Lesson 6: Home-Learning	NAME:	
Unit Question: Why Don't Antibiotics Work Like They Used To?	PERIOD:	DATE:

## Lesson 6 **Home-Learning**: How do bacteria grow in a simulated environment?

1. Imagine you want to place the bacteria in a way that allows one variation to outcompete the others fo space and a higher proportion in the population. In the space below, draw the necessary placement of the four variations of bacteria for this to happen. Identify which variation would have the highest proportion in the population.

## **OBSERVATIONS:**

**2.** Run the simulation to test your prediction above and record your results in the table below.

VARIATION	AT THE START OF THE SIMULATION		AT THE END OF THE SIMULATION	
Color visualization for this variation	# of bacte ria	The % of the population that is made up of this variation	# of bacteria	The % of the population that is made up of this variation
Purple	1	25%		
Green	1	25%		
Brown	1	25%		
Red	1	25%		
Total bacteria	4	100%		



<b>NEXT STEPS:</b> <b>3.</b> How does what you figured out help us predict what might happen in our Petri dishes if they were le to keep growing?
<del>-</del>
<b>4.</b> Now that we have figured out how bacteria are competing for space/food in our Petri dishes, what eneeds to be added to this simulation to explore some of the questions we still have on our Driving Question Board?