How to Make a Bar Graph

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

Number the Y-axis (the vertical one)- Dependent Variable
(2) Always start numbering a bar graph at zero
(3) Only number as high as your highest value (if the highest value is 18, don't number to 100!)
(4) Line up the numbers on the lines, not in the spaces
(5) Evenly space out the numbers (number by 1's, 2's, 5's, etc.) to fill up the page (don't squeeze your graph into one corner of the paper!)

Draw the bars on the X-axis (the horizontal one)-Independent Var.
(6) Make all bars the same width
(7) Evenly space out the bars (they should not touch)
(8) Label what each bar represents
(9) Color in or shade the bars differently

Label the graph
(10) Put a label on the X-axis to tell what **all of the bars** represent (hobbies, months, types of plants, etc.)
(11) Put a label on the y-axis to tell what the numbers represent (# of people, # of days, height of plants, etc.)
     == Make sure you include the proper unit (height of plant in inches, temperature in degrees Celsius, etc.)
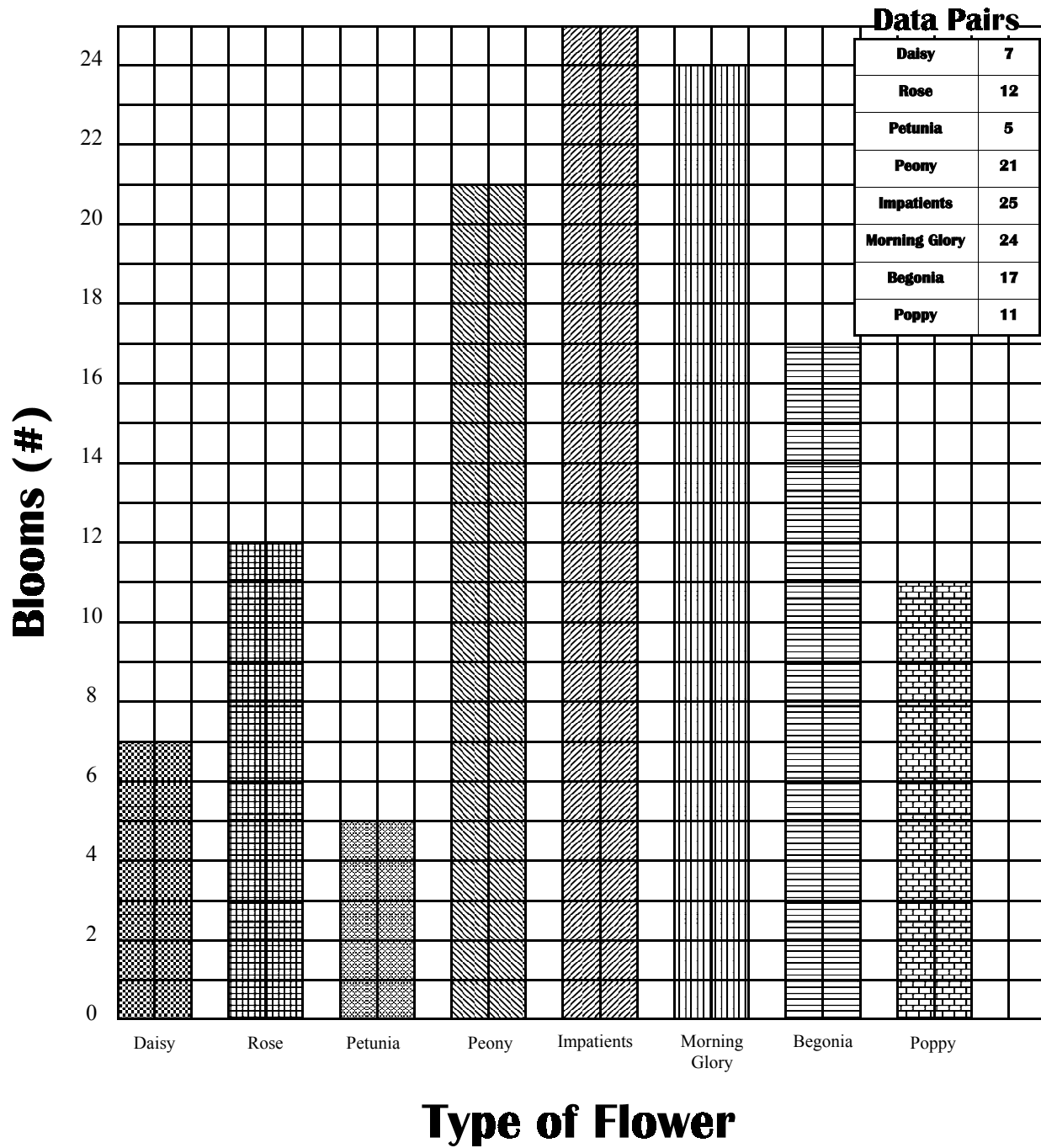
Give the graph a title
(12) The title should describe what the graph is about (The Effect of Brand of Fertilizer on How Tall the Plant Grew)

Write the data pairs
(13) Put the data pairs (IV name, DV value) in the upper right hand corner of the graph
(14) Put a box around the data pairs and label it "Data Pairs"

The Effect of the Type of Flower on the Number of Blooms Produced

Blooms (#) (y-axis)

Type of Flower (x-axis)

X-axis categories: Daisy, Rose, Petunia, Peony, Impatients, Morning Glory, Begonia, Poppy

Data Pairs	
Daisy	7
Rose	12
Petunia	5
Peony	21
Impatients	25
Morning Glory	24
Begonia	17
Poppy	11

Bar Graph Checklist
Does/Is my graph:

☐ **neatly done on graph paper?**
- ◊ Use a ruler.
- ◊ Mark the numbers on the lines, not in the spaces!
- ◊ Space your graph out so that it fills up most of the page.

☐ **have correctly made bars?**
- ◊ The bars are the same size.
- ◊ The bars are evenly spaced.
- ◊ The bars are colored in differently.
- ◊ Each bar should have a label.

☐ **have a correct label on the x-axis?**
- ◊ The label should tell what the bars represent.

☐ **numbered correctly on the y-axis?**
- ◊ The numbers should go from zero 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 data pairs?**
- ◊ The IV name and DV values should be paired up
- ◊ The data pairs should be "boxed in" and labeled "Data Pairs"

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