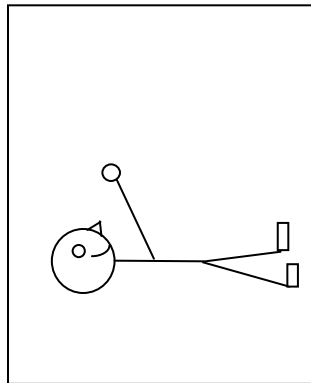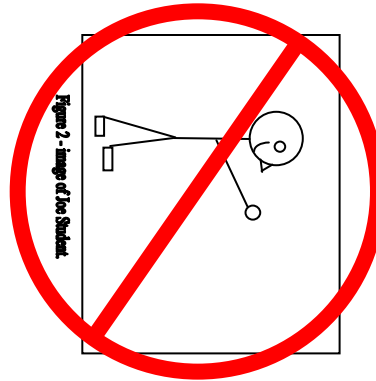**Orientation of illustrations (figures and tables)**: Most data can and should be displayed in portrait format, but if landscape is required, top should go to the left side of the page:

Correct (top is towards the left)   Incorrect (top is towards the right)

Illustration Captions: All figures (sketches, graphs, photographs, etc.) must have a figure number and description (caption) **below** the figure. If the image was not produced by the author (you) then it must be properly cited.
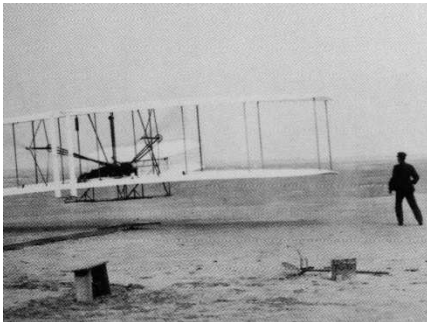

Caption must be sufficiently descriptive so that the figure (table, etc.) is "stand alone" – it is sufficient for the reader to understand what they should gain from the figure or table.

Photographs, sketches, data, etc. not produced by the author must have a citation.

Figure 1 –Wright brothers first flight (this flight lasted only 12 seconds)[1].

Provide bibliography information as footnote or in reference section:

[1] http://www.nasa.gov/multimedia/imagegallery/image_feature_976_prt.htm

For tables, the number and caption go **above** the table. Include units where appropriate.
Also, cite the data if you did not create it. Caption should be meaningfully descriptive.

Example of a table that **_needs improving_**:

Color	Wave Length	Speed
Red	650.2512	Faster
Blue	475.1258	Slower

Table 1 – light data.

Inadequate caption (does not inform the reader what the table is). Table numbers and caption go ABOVE the table.

Excessive significant figures, no units provided

Columns not properly aligned, and contain excessive empty space

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The above table can be revised to be more **_professional in content and appearance_**:

Numbered and titled above the table.

Reference utilized is cited.

Table 1 – characteristics of red and blue light traveling in water.[2]

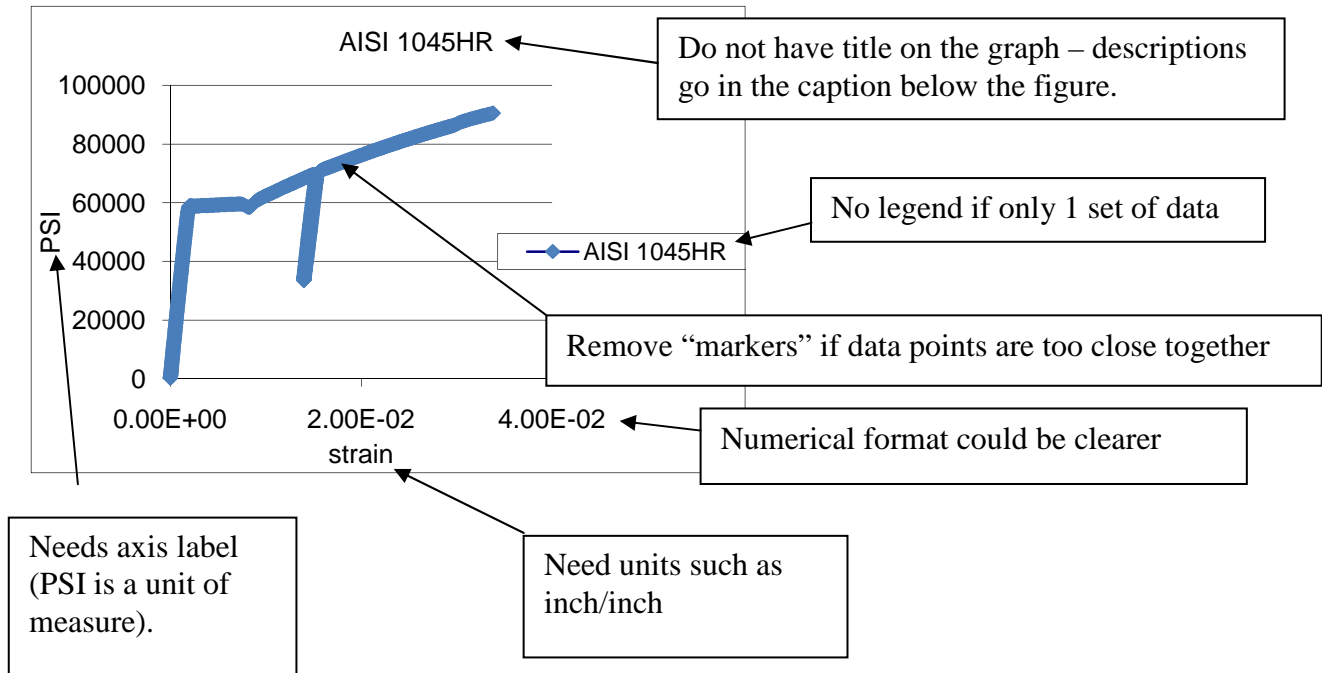| Color	Wave Length (nm)	Speed (relative)
Red	650	Faster
Blue	475	Slower

