

How to Make a Line Graph

Use graph paper

- (1) Choose the size graph paper that best fits the data

Number the X-axis (the horizontal one)- Independent Variable

- (2) Start numbering at your **lowest** value (if the lowest value is 23, you don't need to start numbering at zero—start numbering at 20!)
- (3) Only number as high as your **highest** value (if the highest value is 18, don't number to 100!)
- (4) Evenly space out the numbers (number by 1's, 2's, 5's, etc.)
- (5) Line up the numbers on the lines, not in the spaces

Number the Y-axis (the vertical one)- Dependent Variable

- (6) Start numbering at your **lowest** value
- (7) Only number as high as your **highest** value
- (8) Evenly space out the numbers (number by 1's, 2's, 5's, etc.)
- (9) Line up the numbers on the lines, not in the spaces

Label the graph

- (10) Put a label on the X-axis to tell what **the numbers** represent (distance, length, time, etc.)
==make sure you include the correct unit (feet, inches, minutes, etc.)
- (11) Put a label on the Y-axis to tell what **the numbers** represent (temperature, speed, weight, etc.)
== Make sure you include the proper unit (inches, degrees Celsius, etc.)

Plot the data points (IV/DV data pairs)

- (12) On the X-axis, go over to the first value for the independent value (draw an *imaginary* line up)
- (13) On the Y-axis, go up to the matching value for the dependent value (draw an *imaginary* line across)
- (14) Where the imaginary lines meet, make a dot.

Draw a line

- (15) Draw a line that best fits the data points
= unless it is a graph involving time, you do not connect the points
- (16) Make a smooth line, drawn from left to right

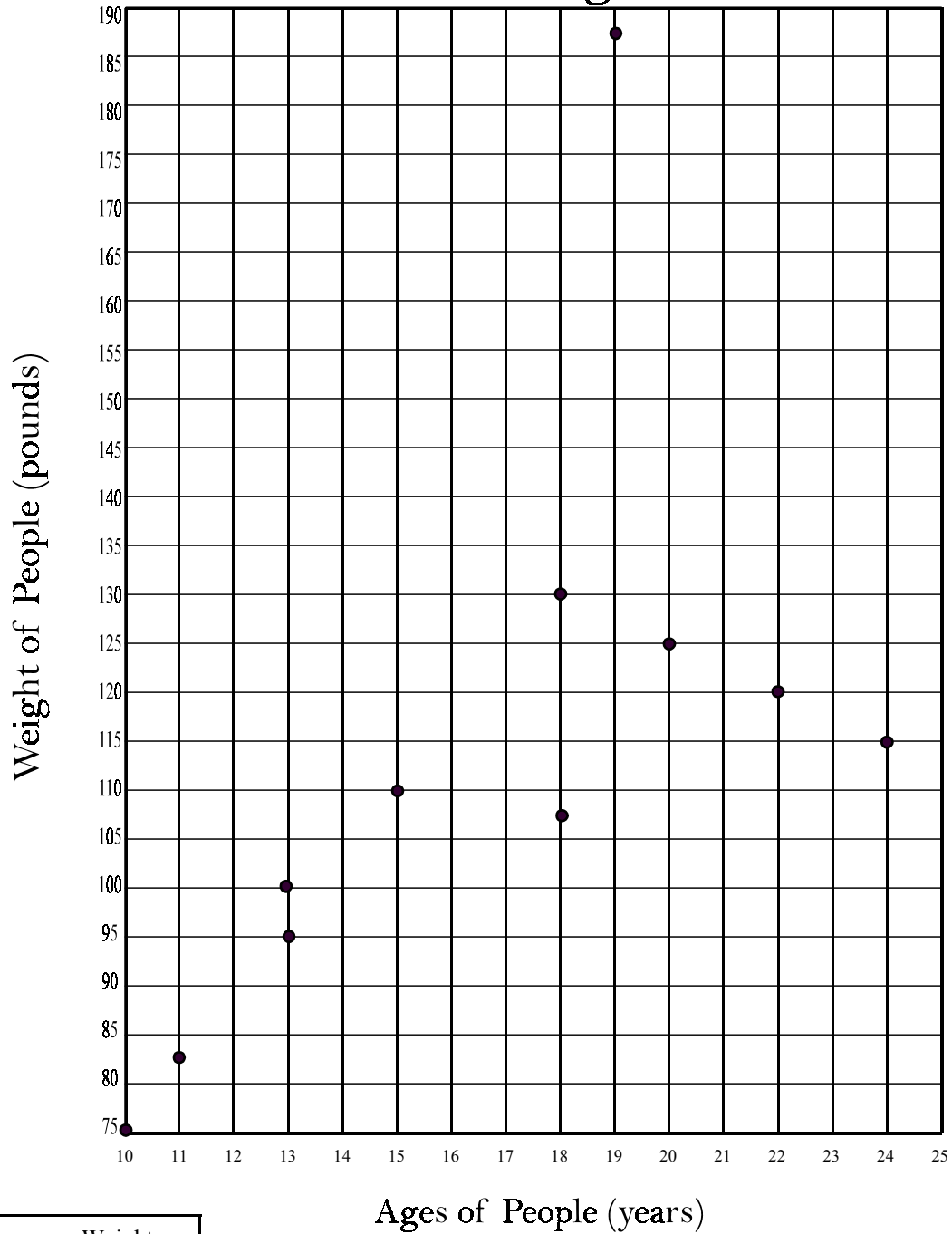
Give the graph a title

- (17) The title should describe what the graph is about (The Effect of the Time on the Temperature of the Water)

Write the data pairs

- (18) Put the data pairs (IV value, DV value) in the upper right hand corner of the graph
- (19) Put a box around the data pairs and label it "Data Pairs"

The Effect of a Person's Age on Their Weight



Age	Weight
10	75
15	110
19	187
22	120
18	130
11	83
18	108
13	100
20	125
13	95
24	115

Line Graph Checklist

Does/Is my graph:

- neatly done on graph paper?**
 - ◇ Use a ruler.
 - ◇ Mark the numbers on the lines, not in the spaces!
- numbered correctly on the x-axis?**
 - ◇ The numbers should go from the lowest value to the highest value
 - ◇ The numbers should be evenly spaced (by 2's, 5's, 10's, etc.).
- have a correct label on the x-axis?**
 - ◇ The label should tell what the numbers represent.
- have the correct unit of measurement on the x-axis?**
 - ◇ The unit of measurement (feet, seconds, years, etc.) should be written in parentheses next to the label.
- numbered correctly on the y-axis?**
 - ◇ The numbers should go from the lowest value to the highest value.
 - ◇ The numbers should be evenly spaced (by 2's, 5's, 10's, etc.).
- have a correct label on the y-axis?**
 - ◇ The label should tell what the numbers represent.
- have the correct unit of measurement on the y-axis?**
 - ◇ The unit of measurement (feet, seconds, years, etc.) should be written in parentheses next to the label.
- have a correctly written title?**
 - ◇ The title should be written in the format of "The Effect of (the IV) on (the DV)."
- have a correctly drawn line?**
 - ◇ The line should be the "best fit" line.
 - ◇ The line should **never** zig-zag from right to left.
 - ◇ It should **not** connect dot-to-dot (unless it is a time graph).
- have data pairs?**
 - ◇ The IV values and DV values should be paired up
 - ◇ The data pairs should be "boxed in" and labeled "Data Pairs"

These are the items that your line graph(s) will be graded on. Make sure that you have done these things correctly!