Notes about Model builder

Float task list:

* I like that it allows you to work side by side but it still is kind of annoying. Potentially it could be a third column on the document so the titles would be simulation settings, simulation results, and tasks as headers to the columns
* A scroll bar would also be helpful for the float task list instead of dragging it
* Another option is to create the webpage in 4 quadrants the options could be Simulation settings, simulation results, instructions (with the tabs) and the task list. This allows all 4 groups to stay on the screen at all times while referring to different options (say you wanted to look at the SIR model overview while comparing the graph. This would allow for this)
* Is it possible to provide a place to answer the questions? At the end it could produce a document that is the summation of their answers.
  + It would make the simulation even more interactive and alleviates the need for clicking back and forth. I could produce an RMD file that when built produces the questions along with their answers
  + The document introduces it as “the best way to use these apps is to do your own science/research with them.” A notes section could also be provided for personal research
* The introduction to the tasks list is very long. Is there a better way to present these tasks that would engage the reader without causing them to skip over them?
  + Could they be listed as mouse over items? There is a bullet that talks about the time step not being specific. Could that be presented as a character that could be moused over next to *dt, time step* in the simulation settings

Simulation Settings:

* The capitalization of the labels is not consistent. Sometimes the word the symbol represents is capitalized and sometimes nothing is capitalized
* To me it would be helpful if the number displayed on the simulation setting matched the number of figures used when changing the number by the arrows
  + Example: *g, recovery rate* (in basic SIR Model) changes in hundredths but it does not show any zeros. When using the arrows, it will then change to 0.99. It could help with expectations and just to be more robust to show 1.00 to guide the user that this will be changing to the 100ths place.
* *In the characteristics of IDs* “gP, rate at which a person leaves P compartment, which” is cut off
* *In Patters of ID* the “n” parameter arrows change by whole numbers but we are inputting the thousandths place.

Specific Tasks

* You may include a button that could give a “reveal answer” and a “here’s why” portion. This would help with overwhelming the reader as well as letting them quiz themselves before revealing the answer.
* Basic SIR model
  + The verbiage used for the prompts is not consistent. Sometimes the user is given directives such as “figure out” and sometimes its asked in the form of a question. (task 3 of basic SIR model)
  + Task 7 references #2 but in the system that is being used it is called Task 2. Adding Task #2 would be better.
* Characteristics of IDs
  + In Task 1 Things are labeled differently than on the simulation settings. It says to set the population size, S0 to 1000 but on the simulation settings it calls it S with the description indicating S0. So, unless the goal is to teach about different ways variables can be labeled I think consistency between the two would be helpful.
  + Task 5, I was a little confused about which variables you meant as transmission parameters. It could be something that is listed in the answer as a way for them to check if they changed the correct parameters.
* Patterns of ID
  + Task 6 has equations written in code but it didn’t translate to text well. I don’t think this was on purpose.

The Graph:

* A back button would be a helpful function so you can see the previous run and compare the two. Maybe it just saves the current and the previous and not all that have been ran to increase speed of processing.