Step 1: Identify the variables
Independent Variable (purposefully changed by the experimenter): Number of coils
Dependent Variable (changes with the independent variable and is measured): Number of paperclips

Step 2: Determine the variable range
Subtract the lowest data value from the highest data value for each variable.
Range of paperclips: 14 - 4 = 10
Range of coils: 20 - 5 = 15

Step 3: Determine the scale of the graph
Determine the numerical value for each grid unit that best fits the range of each variable.
Number of lines on graph: 36 (y axis)
Range 10 paperclips
# of lines 36 lines
= .28 paperclips/line — round to .5 paperclips/line

Number of lines on graph: 25 (x axis)
Range 15 coils
# of lines 25 lines
= .6 coils/line — round to 1 coil/line

Step 4: Number and label each axis and title the graph
Step 5: Determine the data points and plot on the graph
(5, 4) (10, 7) (15, 11) (20, 14)

Step 6: Draw the graph
Draw a curve or a line that best fits the data points. Do not connect the dots.
As the number of coils increases, more paperclips are picked up with the electromagnet.