Name: _____   Date: _____

Graphing Practice – PreAP Biology

- Use the graph paper to graph the following data tables.
- USE YOUR HANDWRITTEN COPY – FOLLOW THEM!!
- Answer the questions AFTER creating your graphs.

1. Baby chickens, like all baby birds, require a constant source of food. As chick grow, more energy is required for daily activities, and their food requirements increase. The following data table reports the average food eaten by a group of 10 chickens over a 5-day period.

Baby Chicken Food Consumption

Day	Food Consumed (g)
0	0.0
1	1.0
2	3.2
3	6.5
4	10.6
5	15.4

Questions

1. Identify the independent and dependent variables.
2. How much grain will the chicks eat on day 6?
3. On day 7?
4. What type of relation does the graph represent?

2. The data below summarizes the results of a scientific experiment on the effects of a growth hormone (gibberellic acid) on plant height. A 0.1 molar solution was used in all experiments.

Gibberellic Acid and Plant Height

Gibberellic Acid (0.1 M) (mL)	Plant Height at 1 Week (cm)
20	18.5
30	20.7
40	45.2
50	62.3
60	10.6

Questions

1. Identify the independent and dependent variables.
2. Estimate the plant height at 10 mL gibberellic acid.
3. Estimate the plant height at 25 mL?=.
4. Explain why the plant height at 60 mL is not consistent with the rest of the data.

3. A team of scientists wanted to test the effects of temperature on the germination rate of pinto beans. They placed three sets of 100 pinto bean seeds in temperature controlled chambers: Chamber A was set at 15º C, chamber B at 20ºC, and chamber C at 25ºC. Their results are shown in Table 1 below:

Germination Rates of Pinto Beans

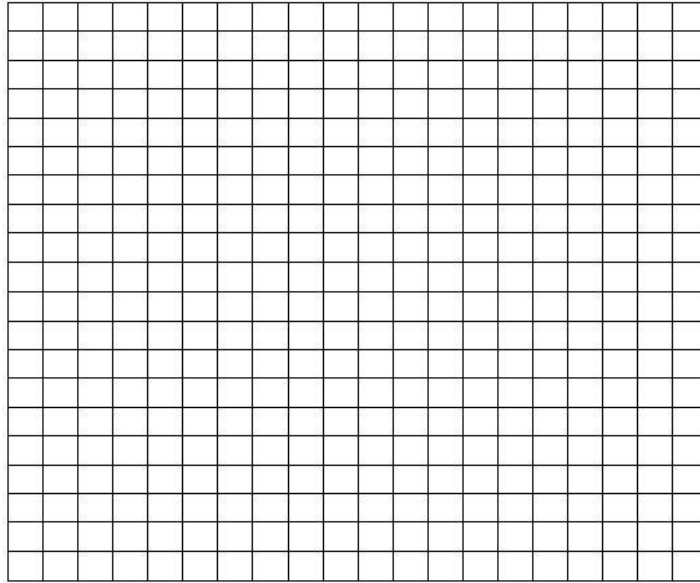| Day	% Germination (15º C)	% Germination (20º C)	% Germination (25º C)
0	0	0	0
2	2	10	10
4	10	30	50
6	20	40	80
8	20	60	90
10	35	70	90

Questions

1. Identify the independent and dependent variables.
2. Compare and contrast the growth rate of pinto beans at the different temperatures.
3. Summarize the experimental results.

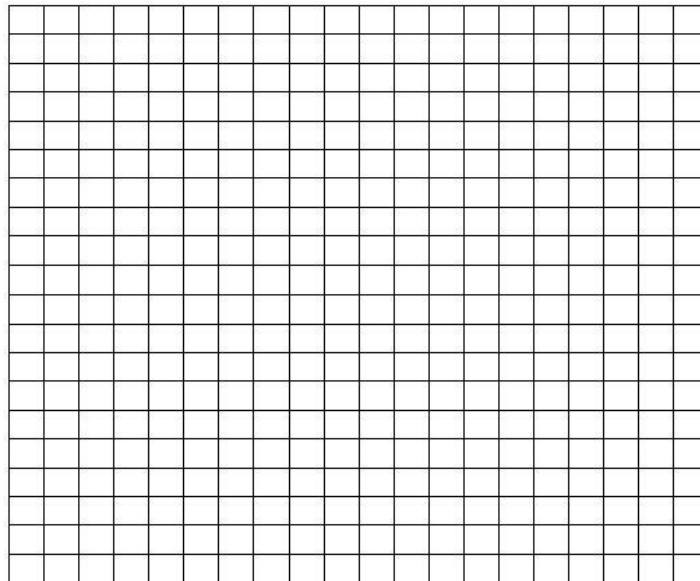THINK: How many lines do you graph? Do you need a key?

1.

2.

3.