**Human body circulatory system rubric (unit of study holistic rubric\*)**

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|  | **Novice 1** | **Apprentice 2** | **Proficient 3** | **Distinguished 4** |
| Scientific practices(that enhance the understanding of the human circulatory system) | Student failed to engage in scientific practices to enhance their understanding of the human circulatory system (i.e., struggled with the following tasks: developing testable questions and a hypothesis, designing models for experiments, planning and carrying out investigations, analyzing and interpreting data, constructing explanations, engaging in an argument supported by evidence, evaluating and communicating information). | Student superficially engaged in scientific practices to enhance his or her understanding of the human circulatory system (i.e., worked toward proficiency to complete the following tasks with teacher’s guidance: developing testable questions and a hypothesis, designing models for experiments, planning and carrying out investigations, analyzing and interpreting data, constructing explanations, engaging in an argument supported by evidence, evaluating and communicating information). | Student proficiently engaged in scientific practices to enhance his or her understanding of the human circulatory system (i.e., proficiently completed the following tasks with minimum help from the teacher: developing testable questions and a hypothesis, designing models for experiments, planning and carrying out investigations, analyzing and interpreting data, constructing explanations, engaging in an argument supported by evidence, evaluating and communicating information). | Student thoroughly engaged in scientific practices to enhance his or her understanding of the human circulatory system (i.e., achieved the following tasks exceptionally well and without the teacher’s help: developing testable questions and a hypothesis, designing models for experiments, planning and carrying out investigations, analyzing and interpreting data, constructing explanations, engaging in an argument supported by evidence, evaluating and communicating information). |
| Human body, circulatory system, performance indicators | Student did not grasp the understanding thatproper functioning of the circulatory system is essential to good health and maintaining homeostasis/balance in the human body, and that the choices humans make (e.g., diet, exercise, activities) can impact the health of the circulatory system.  | Student grasped the basic understanding thatproper functioning of the circulatory system is essential to good health and maintaining homeostasis/balance in the human body, and that the choices humans make (e.g., diet, exercise, activities) can impact the health of the circulatory system.  | Student demonstrated a good understanding thatproper functioning of the circulatory system is essential to good health and maintaining homeostasis/balance in the human body, and that the choices humans make (e.g., diet, exercise, activities) can impact the health of the circulatory system.  | Student demonstrated a deep understanding thatproper functioning of the circulatory system is essential to good health and maintaining homeostasis/balance in the human body, and that the choices humans make (e.g., diet, exercise, activities) can impact the health of the circulatory system. |
| New literacies of information communication technologies (ICTs) in human circulatory system study | Student failed to incorporate an ICT component to enhance the study of the human circulatory system.ICT components:* Used data collection tool to collect human body circulatory system data
* Located and evaluated information using web resources and collected data to form research questions and a hypothesis
* Organized information using ICTs (spreadsheet)
* Synthesized multimodal information using ICTs
* Communicated results using ICTs and multimodal information
 | Student incorporated one or two ICT components to enhance the study of the human circulatory system.ICT components:* Used data collection tool to collect human body circulatory system data
* Located and evaluated information using web resources and collected data to form research questions and a hypothesis
* Organized information using ICTs (spreadsheet)
* Synthesized multimodal information using ICTs
* Communicated results using ICTs and multimodal information
 | Student incorporated most of the required ICT components to enhance the study of the human circulatory system.ICT components:* Used data collection tool to collect human body circulatory system data
* Located and evaluated information using web resources and collected data to form research questions and a hypothesis
* Organized information using ICTs (spreadsheet)
* Synthesized multimodal information using ICTs
* Communicated results using ICTs and multimodal information
 | Student incorporated exceedingly well all ICT components to enhance the study of the human circulatory system.ICT components:* Used data collection tool to collect human body circulatory system data
* Located and evaluated information using web resources and collected data to form research questions and a hypothesis
* Organized information using ICTs (spreadsheet)
* Synthesized multimodal information using ICTs
* Communicated results using ICTs and multimodal information
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\* A holistic rubric is helpful when it is difficult to separate evaluative criteria in scoring a student’s work (i.e., lab reports). Many learning tasks need to be evaluated in combination because they are dependent on one another.