

all the right answers indicated. When discussing the exam with them, this saves the time of going over those questions that many students will understand by just seeing which answer was correct. The time saved can be used to explain in more detail an answer to a more complex question. Our exam-review sessions have been far more rewarding because of this feature. Usually the questions that are in need of detailed explanation are those that confused the largest number of students in the class; hence, these explanations reach the greatest number of students who need them.

4. For reviewing at the end of marking periods or semesters the student has all the correct answers already on his answer sheet. A set of exams becomes, in effect, a sort of "programmed" biology course. This will encourage the student to go over his own exams, knowing he has a ready check on his knowledge.

We have been using this system in our biology department for several years. We have found it easy to use and very rewarding. Those who try it will, I am sure, be similarly rewarded.

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## Science Club . . . .

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2. The major gas and heated-aerosol polluting agent is automobile exhaust.

3. Under certain conditions automobile exhaust may combine with water and produce weak but effective acids. Thus, corrosion of metals occurs at a greater rate.

4. The shopping center is a major secondary pollution factor, in that asphalt and cement radiate heat, which magnifies existing pollution.

5. Architects and engineers should consider the use of materials that are less heat-retentive. This would reduce some aspects of air pollution.

6. The immediate environs of the shopping center are warmer on cool winter evenings than are the streets farther away. The thermal energy from the shopping complex is effective slightly beyond the 1-km zone.

7. During the summer months rainfall patterns indicate that the high aerosol content and additional atmospheric heating over the center creates an almost constant vertical movement of air. This causes convection showers around the center and a lessening of rainfall over the center.

The biologic studies yielded less information, but the students found that domestic species of plants and animals quickly replace native species. Pesticides and other chemicals probably aid in the removal of native populations, and the more resistant domestic species increase.

The project raised more questions than it answered. Even so, this project proved to be a source of enrichment to the club and the community.

## War on Nature . . . .

from p. 130

Despite his misguided stand on Alaskan oil, Hickel is a man who has shown great capacity to learn. I wish him well. I hope that he will learn all the ecology and biology that he must; for his is an important voice, which has given both students and biologists, as well as the public, faith that even this government might possibly work or might even change, given an honest man. Abraham Lincoln was made of similar rough stuff, and he became a great president.

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We will never get to the root of our environmental crisis by picking up tin cans. Only by changing the very institutions that have allowed our crisis to develop, by placing in high government office men who have an honest concern for ecology, is there hope for plants and animals, and for us, to survive. Let us quickly dismiss from positions of power those who do not understand the ecologic limitations of the earth. Let us replace them with people as environmentally concerned as Ralph Nader, William Ruckelshaus, Gaylord Nelson, Walter Hickel, and Robert Packwood. And let us, as individual biologists, do our utmost to make sure that such men are elected to the highest positions in government.

Let the biology teacher become politically active. Let him join with the Sierra Club, the Environmental Defense Fund, the Wilderness Society, the National Parks Association, and any other organization willing to hire lawyers and fight the smoke screen of the anti-environment campaigns.

The National Association of Biology Teachers must speak out, too. It should hire representatives in Washington—eco-lobbyist lawyers who would represent its members' wishes (Iltis, 1969, 1970b). The issues are not only questions of politics or biology; they are issues of simple human decency. The biology teacher, more than any other professional, has the answers to many of today's problems. You must not remain silent.

(To be concluded in the April issue)

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## Correction

In the article "A Versatile Copper Reagent for Sugar Chemistry Demonstrations," by F. W. Price (ABT 34 [1]: 23-27) the word "ammonia" was dropped at the beginning of the section on preparing the reagent. The first sentence should read as follows: "To a 5% w/v [weight per volume] aqueous solution of cupric sulfate pentahydrate,  $\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$ , add strong ammonia (S.G. 0.880) from a buret with continual swirling."