogenesis progressed to provide evidence for the theories? Integrate NOS | 5  SC.912.L.14.5  How does the endosymbiont theory explain the origin of eukaryotic cells?  SC.912.L.15.4  How are organisms classified based on evolutionary relationships?  Required Topic Lab | 6  SC.912.L.15.6  What are the distinguishing characteristics of the Domains?  Integrate NOS | 7  SC.912.L.15.6  Why are the distinguishing characteristics of each of the kingdoms in the six kingdom classification system?  Integrate NOS |
| **Strawberry Festival** | **EOC Mini Deadline** |
| 10 **Spring Break** | 11 **Spring Break** | 12 **Spring Break** | 13 **Spring Break** | 14 **Spring Break** |
| 17  SC.912.L.15.5  How were organisms classified in the past, and why did this change?  **FORM 3** | 18  Unit 8 (Classification) Assessment  **FORM 3** | 19  SC.912.L.14.53  What are the major plant divisions and the major characteristics that define each division?  What are the evolutionary benefits of each plant group?  **FORM 3** | 20  SC.912.L.14.7  What are the primary functions of the main tissue systems (meristematic, ground, dermal, and vascular tissues) of a seed plant and how are they organized?  **Biology JIT Training @ 5pm at Middleton**  **FORM 3** | 21  SC.912.L.14.7  How do the structure and function of roots, stems, and leaves help a plant carry out life processes?  **FORM 3** |
| 24  SC.912.L.14.7  How do the structure and function of roots, stems, and leaves help a plant carry out life processes?  (CERR)  **FORM 3** | 25  SC.912.L.14.7  What role do the following structures (cambium, guard cells, phloem, root hairs, root cap, stomata, xylem) play in the processes of photosynthesis, cellular respiration, transpiration, growth, and reproduction?  **FORM 3** | 26  SC.912.L.14.7  What role do the following structures (cambium, guard cells, phloem, root hairs, root cap, stomata, xylem) play in the processes of photosynthesis, cellular respiration, transpiration, growth, and reproduction?  **FORM 3** | 27  SC.912.L.14.7  What are the structures (seed, stamen, pistil, ovary, petals, sperm, egg, sepal, filament, anther, style, and stigma) and functions of flower structures?  Required Topic Lab  **FORM 3** | 28 **END QUARTER 3**  Unit 9 (Plants) Assessment  **FORM 3** |

**Biology Regular and Honors Pacing, Quarter 4**

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| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** |
| 31  SC.912.L.14.26  What are the major parts of the brain?  **FORM 3** | April 1  SC.912.L.14.36  What are the structures and functions of the cardiovascular system?  How does blood flow through the cardiovascular system?  **FORM 3** | 2  SC.912.L.14.36  What is blood pressure and what are normal blood pressure values?  (Activity suggested)  **FORM 3** | 3  SC.912.L.14.36  How does blood flow through the cardiovascular system?  What is blood pressure and what are normal blood pressure values?  **FORM 3** | 4  SC.912.L.14.36  What biologic and lifestyle factors affect blood flow through the cardiovascular system? (CIS Model)  **FORM 3** |
| 7  SC.912.L.14.36  What biologic and lifestyle factors affect blood flow through the CVS (CIS Model) | 8  SC.912.L.16.13  What are the structures and functions of the male and female reproductive systems? | 9  SC.912.L.16.13  What are the structures and functions of the male and female reproductive systems? | 10  SC.912.L.16.13  What is the process of fertilization from ovulation to implantation? | 11  SC.912.L.16.13  What is the process of human development from fertilization to birth? |
| 14  SC.912.L.14.52  What are the basic functions of the specific and nonspecific immune responses? | 15  SC.912.L.14.52  How does the body defend against infection? | 16  SC.912.L.14.52  How does the body defend against infection? | 17  SC.912.L.14.52  How do humans prevent and fight the spread of disease? | 18 **Non-student Day** |
| 21  SC.912.L.14.6  How do genetic, environmental and pathogenic factors affect individual and public health? | **22**  **FCAT 10** | **23**  **FCAT 10** | 24  SC.912.L.14.36  Dissection (Frog or Fetal Pig) | 25  Unit 10 (Human Body) Assessment |
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| 28  **Review** | **29**  **FCAT 9** | **30**  **FCAT 9** | May 1  **Review** | 2  **Review** |
| **Review** | **Review** |
| 5  **Biology EOC** | 6  **Biology EOC** | 7  **Biology EOC** | 8  **Biology EOC** | 9  **Biology EOC** |
| 12  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 13  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 14  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 15  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 16  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals |
| 19  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 20  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 21  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 22  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 23  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals |
| **26 Memorial Day** | 27  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 28  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 29  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals | 30  Accountable Instructional Ideas:  Prepare for chemistry  Forensic Science  Animals |
| 2  **EXAM WEEK** | 3  **EXAM WEEK** | 4  **EXAM WEEK** | 5  **EXAM WEEK** | 6 Last Day of School  **EXAM WEEK** |