

ACTIVITY 1

Notes to the Instructor

This activity was designed to encourage students to use various library resources and/or the Internet to obtain some more information about the topics being studied in this section. It could also be used at the end of all of these sections to encompass a wider variety of different topics that could then be assigned to students. It may be necessary to modify the questions on the hand out for certain topics. **There should also be a discussion with the students concerning the validity of the information that can be found on the web. Caution them to not rely on a single source, but to try to verify their findings at other sites.**

Some possible topics to assign within this section include, but are not limited to

- SPM
- STM
- AFM
- MFM (Magnetic Force Microscopy)
- X-ray diffraction
- Crystalline structures/solids
- Amorphous solids
- Visible light
- Electromagnetic radiation
- Optical transform experiments
- Tungsten
- Platinum
- Platinum-Iridium alloys
- Electrostatic forces
- Piezoelectric materials

If the activity is done after all the sections are completed, some possible topics to include are those listed above as well as:

- Memory metal
- Nitinol
- Alloy
- Austenite
- Martensite
- LEDs, including white LEDs
- CDs
- Semiconductors
- Blue light emitting diodes and lasers
- Ferrofluids