Caption is descriptive.

Columns nicely aligned and width properly adjusted.

Appropriate significant figures, units provided.

Provide bibliography information as footnote or in reference section:
   [2] Halliday and Resnick, *Fundamentals of Physics*, Wiley and Sons, 1981

AISI 1045HR

Do not have title on the graph – descriptions go in the caption below the figure.

No legend if only 1 set of data

AISI 1045HR

Remove "markers" if data points are too close together

Numerical format could be clearer

Needs axis label (PSI is a unit of measure).

Need units such as inch/inch

Above graph has been reformatted and is now of a **professional quality appropriate for engineering documents:**

NOTE: font size is sufficiently large (approximately12 point) after being pasted in to this document

Appropriate significant figures for both axes scales.

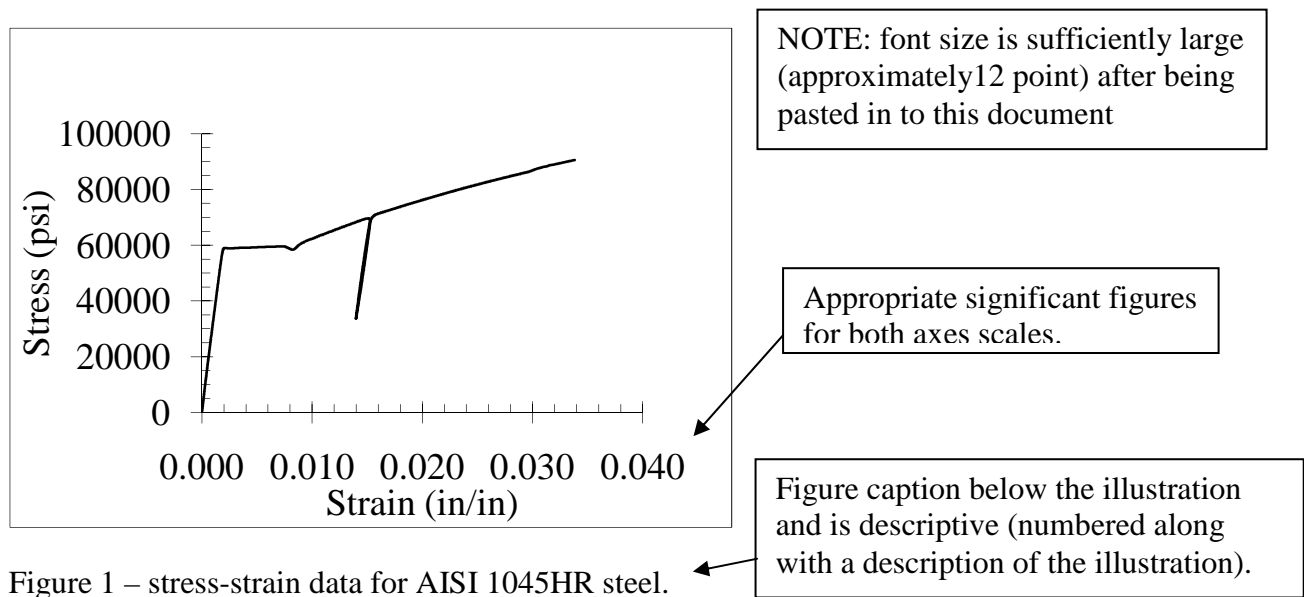Figure caption below the illustration and is descriptive (numbered along with a description of the illustration).

Figure 1 – stress-strain data for AISI 1045HR steel.