Name _____

Date _____ Period _____

An astronaut who weighs 150 lb on earth, travels away from earth in a rocket ship. As she gets further away from earth, the pull of gravity decreases and her weight goes down as follows:

Weight	Miles from Earth
150 lb	0
80 lb	1400
40 lb	3500
20 lb	5500
15 lb	7000
12 lb	9000
10 lb	10000
7 lb	13000
6 lb	14000

Prepare a graph showing the relationship between weight and distance from earth.

PROCEDURE

1. On a separate sheet of graph paper, set up a graph using appropriate axes, intervals, and origin. Let **Weight** be on the *X*-axis, and **Miles from Earth** be on the *Y*-axis. Plot the points.

2. After plotting the points, draw the best straight line or curve.

3. Read the values from your graph to answer the questions below.

CONCLUSIONS

1. How high above the earth is the astronaut when she weighs 100 lb? _____

2. How much does the astronaut weigh 1,000 miles from earth? _____

3. What type of relationship exists between weight and distance from earth? _____