Name: _____   Date: _____

How do different mitigation strategies affect the spread of an infection in a community?

Part A

Control conditions
Set these variables in your simulation to the following values shown to the right.

initial-infected **5**   ☑ autostop?

Infection color key: pink = asymptomatic   red = symptomatic

initial-students **104**   schooling-plan
in person (no masks) ⌄

Record your initial conditions
- Press **SETUP.** *DO NOT PRESS GO, YET.*
- Look for where the 5 red and/or pink circles (people) are in the population.
- Determine how many of the infected are students. Students have a black dot in the middle of their circles. Record this number in the table to the right.
- Determine how many of the infected are not students. Record this number in the table to the right.

# of people initially infected = 5	
# that are students	# that are not students

Run the model
- Press **GO/PAUSE.** Run the model until there are no infections left in the population. You can speed up the model run using the speed slider if you wish.
- Based on your simulation run, discuss how your graph and its related values compare to your partner's. Record what is similar between these two trials and what is different in the space below

Similarities	Differences

Compare your results as a class
- Share how the results from your individual trials compared across the class.

Part B

Exploring different mitigation strategies.
- Work in teams. Assign different group members a different schooling-plan to explore to see what effect different plans have on the spread of an infection, compared to the control condition you just explored (in person (no masks)).
- Add a check 2nd checkmark next to the new schooling-plan you will investigate in the menu shown to the right.
- Run a series of trials to compare the condition you selected to the control condition (in person (no masks)). Record the results of your investigation in the space below.

schooling-plan
✓ in person (no masks)
in person (masks)
virtual
hybrid (no masks)
hybrid (masks)

Results / observations

Making sense of your results.
- Compare your results to those of your group members.
- Discuss the patterns you notice across your different investigations.

Conclusions
- What evidence-based claim(s) can your group now make about how different schooling-plans affect the spread of an infection in a simulated community? Summarize these below:

_____

_____

_____

_____

_____