**AP Computer Science Principles**

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| **Date(s):** |  | **NetLogo** |
| **Prerequisite Knowledge:** Computer/Web Usage | | |
| **Enduring Understanding:** | | |
| **Learning Objective(s):** | | |
| **Essential Knowledge:** | | |

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| **AIM:** How do we setup and run a model in NetLogo?  **SWBAT**: Navigate the Netlogo interface and successfully edit and run models. | **Notes/Q’s/CFUs/CM** |
| **WARM UP (5 MINS):**  DO NOW: Given link to Netlogo model (Choosing one on virus spread)  <http://www.netlogoweb.org/launch#http://www.netlogoweb.org/assets/modelslib/Sample%20Models/Biology/Virus.nlogo>  Run the model with default values.  Re-run the model with new values.  Write down on questions or helpful hints you have to help your group when running through the model. Use community tool to help aggregate questions and students can see if anyone types a helpful hint or helps answer their question. | Note: Students may get stuck on clicking setup first then go and also clicking on go to stop the simulation. Students will be in pairs but can ask anyone around them for help. |
| **LESSON (5-10 MINS)**  Teacher **-** Review the current model. Review any class discussions/questions/advice by the students. Choose another model to demo in front of class and show how by editing the code directly you can make changes.  Students - Attention on the demo and taking notes if applicable. | Note: Demo make sure how to access the code, modify the code, compile, and execute it again.  Note: Also, if adding new variable to model, show how to visually add buttons and graphs so they have an output for feedback on correct implementation |
| **ACTIVITY PART (25 MINS)**  Teacher - Leading from the model in the lesson. Give overview of the lab for guided programming. In the model code, adjust certain variables or add a new one to the model.  Teacher - Interject at midway to provide hints, scaffolding, and a full working model of the lab so students can see what they’re working towards in this introductory lab.  Students - Work in pairs on the guided lab to add variables and visualizations to get acquainted with the environment. |  |
| **ASSESSMENT (5 MINS):**  Demo result to the teacher. |  |
| **HOMEWORK:** n/a |  |