

Material Reports

Select any material that is of interest to you. Prepare a one page report and presentation of four minutes in length to be given in class. "Four minutes" means that the talk must be at least three minutes and absolutely no more than five minutes long.

Include in your report, information on:

1. Raw materials (The components, typically from a mine, from which your material is made)
2. Manufacture (The most important processes to make your choice a useful engineering material. This will typically describe how the "raw materials" above are processed to create the useful material)
3. Use (What are the most important engineering applications for your material? How is it used?)
4. The most important engineering properties of interest (Tensile strength, yield -strength, elastic modulus, etc.)
5. Cost of the material- (This can be very rough, usually dollar per pound)
6. A written bibliography of at least four references to be presented to the instructor immediately before you deliver your talk. References MUST BE properly cited. Included in these references must be: 1) Your text if applicable, 2) At least one, but not more than two, internet sources, 3) At least one general reference book from the library such as a handbook, encyclopedia or similar reference. 4) One online data base article. Include Author(s), Title of Article (if applicable), Book or Journal (include number & volume), date, and pages.

Be sure that the talk includes some data. The report must include slides on PowerPoint or the overhead projector. It will most likely consist of items included under number 4 above. See me at least 3 days before your talk if you need overhead transparencies made.

You should consult a minimum of four references, as indicated above, although it is permissible to use one reference as your main source. Don't forget your textbook. It can be an excellent source.

We will go to the library for an orientation to the reference section that will take about half an hour. The remaining time should be used to start preparation of your talk.

Please remember, directly utilizing someone's work without acknowledging the source is plagiarism and is a serious offense. (Do not use an author's works and phrases directly. Read them, understand them and then summarize the parts you want to include in your own words.)

This is a "Talk" not a "Read"! You may use notes and refer to them as needed but you may not "read" your "talk". Stage fright is natural! Your delivery will be improved with practice. A mirror, a friend or some other group can be used to practice for the real thing. Practice initiates the process of getting what is in your head properly routed and headed out over your tongue. It is highly recommended!

See your lab instructor for the date of your presentations.