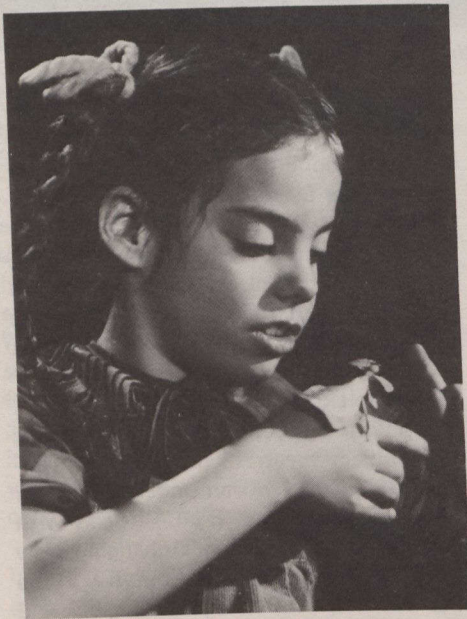




Children will learn about robotics with Hero the robot in the communications workshop.

computers while "Comets, Volcanoes and the Sudbury Basin" explores geological theories relating to the formation of the Sudbury Basin.

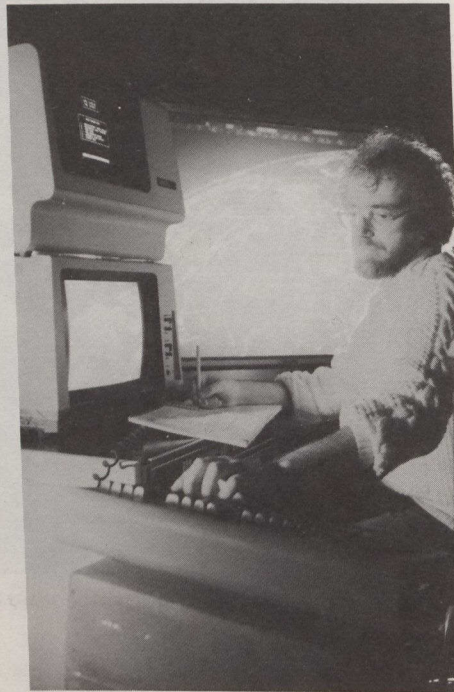
The focal point of the main exhibit area will be the fast-paced, forge centre show. A working forge will demonstrate the principles of forging, smelting, casting and alloying with demonstrations based on themes such as "up and down", "hot and cold", "motion and mass".



A live insect zoo will contain exotic specimens like this Javanese leaf insect. The insect zoo will contain many northern specimens as well as part of the life sciences exhibit area at Science North.

Other exhibit and workshop areas will illustrate questions relating to scientific concepts such as the biosphere, which includes an insect zoo, and the atmosphere where a weather station is in full operation together with an air quality monitoring device.

"More important than the themes themselves will be our approach to the visitor," said Cynthia Thompson. "We want people to get involved; to sit down at a computer and assess their lifestyle data for stress index, cardiac risk, diet and exercise; to discover electro-magnetism as Faraday did by performing the same experiments in a replica of his laboratory; to do their own soapstone carving while being instructed by a northern artist."



Visitors will be able to operate a viewfax system, one of only three in existence. It is the most up-to-date satellite photo display system available and is part of Science North's atmospheric workshop area.

Science North cost \$23 million to build, most of the money coming from local governments and corporate donors. Inco, for example, donated \$1 million and Falconbridge Mines another \$1 million.

Its yearly budget will be well over \$1 million, with the deficit to be covered by the province of Ontario and the federal government.

Science North will open its doors to the public on June 19. An official opening is expected to take place in July.

For further information, please contact Science North, 100 Ramsey Lake Road, Sudbury, Ontario, Canada P3E 4S8.

Machine-readable passports

New "machine-readable" Canadian passports are on the horizon — possibly as early as October.

Potentially, these "computerizable" documents could:

- both speed up and increase border-crossing checks;
- hook into other computer sources of information, and help police and immigration officials to quickly pinpoint terrorists and other criminals; and
- simplify passport renewals.

To the average Canadian, the most obvious change in the new passport will be size: prototype models are smaller, squarer and pocket-sized. The new documents are also less descriptive. In accordance with international standards adopted by the International Civil Aviation Organization, height, eye colour and hair colour and other names the person is known by will be dropped.

For example, if a person's name is Cuthbert William Smith, but he has been called Bill Smith all his life, the passport will call him Bill Smith. According to Nicholas Wise, chief of passport policy for the Department of External Affairs, the old, descriptive features were dropped mainly because they were easy to alter or liable to change.

The new passport should also have heat- and cold-resistant lamination on the specially treated information page to guard against counterfeiting or nefarious alteration. If this security technique proves successful, Canadians may be able to renew their passports using only their old passports as proof of identity.

But the most unique feature of the passport will be its ability to be "read" by computerized machines, as well as by the naked eye. These optical-character-recognition machines will scan and then show on a computer screen the information which in the past has ordinarily been written on a passport. It will check this against an abbreviated version of those facts appearing at the bottom of the passport.

More important, it will also have the capacity to check the passport and the information on it against other facts about the traveller which might be recorded in other computers.

For example, within seconds a cursory check could reveal to authorities that the document is one of the 8 000 Canadian passports which are reported stolen each year.