**Biology Midterm Topics to Review**

**This, like the test, is made by the county!**

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| **UNIT** | **General Topic** | **# of items** |
| 1 | Carbohydrates/Lipids/Proteins/Nucleic Acids Structure & Function | 3 |
| Enzyme Functions – Conditions that affect enzyme activity  | 3 |
| Properties of Water | 2 |
| 2 | Cell Theory | 1 |
| Organelle Structure & Function / Cell Membrane & Types of Transport | 4 |
| Plant vs. Animal Cell | 3 |
| Types of Microscopes and their uses | 1 |
| Plants Parts & their functions in Photosynthesis | 2 |
| Energy storage in food | 2 |
| Reactants and products of photosynthesis | 2 |
| Cell Respiration | 2 |
| Carbon Dioxide/Oxygen Cycle & How plants & Animals are interdependent | 2 |
| 3 | Cell Cycle / Mitosis | 3 |
| Meiosis | 3 |
| Comparison between mitosis & Meiosis | 2 |
| 4 | DNA Replication | 2 |
| Mutations | 3 |
| Protein Synthesis (transcription & translation) | 3 |
| Cancer | 1 |
| Universal nature of the Genetic Code  | 1 |
| ALL | Scientific Method – scenarios to respond to | 5 |
| **TOTAL** | 50 |

**Biology Original Student Tutorials – Click on the links to review the topics.**

**UNIT ONE**

[SC.912.L.18.1](http://www.cpalms.org/Public/PreviewStandard/Preview/2044) Biological Molecules (5 tutorials)

[SC.912.L.18.11](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119077) Enzymes

[SC.912.L.18.12](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/111258) Water Properties

**UNIT TWO**

[SC.912.L.14.1](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/115502) Cell Theory

[SC.912.L.14.3](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/118857) Plant/Animal Cells

[SC.912.L.14.2](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119143) Cell Transport

[SC.912.L.14.7](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/109414) Plant Organs/Tissues

[SC.912.L.18.9](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/107103) Interrelationship between photosynthesis and cellular respiration

[SC.912.L.18.7](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/109219) Photosynthesis

[SC.912.L.18.8](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119149) Cellular Respiration

[SC.912.L.18.10](http://www.cpalms.org/Public/PreviewStandard/Preview/2053) Role of ATP in energy transfer (2 tutorials)

**UNIT THREE**

[SC.912.L.16.17](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/122586) Mitosis *vs* Meiosis

[SC.912.L.16.8](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119811) Cause of Cancer

[SC.912.L.16.14](http://www.cpalms.org/Public/PreviewStandard/Preview/2025) Cell cycle (2 tutorials)

[SC.912.L.16.16](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/118821) Meiosis

**UNIT FOUR**

[SC.912.L.16.3](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/118757) DNA replication

[SC.912.L.16.4](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/173486)  Mutations

[SC.912.L.16.5](http://www.cpalms.org/Public/PreviewStandard/Preview/2017) Transcription and translation (2 tutorials)

[SC.912.L.16.9](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/109648) Genetic Code

[SC.912.L.16.10](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/105492) Biotechnology

**GENERAL SCIENCE MATERIAL**

[SC.912.N.1.1](http://www.cpalms.org/Public/PreviewStandard/Preview/1856)  Scientific problems (2 tutorials)

[SC.912. N.1.6](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/118852) Scientific Inferences

[SC.912.L.14.4](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119048) Microscopes

[SC.912.N.2.1](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/110926) What is Science?

[SC.912.N.2.2](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/112649) Scientific Questions

[SC.912.N.3.1](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/119155) Scientific Theories

[SC.912.N.3.4](http://www.cpalms.org/Public/PreviewResourceStudentTutorial/Preview/112960) Theories *vs* Laws