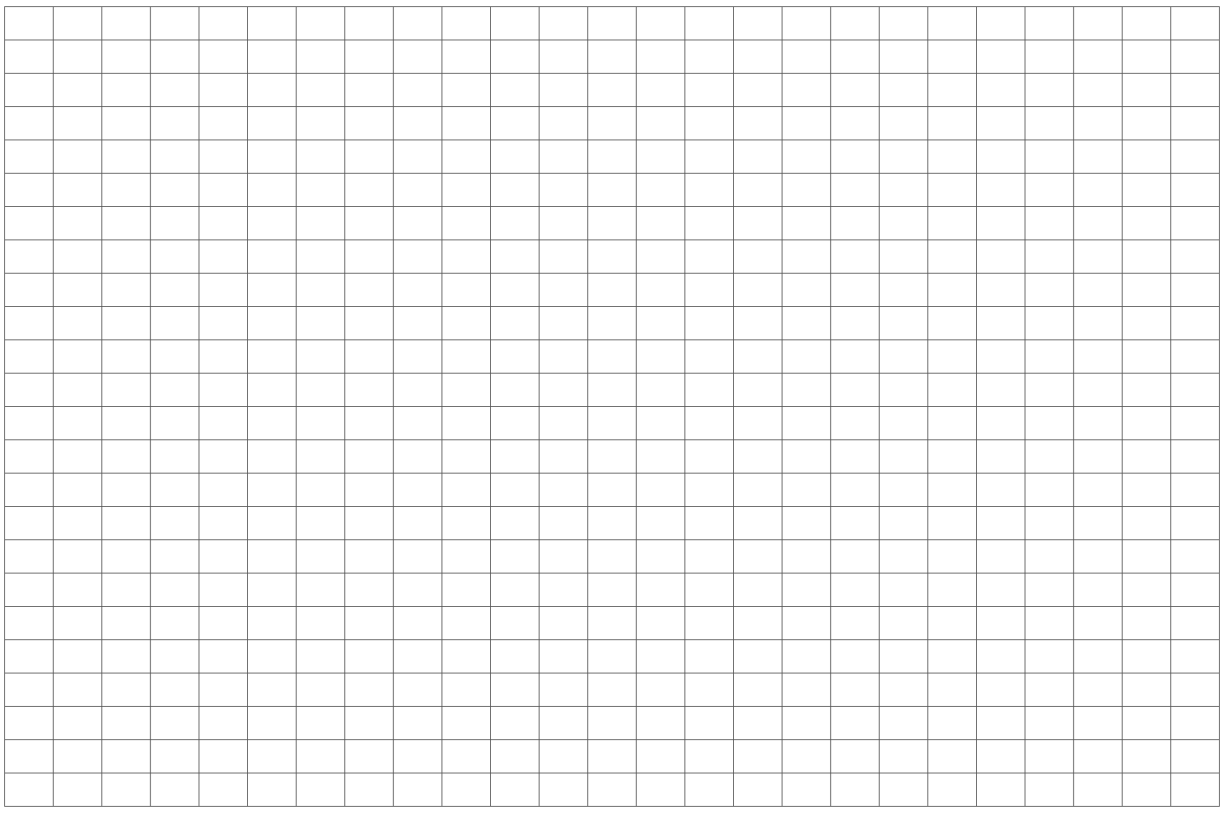
Activity — Growing Bacteria

Imagine that you are a technician who is studying the growth patterns of a new bacteria colony in a small petri dish in a lab. Each day, you feed the bacteria a set amount of food and remove wastes. Each day, you count the bacteria using a microscope. The table below is a record of your daily count.

Day	Number of Bacteria
1	2
2	6
3	20
4	75
5	190
6	275
7	315
8	380
9	425
10	450

Day	Number of Bacteria
11	410
12	415
13	480
14	450
15	400
16	475
17	450
18	440
19	455
20	455

1. Using the grid below, plot a line graph to represent the growth of this bacteria over time. Remember to label the axes and scales.



2. By examining your graph

   a) estimate the carrying capacity of the petri dish for bacteria.

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   b) estimate on what day the bacteria reached the carrying capacity of the petri dish.

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