

Simpocalypse for Middle School: STEM Explorer Project Rubric

	<b>(4) Exceeds Expectations</b>	<b>(3) Meets Expectations</b>	<b>(2) Below Expectations</b>	<b>(1) Far Below Expectations</b>	<b>(0) Incomplete</b>
<b>Simpocalypse Tutorial</b>	Entire Simpocalypse tutorial completed. Student demonstrates exemplary understanding of the concepts.	Entire Simpocalypse tutorial completed. Student shows enough understanding to be able to move on and complete the project.	Most or all of the tutorial completed, but student shows a lack of understanding of important concepts required for successful manipulation of the app to meet project objectives.	Tutorial not completed (or completed with little effort). Student demonstrates few of the skills needed to move forward in the project.	Simpocalypse tutorial incomplete. Student does not have the understanding needed to move forward in the project.
<b>Disease Research</b>	Student demonstrates exemplary understanding of a specific viral disease outbreak including: biology, spread, effect on society, historical significance, and mitigation.	Student shows understanding of the most important factors concerning a specific viral disease outbreak from the past.	Understanding demonstrated of some of the important factors concerning a specific viral disease outbreak from the past, but is missing important details.	Does not demonstrate clear understanding of the disease or the research is incomplete.	Student does not turn in or demonstrate knowledge of research into a disease.
<b>Narrative of Novel Disease</b>	A creative, detailed, and convincing narrative is produced that describes a new disease by name, explains the spread, its effect on society, and mitigation plans put into effect to stop the spread.	A narrative is produced that describes a new disease by name, explains the spread, its effect on society, and mitigation plans put into effect to stop the spread..	Narrative of a new disease produced, but is missing a number of descriptive components that make it convincing.	Narrative is incomplete or missing most of the components needed to describe it in detail.	Student does not turn in a completed narrative of a novel disease.
<b>Modeling of Disease in Simpocalypse</b>	Student faithfully re-creates the described disease outbreak and can demonstrate how each manipulated factor fits the narrative (societal as well as disease-specific factors). Disease file is saved and results can be replicated.	Student presents general accuracy in the creation of the disease outbreak in Simpocalypse as per the narrative, but may be missing (or misinterpreting) one or more important factors. Disease file is saved and results can be replicated.	Shows only partial understanding of Simpocalypse and the disease described in their own narrative. Numerous factors related to the disease are not properly modeled in Simpocalypse and/or the data are misinterpreted. Results of the disease file may not be replicable.	Model in Simpocalypse does not accurately describe what was written in the narrative. Student shows general misunderstanding of the important factors in the model.	Student does not complete the modeling aspect of the assignment.
<b>Plan to Eradicate Disease</b>	Student creates an action plan for society dealing with this new disease. Student proves action plan works as intended by demonstrating it in action and/or with saved data from Simpocalypse. Plan shows thorough understanding and is convincing and realistic.	Student creates an action plan for society dealing with this new disease. Student is generally able to prove that the action plan works as intended by demonstrating it in action and/or with saved data from Simpocalypse.	Action plan created, but is lacking detail and/or understanding of factors that can successfully mitigate disease. Data generated or demonstrated may not match claims.	Action plan is incomplete and/or unrealistic. Student shows lack of understanding of how to mitigate viral outbreaks in Simpocalypse or in the real world.	Student does not create an action plan for mitigation of their novel disease.
<b>Presentation of Plan</b>	Action plan is presented clearly and in an organized fashion. Visual aids are effective. Student is able to explain each factor that plays a role in influencing the statistics generated by the Simpocalypse application.	Action plan is presented clearly and in an organized fashion. Visual aids are used. Student is able to adequately explain most of the factors influencing data generated by Simpocalypse.	Action plan is presented, but may be unorganized, not fully understood, or poorly planned. Student may struggle explaining various factors influencing data. When demonstrating simulation, data may contradict claims.	Action plan is presented, but student demonstrates a general lack of understanding. Student is not able to answer basic questions concerning their disease or modeling of their disease in Simpocalypse.	Action plan is not presented in any form.

