School Tours at the Des Moines Center of Science and Industry

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Des Moines Center of Science and Industry

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As every teacher knows, some of the best learning experiences take place outside the classroom. This may be especially true when you take your class on a field trip to the Des Moines Center of Science and Industry, where a program has been planned especially for school groups.

Science Center school tours provide a motivational experience which stimulates interest in science and technology through participation. One of the nation’s few museums of science, technology and industry, the Center seeks to explain scientific principles and to show how the principles are applied in society and industry. The emphasis is on present-day knowledge rather than on the past, and on the use of visitor participation and three-dimensional exhibits. Unlike the traditional historical, art and natural history museums, the Science Center is contemporary in nature and designed for interaction. There is no “hands-off policy”; visitors are encouraged to touch, to manipulate and to become involved with the exhibits.

This fall the Science Center offers a new and expanded school tour program which will be of particular interest to teachers and children. The classroom teacher who schedules the tour will have a choice of several programs which begin in the morning and continue through the school day. A planetarium demonstration, a life science demonstration, a physical science demonstration, nature hikes and a tour of exhibits are all available. The amount of time the group spends at the Center is determined by the number of 30-minute program blocks the teacher selects. Staff members and a core of trained volunteers shepherd the students through the day, presenting challenging material and new experiences for inquiring young minds.

Teachers who select the planetarium demonstration will visit one of the most modern facilities of the type. Virtually any astronomical phenomenon can be projected onto the 40-foot dome of the Sargent Planetarium. Within the theater some 75 special effects projectors, professional grade stereo equipment and the computerized Spitz A-4 plane-
tarium star projector make even the most obscure theories easy to understand.

The morning planetarium schedule includes four different shows—The Moon, The Terrestrial Planets, The Jovian Planets and The Stars. The class may elect any one of these 30-minute shows, although selections for grade levels are suggested.

The afternoon schedule literally turns the facilities of the planetarium over to the teacher, who may request that any topic in astronomy be presented during the half-hour period. While instruction is the main concern, the highly visual and thought provoking shows are also entertaining. Action is fast and continuous.

A new exhibit from the Atomic Energy Commission will be the springboard for the 30-minute physical science demonstration. The Energy Laboratory exhibit is a multimedia presentation that combines striking graphic art with live lecture demonstration by specially trained teacher-demonstrators. The six-part display depicts historic stages in man’s utilization of energy to shape his environment. The over-all ef-
fect is a colorful, three-dimensional kaleidoscope of man's steady progress toward the mastery of nature's forces as the energy demands of modern society have multiplied many times over.

The Iowa Wildlife Demonstration Area on the lower level was just added to the life science displays in September. From this focal point—what better place to start a study of life and the environment?—a number of different programs can be followed. This area houses native live material representing each major subdivision of the animal kingdom except man. These animals include examples of insects, fish, reptiles, amphibians, birds and mammals representative of Iowa wildlife. Many of these animals are seldom seen in our urban society, although in earlier days they were familiar neighbors. The response to a live animal is basically an emotional one through which interest, curiosity and creativity are awakened. The 30-minute demonstrations will include discussions about individual specimens, their habits, preferred environment, and place in the ecological system.

Another new area, The Health Cell, will open next spring. A transparent anatomical model, a Life Begins exhibit, and a demonstration
area will comprise stage one of the Health Cell. In this area the won-
ders and mysteries of the human body will be explored.

Nature hikes along the Center’s three miles of nature trails are led
by the Center’s naturalist and volunteer staff. Along the trail students
identify trees, flowers, birds and animal traces. The interaction of ani-
mals with the park environment, their relation in a food chain, their
relation with man and their evolution to fit their environment are some
of the topics covered during the half-hour on the trail.

A guided tour of the Center gives a comprehensive view of exhibits
including the Foucault Pendulum, the Story of Energy, What Is a
Million, Visu-Phones, the Iowa Wildlife Demonstration Area and the
Energy Laboratory. Traveling exhibits are lodged in the Windsor Gal-
lery and change frequently. A stop in the Explorer Shop provides stu-
dents and teachers the opportunity to purchase science materials,
books and games.

The Science Center is a “science education center” which supple-
ments the course offerings of the formal school system. It is a re-
source that helps teachers in the difficult job of educating youngsters
about the world of science, technology and industry. School tours
make the world of science understandable—and do it in such a way
that it is an enjoyable experience.

Teachers wishing more information should write to Mrs. Peggy
Paschall, Program Coordinator, Science Center, Greenwood Park, 4500
Grand Avenue, Des Moines, Iowa 50312, for a complete brochure.
The telephone number is (515) 274-4138.

SCHOOL TOUR SCHEDULE, 1974-75

Morning
Planetarium demonstrations, life science demonstrations, physical science demon-
strations and nature trail are available during each 30-minute block. (The nature
trail is offered October, November, April and May only.)
Block I 9:45-10:15 a.m. Block III 10:45-11:15 a.m.
Block II 10:15-10:45 a.m. Block IV 11:15-11:45 p.m.

Afternoon
Planetarium demonstration or nature trail or exhibit tour is available during each
30-minute block.
Block V 1:00-1:30 p.m. Block VII 2:00-2:30 p.m.
Block VI 1:30-2:00 p.m. Block VIII 2:30-3:00 p.m.

Maximum group size: planetarium or nature trail, 60; physical science or life sci-
ence, 30 (group of 60 may be split).
Fee: $25 per group (Des Moines Public Schools are prepaid).