Name _____

Date _____

Plotting Line Graphs- Step-by-Step Lesson

Make a line graph for the data set below. Label both the x (horizontal) and y (vertical) axis properly. Give the graph a title.

| Number of Days | 10 | 12 | 14 | 16 | 20 | 21 | 26 | 30 | 35 | 40 |
|------------------------------|----|----|----|----|----|----|----|----|----|----|
| No. of Apples Consumed | 5 | 8 | 9 | 10 | 14 | 16 | 20 | 21 | 26 | 30 |

Explanation:

Step 1) Determine the purpose of the data.

We weren't given any background on the data set. It appears that the data charts the number of apples eaten over a series of days.

Step 2) Determine the data that should appear on the horizontal and vertical axis.

The data consists of two variables, in this case. There are two types of variables:

Independent Variable – This is the variable that is unchanged by other variable in the setting. This data will continue to grow or accumulate regardless of anything else.

Dependent Variable – This is the variable that is affected by other variables or factors in the environment or setting.

We usually place the variables in this arrangement on a line graph.

| Dependent | |
|-----------|---|
| Variable | |
| | Independent |
| | Variable |
| * Tons | of Free Math Worksheets at: © <u>www.mathworksheetsland.com</u> |

```
Name _
```

Date _

In our problem, we can easily determine that "Number of Days" is the independent variable. Days will continue to accumulate regardless of how many apples anyone eats on the planet.

Independent Variable = Number of Day (x-axis)

Dependent Variable = Number of Apples Consumed (y-axis)

Step 3) Determine a suitable range for each data set.

Number of days ranges from 10 -40. It is very customary to start your range at 0 and we must go to at least 10. This will be the range of the x-axis.

Number of apples consumed ranges from 5 - 30. Again, I would suggest starting at 0 and going to at least 30 (top value). This will be the range of the y-axis.

Step 4) Put everything together.

Create a graph that fits in the range of the data. Plot your points and connect your line.

