Name: Quang Huynh Answer sheet

A Yeast Population Study

Table 1: Samples of Yeast Population/Number of cells

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| HOURS | 0 | 24 | 48 | 72 | 96 | 120 |
| Area **A** | 9 | 21 | 79 | 105 | 57 | 32 |
| Area **B** | 10 | 20 | 77 | 115 | 58 | 29 |
| Area **C** | 11 | 19 | 81 | 107 | 65 | 29 |
| Total | 30 | 60 | 237 | 327 | 180 | 90 |
| Average | 10 | 20 | 79 | 109 | 60 | 30 |
| Entire population  (Average x 1000) | 10,000 | 20,000 | 79,000 | 109,000 | 60,000 | 30,000 |

BONUS SECTION Figure 2: Construct Graph

140,000

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 130,000 |  |  |  |  |  |  |  |  |  |
| 120,000 |  |  |  |  |  |  |  |  |  |
| 110,000 |  |  |  |  |  |  |  |  |  |
| 100,000 |  |  |  |  |  |  |  |  |  |
| 90,000 |  |  |  |  |  |  |  |  |  |
| 80,000 |  |  |  |  |  |  |  |  |  |
| 70,000 |  |  |  |  |  |  |  |  |  |
| 60,000 |  |  |  |  |  |  |  |  |  |
| 50,000 |  |  |  |  |  |  |  |  |  |
| 40,000 |  |  |  |  |  |  |  |  |  |
| 30,000 |  |  |  |  |  |  |  |  |  |
| 20,000 |  |  |  |  |  |  |  |  |  |
| 10,000 |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

120

48

24

96

72

Analysis:

1. 0 and 24 hours 10,000

24 and 48 hours 59,000

48 and 72 hours 30,000

0 and 72 hours 109,000

2. 24-48 hours

3. 0-24 hours

4. At the 72-hour mark.

5. After the population reached its peak, the population started to decrease.

6. A lack of resources.

Regents Questions:

7. 1 8. 3 9. 2 10. 2

11. 1 12. 1