|  |  |  |  |
| --- | --- | --- | --- |
| Teacher: Y. Abrams | Course: Biology I CP | Period(s): 3 and 4 | Week of: /Dates: 11/06 – 11/10 |
| Unit Title: Cellular Energy | |  |  |
| State Standards: B-3 | |  |  |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 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.3A.1 | Develop and use models to explain how chemical reactions among ATP, ADP, and inorganic phosphate act to transfer chemical energy within cells. | | Warm-up question (10 min.)  ATP cycle model (25 min.)  Cell energy notes (20 min.)  Chloroplast model (30 min.)  Exit slip (5 min.) | | Respond to warm-up question using content knowledge.  Model ATP cycle.  Discuss metabolism.  Create model of chloroplast.  Define weekly vocabulary for HW. | | Informal assessment by asking questions and student summaries during class.  Unit test that includes multiple choice questions, graphic interpretation, and free response questions. | | Whole group  Individual practice | Biology textbook  Handouts  SMARTBOARD | Extended time on assignments.  Read aloud all directions from handouts. |
| **Tuesday** | H.B.3A.2 | Develop and revise models to describe how photosynthesis transforms light energy into stored chemical energy. | | Warm-up question (10 min.)  Ted-Ed video (10 min.)  Pigment lab (30 min.)  Photosynthesis notes (35 min.)  Exit slip (5 min.)  . | | Respond to warm-up question using content knowledge.  Extract various pigments from plant leaves.  Discuss process of photosynthesis. | | Informal assessment by asking questions and student summaries during class.  Lab results  Unit test that includes multiple choice questions, graphic interpretation, and free response questions. | | Individual practice  Whole group | Biology textbook  Handouts  SMARTBORAD  Lab materials | Extended time on assignments.  Read aloud all directions from handouts. |
| **Wednesday** | H.B.3A.3 | Construct scientific arguments to support claims that chemical elements in the sugar molecules produced by photosynthesis may interact with other elements to form macromolecules. | | Warm-up question (10 min.)  Create photosynthesis and macromolecule cartoon (75 min.)  Exit slip (5 min.) | | Respond to warm-up question using content knowledge.  Create and share cartoon. | | Informal assessment by asking questions and student summaries during class discussions/activities.  Rubric for cartoon.  Unit test that includes multiple choice questions, graphic interpretation, and free response questions. | | Individual practice  Whole group | Biology textbook  Handouts  SMARTBORAD | Extended time on assignments.  Read aloud all directions from handouts. |
| **Thursday** | H.B.3A.4 | Develop models of the major inputs and outputs of cellular respiration. | | Warm-up question (10 min.)  Vocabulary quiz (10 min.)  Mitochondria foldable (25 min.)  Cellular respiration notes (40 min.)  Exit slip (5 min.) | | Respond to warm-up question using content knowledge.  Create model of mitochondria and respiration. | | Informal assessment by asking questions and student summaries during class discussions/activities.  Unit test that includes multiple choice questions, graphic interpretation, and free response questions. | | Individual practice  Whole group | Biology textbook  Handouts  SMARTBOARD | Extended time on assignments.  Read aloud all directions from handouts. |
| **Friday** |  |  | | NO SCHOOL – VETERAN’S DAY | |  | |  | |  |  |  |

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