**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** | 22SC.912.L.16.9 What is the universal genetic code? Why do almost all organisms have the same genetic code?  | 23SC.912.L.16.3How does DNA replicate?  | 24SC.912.L.16.3How does DNA replicate?  |
| 27SC.912.L.16.5How are proteins made from DNA? Required Topic Lab | 28SC.912.L.16.5How are proteins made from DNA?Required Topic Lab**Biology JIT Training @ 5pm at Middleton** | 29SC.912.L.16.4What is a mutation? When does a mutation result in a phenotypic change? (Mutation activity suggested) | 30SC.912.L.16.4When does a mutation result in a phenotypic change? | 31 SC.912.L.16.8What is cancer?  |
| Feb 3SC.912.L.16.10What 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)  | 4SC.912.L.16.10What 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) | 5Unit 6 (Molecular Genetics) Assessment | 6SC.912.L.15.13What is the theory of evolution by natural selection? Integrate NOS | **7 Fair Day** |
| 10SC.912.L.15.13Under what conditions does natural selection occur? Required Topic LabIntegrate NOS | 11SC.912.L.15.13Under what conditions does natural selection occur? Required Topic LabIntegrate NOS | 12SC.912.L.15.13Under what conditions does natural selection occur? Required Topic LabIntegrate NOS(CERR) | 13SC.912.L.15.14How do genetic drift and gene flow contribute to changes in the gene pool?  | 14SC.912.L.15.14What is speciation and how do new species form?  |
| **EOC Mini Deadline** |
| 17SC.912.L.15.14What is speciation and how do new species form? SC.912.L.15.3How does extinction influence speciation? | 18SC.912.L.15.15How is evolution defined in genetic terms? What causes a populations’ gene pool to change?  | 19SC.912.L.15.1What are the main lines of scientific evidence that support the scientific theory of evolution by natural selection? Integrate NOS | 20SC.912.L.15.1What are the main lines of scientific evidence that support the scientific theory of evolution by natural selection? What is convergent evolution?SC.912.L.15.2How is molecular evidence used to trace the process of evolution? (1/2 day for Bio H)  | 21SC.912.L.15.10What are some basic trends in hominid evolution?  |
| **24****FCAT Writing** | **25****FCAT Writing** | 26**School-based SAT**SC.912.L.15.10What 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 | 27SC.912.L.15.2What 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?  | 28Unit 7 (Evolution) Assessment |
| Remediation and Enrichment  | Remediation and Enrichment**Biology JIT Training @ 5pm at Middleton** |
| March 3SC.912.L.15.8What are the scientific hypotheses about how and where life began on earth? Integrate NOS | 4SC.912.L.15.8What 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 | 5SC.912.L.14.5How does the endosymbiont theory explain the origin of eukaryotic cells?  SC.912.L.15.4How are organisms classified based on evolutionary relationships? Required Topic Lab | 6SC.912.L.15.6What are the distinguishing characteristics of the Domains? Integrate NOS | 7SC.912.L.15.6Why 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** |
| 17SC.912.L.15.5How were organisms classified in the past, and why did this change? **FORM 3** | 18Unit 8 (Classification) Assessment**FORM 3** | 19 SC.912.L.14.53What 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.14.7What 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.14.7How do the structure and function of roots, stems, and leaves help a plant carry out life processes? **FORM 3** |
| 24 SC.912.L.14.7How do the structure and function of roots, stems, and leaves help a plant carry out life processes?  (CERR)**FORM 3** | 25 SC.912.L.14.7What 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.14.7What 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.14.7What 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** |
| 31SC.912.L.14.26What are the major parts of the brain? **FORM 3** | April 1SC.912.L.14.36What are the structures and functions of the cardiovascular system? How does blood flow through the cardiovascular system? **FORM 3** | 2SC.912.L.14.36What is blood pressure and what are normal blood pressure values? (Activity suggested)**FORM 3** | 3SC.912.L.14.36How does blood flow through the cardiovascular system?What is blood pressure and what are normal blood pressure values?**FORM 3** | 4 SC.912.L.14.36What biologic and lifestyle factors affect blood flow through the cardiovascular system? (CIS Model)**FORM 3** |
| 7 SC.912.L.14.36What biologic and lifestyle factors affect blood flow through the CVS (CIS Model) | 8SC.912.L.16.13What are the structures and functions of the male and female reproductive systems?  | 9 SC.912.L.16.13What are the structures and functions of the male and female reproductive systems?  | 10 SC.912.L.16.13What is the process of fertilization from ovulation to implantation?  | 11 SC.912.L.16.13What is the process of human development from fertilization to birth?  |
| 14 SC.912.L.14.52What are the basic functions of the specific and nonspecific immune responses?  | 15 SC.912.L.14.52How does the body defend against infection?  | 16 SC.912.L.14.52How does the body defend against infection?  | 17 SC.912.L.14.52How do humans prevent and fight the spread of disease?  | 18 **Non-student Day** |
| 21 SC.912.L.14.6How do genetic, environmental and pathogenic factors affect individual and public health?  | **22****FCAT 10** | **23** **FCAT 10** | 24SC.912.L.14.36Dissection (Frog or Fetal Pig) | 25Unit 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** |
| 12Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 13Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 14Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 15Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 16Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals |
| 19 Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 20Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 21Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 22Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 23Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals |
| **26 Memorial Day** | 27Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 28Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 29Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals | 30Accountable Instructional Ideas:Prepare for chemistryForensic ScienceAnimals |
| 2**EXAM WEEK** | 3**EXAM WEEK** | 4**EXAM WEEK** | 5**EXAM WEEK** | 6 Last Day of School**EXAM WEEK** |