

Cellular Metabolism Performance Task Rubric

	4	3	2	1
Level 1 Visual of mitochondria and cytoplasm	Clear, accurate visual are included and make the easier to understand. Visuals are labeled neatly and accurately.	Visuals are included and are labeled neatly and accurately.	Visuals are included and are labeled.	Needed visuals are missing OR are missing important labels.
Level 2 Evolution and Cellular Respiration	Communicates an accurate and thorough understanding of scientific concepts underlying cellular respiration and evolution.	Communicated an accurate understanding of most scientific concepts underlying cellular respiration and evolution.	Communicates a limited understanding of scientific concepts underlying cellular respiration and evolution.	Communicates inaccurate understanding of scientific concepts underlying cellular respiration and evolution.
Level 3 Enzymes	Summary describes the topic specific to enzymes accurately and relates it to real life situation.	Summary describes the topic specific to enzymes vaguely and relates it to real life situation.	Summary describes the topic specific to enzymes.	Summary describes the topic specific to enzymes vaguely.
Level 4 Point of View from Oxygen	The entire story is related to the point of view of oxygen and allows the reader to understand much more about cellular respiration.	Most of the story is related to the point of view of oxygen. The story wanders off at points, but the reader can still learn about cellular respiration.	Some of the story is related to the point of view of oxygen, but a reader does not learn much about cellular respiration..	No attempt has been made to relate the story from the point of view of oxygen..
Level 4 How is energy captured, stored, and used?	Communicates an accurate and thorough understanding of scientific concepts underlying cellular respiration & free energy.	Communicates an accurate understanding of most scientific concepts underlying cellular respiration & free energy.	Communicates a limited understanding of scientific concepts underlying cellular respiration & free energy.	Communicates inaccurate understanding of scientific concepts underlying cellular respiration & free energy
Level 4 Enzyme Lab Results	Accurate representation of the data. Graphs and tables are labeled and titled. The relationship between the variables is discussed and trends/patterns logically analyzed. Predictions are made about what might happen if part of the lab were changed or how the experimental design could be changed. Conclusion includes whether the findings supported the hypothesis, possible sources of error, and what was learned from the experiment.	Accurate representation of the data. Graphs and tables are labeled and titled. The relationship between the variables is discussed and trends/patterns logically analyzed. Conclusion includes whether the findings supported the hypothesis and what was learned from the experiment.	Accurate representation of the data in written form, but no graphs or tables are presented. The relationship between the variables is discussed but no patterns, trends or predictions are made based on the data. Conclusion includes what was learned from the experiment.	Data are not shown OR are inaccurate. The relationship between the variables is not discussed. No conclusion was included in the report OR shows little effort and reflection.
Peer Review	Completed 2 peer review in great detail.	Completed 2 peer reviews.	Completed 1 peer review.	Did not complete peer review.
Product	Title. Attractive in terms of design, layout, and neatness. Cites 3+ sources in correct format.	Title. Attractive in terms of design, layout and neatness. Cites 2 sources in correct format.	No Title. Acceptably attractive though it may be a bit messy. Cites 1 source in correct format.	No Title. Messy or very poorly designed. It is not attractive. Does not cite sources or does so incorrectly.

Total Points: _____ /32