

# NOTES TO THE INSTRUCTOR

Copies of all paper-based work sheets should be available at the module before students are placed in the modules. Students may use the provided **Vocabulary Word Work Sheet**, or you may want to save copying costs by having them write down vocabulary words and definitions on their own sheet of paper.

Even though they are computer-based, copies of the student **Inventory**, **Journal**, **Pre-test**, and **Post-test** should be copied before the students are placed in the modules and kept in the instructor's notebook in case they are needed.

Note that the answer key for the **Pre-test** here in the Instructor's Overview is used as the key for both the **Pre-test** and the **Post-test** on the computer. Reference the hard copy **Pre-test** answer key with any questions about answers on the computer-based **Pre-test** and **Post-test**.

Instructors should also note that the students will be required to take a **Checkpoint** at the end of **Activity Six** and **Eight**. A **Checkpoint** asks the student to have you, the instructor, come to the module area and check off, on the computer, that the day's work has been completed satisfactorily. You will be required to enter a passcode before completing the **Checkpoint** to ensure that you and not the student completes the assessment. The code will always be the ID# listed on page 2 of the Student Guide. It would be a good idea for you to keep a separate list of the numbers that you can keep with you so that it will not be obvious to the students where you are retrieving the number.

Students will be constructing a solar collector in **Activity Six**. All of the items they will need are supplied with the module except for a cardboard box (shoe box). They are instructed to bring one in **Activity Five**.

In **Activity Eight** the students build a model using the K'NEX solar power system set. They will need a lamp and one 60 watt light bulb for this experiment. They will also need the 3-page laminated Crank Man instructions. These are all included with the module.

In **Activity Ten** the students are given the opportunity to choose one of the K'NEX models to build during the activity. They need to choose one that involves using the solar panels, lamp and light bulb.

## REQUIRED MATERIALS & EQUIPMENT

- 1 - Applied Technologies Alternative Energy Module Student Guide
- 1 - Media Cruiser CD
- 1 - Compton's *Interactive Encyclopedia* CD
- 1 - K'NEX solar power system set
- 1 - *Encyclopedia of Science* CD
- 2 - ***Weather and Climate*** text
- 2 - ***Wind Power*** booklet
- 2 - Thermometers
- 1 - Laminated 3-page Crank Man instructions
- 1 - Package of black/white construction paper
- 1 - Pair of scissors
- 1 - Tape
- 1 - Roll of plastic wrap
- 1 - Roll of aluminum foil
- 1 - lamp
- 2 - 60 watt light bulbs
- 1 - ***Power Up: Energy in Our Environment*** video
- 1 - ***The Power of Wind*** video

\* Videotapes are provided as backup since students access the videos via the Media Cruiser CD.