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| Honors Earth Science Worksheet  More Practice with Graphing | Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

Using the following data, answer the questions below and then construct a line graph.

|  |  |  |
| --- | --- | --- |
| Depth in meters | Number of Bubbles / minute Plant A | Number of Bubbles / minute Plant B |
| 2 | 29 | 21 |
| 5 | 36 | 27 |
| 10 | 45 | 40 |
| 16 | 32 | 50 |
| 25 | 20 | 34 |
| 30 | 10 | 20 |

1. What is the dependent variable and why?

2. What is the independent variable and why?

3. What title would you give the graph?

**Graph Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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Diabetes is a disease affecting the insulin producing glands of the pancreas. If there is not enough insulin being produced by these cells, the amount of glucose in the blood will remain high. A blood glucose level above 140 for an extended period of time is not considered normal. This disease, if not brought under control, can lead to severe complications and even death.

Answer the following questions concerning the data below and then graph it.

|  |  |  |
| --- | --- | --- |
| Time After Eating hours | Glucose mg /dL of Blood Person A | Glucose mg /dL of Blood Person B |
| 0.5 | 170 | 180 |
| 1 | 155 | 195 |
| 1.5 | 140 | 230 |
| 2 | 135 | 245 |
| 2.5 | 140 | 235 |
| 3 | 135 | 225 |
| 4 | 130 | 200 |

 1. What is the dependent variable and why?

2. What is the independent variable and why?

3. What title would you give the graph?

4. Which, if any, of the above individuals (A or B) has diabetes?

5. What data do you have to support your hypothesis?

6. If the time period were extended to 6 hours, what would the expected blood glucose level for Person B?

Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

