Name _____ Class _____

Date _____ Midterm Review 5 – Graphing

Questions 1 through 3 refer to the following:

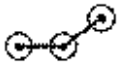
A study was made to determine the water quality of a lake. Water samples were collected at different depths, and chemical tests were performed to determine the amount of dissolved oxygen in parts per million (ppm) in each water sample. The results are shown in the data table below.

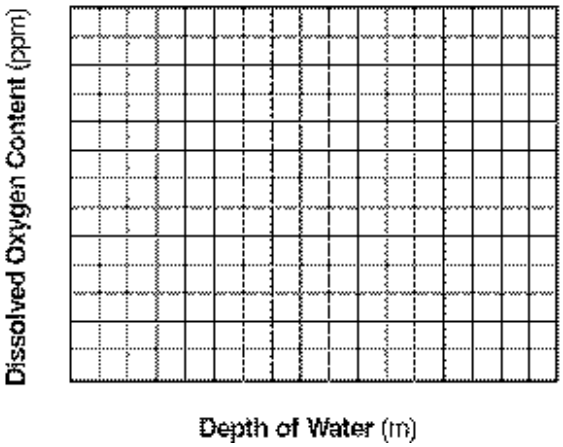
DATA TABLE

Depth of Water (m)	Dissolved Oxygen Content (ppm)
0	10.0
5	9.8
10	9.0
15	6.8
20	5.4
25	4.6
30	3.8
35	3.2
40	2.8

1) Using the information in the data table, construct a line graph.

(a) Mark an appropriate scale on each labeled axis.
(b) Plot the data from the data table. Surround each point with a small circle and connect the points.

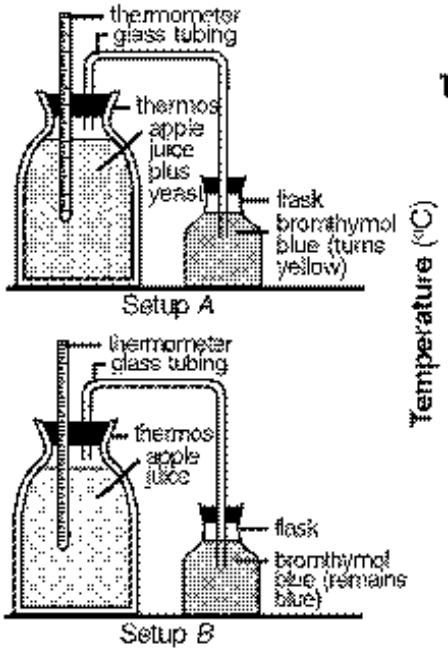
EXAMPLE: 

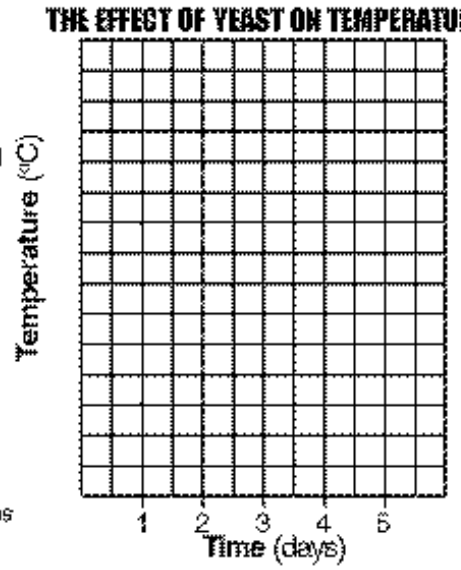


2) What process produces most of the dissolved oxygen found in the lake?

3) Approximately how many parts of oxygen per million would be found at a depth of 13 meters? (Your answer should be rounded to the nearest tenth.)

5) Two laboratory setups were prepared as shown in the diagram below. Each thermos jar contained 250 milliliters of apple juice and each flask contained 100 milliliters of bromthymol blue. Yeast was added to setup *A*, only. The bromthymol blue turned yellow in setup *A*, but remained blue in setup *B*. A daily temperature reading was taken for 5 days and the results are shown in the data table below.

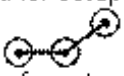




DATA TABLE

Time (days)	Temp. (°C) Setup *A*	Setup *B*
1	22	22
2	25	22
3	24	22
4	23	22
5	22	22

Using the information in the data table, construct a line graph following the directions below.

(a) Mark an appropriate scale on the axis labeled "Temperature (DC)."
(b) Plot the data for setup *A* on the grid. Surround each point with a small circle and connect the points.
EXAMPLE: 
(c) Plot the data for setup *B* on the grid. Surround each point with a small triangle and connect the points.
EXAMPLE: