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| Teacher: Y. Abrams | Course: Biology I CP | Period(s): 3 and 4 | Week of: / Dates: 8/28-9/1 |
| Unit Title: Inquiry and Biochemistry |  |  |
| State Standards: B-1, B-2, B-3 |  |  |

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|  | Standards | Goals | As a result of this lesson the student will be able to: | Instructional Plan | Activities (aligned, sequenced, build, time) | Student Work | (Thinking & Problem Solving, Real World)  | Assessment | (aligned, rubrics, >2, written) | Grouping Method | Materials | Accommodations (IEP, 504, ESOL) |
| **Monday** | H.B.1A.4H.B.1A.1 | Analyze and interpret data from informational texts and data collected from investigations using a range of methods. Ask questions to generate hypothesis for scientific investigations, refine models, explanations, or designs or extend the results of investigations or challenge scientific arguments or claims. | Warm-up question (10 min.)Finish and discuss graphing activity. (15 min.)Scientific Method: How can a casual question be answered? (30 min.)Lab safety activity (25 min.)Exit slip (10 min.) | Practice creating and analyzing graphs.Apply the scientific method to various questions.Evaluate safety procedures for the lab. | Informal assessment by asking questions and student summaries during class discussions.Evaluate student’s graph and provide feedback. | Whole groupAssigned cooperative groups | Biology textbookHandoutsSmartboard | Extended time on assignments.Read aloud all directions from handouts. |
| **Tuesday** |  |  | SUBSTITUTE TEACHER PLANSComplete Ch. 1 study guide. | Use textbook to complete Ch. 1 study guide. | Informal assessment by asking questions and student summaries during class discussions. | Individual completion | Biology textbookHandouts | Extended time on assignments.Read aloud all directions from handouts. |
| **Wednesday** | H.B.2A.1 | Construct explanations of how the structures of carbohydrates, lipids, proteins, and nucleic acids are related to their functions in organisms. | Warm-up question (10 min.)Discuss Ch. 1 study guide. (15 min.)Macromolecules collage (30 min.)Atoms, elements, and compounds notes and discussion (25 min.)Exit slip (10 min.) | Create collage of food examples of three macromolecules.Justify their selection of food examples. | Informal assessment by asking questions and student summaries during class discussions.Collage rubric | Whole groupAssigned small groups | Biology textbookHandoutsOld magazinesCraft supplies | Extended time on assignments.Read aloud all directions from handouts. |
| **Thursday** | H.B.2A.1H.B.2A.2 | Construct explanations of how the structures of carbohydrates, lipids, proteins, and nucleic acids are related to their functions in organisms. Plan and conduct investigations to determine how various environmental factors affect enzyme activity and the rate of biochemical reactions. | Warm-up question (10 min.)Chemical reactions notes (30 min.)Model enzyme action (25 min.)Enzyme graph practice (15 min.)Exit slip (10 min.) | Create model of enzyme action.Interpret graphs of enzyme action. | Informal assessment by asking questions and student summaries during class discussions.Interpret graphs on unit assessment. | Whole groupAssigned small groupsIndividual practice | Biology textbookHandoutsSmartboard | Extended time on assignments.Read aloud all directions from handouts. |
| **Friday** | H.B.2A.2 | Plan and conduct investigations to determine how various environmental factors affect enzyme activity and the rate of biochemical reactions. | Warm-up question (10 min.)Vocabulary quiz (15 min.)Pineapple enzyme lab (55 min.)Exit slip (10 min.) | Conduct lab activity and analyze results. | Informal assessment by asking questions and student summaries during class discussions.Lab analysis. | Assigned small groupsIndividual practice | Biology textbookHandoutsSmartboardVarious pieces of lab equipment and materials | Extended time on assignments.Read aloud all directions from handouts. |

\* All plans are subject to change. Student progress will be monitored and adjustments will be made.