PASSPORT

Your Name: _____

Your School: _____

Chicago's Navy Pier October 14, 2004

Dear “What’s Next” participant:

Thank you for joining us today for this exciting expo.

This expo is full of fascinating and creative ideas and prototypes. The technologies you will see today take time and money to create, but the most important ingredient in their success is IMAGINATION. You will see how yesterday’s daydreams have become today’s discoveries.

As you visit the different exhibits, make sure you speak with the scientists and ask questions about their ideas. Their life’s work in science and technology is the key to a more exciting future and a more secure world.

Who knows, maybe you have an idea that could be “What’s Next” in science or technology!

Whatever your dream, this is future science for you!

Spencer Abraham
Secretary of Energy

What's Next
Schedule

9:00-9:45 AM	Students Arrive, go to ballroom for pre-show activity
10:00 AM	Program begins in Ballroom
10:40 AM	Students are dismissed from ballroom in shifts based on group number
10:45 AM	Exhibits begin on Second floor in Lobby and Balcony
12:10 PM	Lunch begins according to the following schedule:
12:10	Group 1 goes to lunch
12:20	Group 2 goes to lunch
12:30	Group 3 goes to lunch
12:40	Group 4 goes to lunch
12:50	Group 5 goes to lunch
1:00	Group 6 goes to lunch
1:10	Group 7 goes to lunch
12:40-1:30	Students assemble and head to their buses at predetermined times.
1:30 PM	Last buses depart.

Participating Exhibitors and Exhibits:

Ames Laboratory www.ameslab.gov

- Chill Out with Magnetic Refrigeration
- Photonic Frenzy

Argonne National Laboratory www.anl.gov

- Chemistry
- Driving the Future: Fuel Cells
- Materials of Tomorrow
- Meteorology: Forcasting the Future Today
- NEWTON Online and Ask a Scientist
- Palentology: Uncovering the Past
- Science for All
- Science of Toys
- Sizing it up: Microscopes and Forensic Science

Brookhaven National Laboratory www.bnl.gov

- Computer Modeling in Structural Biology
- Magnetic Levitation Trains

Chicago Web Docent cwd.uchicago.edu

- Bringing Museums to the Digital Classroom

DELL DOE Federal Team

- Visualization

Department of Energy - Office of Science www.science.doe.gov

Department of Energy - Workforce Development
www.scied.science.doe.gov

Department of Energy - Joint Genome Institute www.jgi.doe.gov

- Fruitful DNA Extraction--The first step toward sequencing genomes.

Fermi National Accelerator Laboratory www.fnal.gov

- Can You Measure Something Without Seeing It?
- Can You Read Particle Tracks?
- Do Rules Matter?
- How Good is Your Aim? Knock Balls into One Another.
- Invisible Forces Here! What Can We Learn?
- Invisible Particles! What Can You Detect?
- It's Hiding! What Characteristics Can You Identify?
- Let's accelerate! Are you faster than the ball?
- Mr. Freeze

IBM www.ibm.com

- Think Outside the Box

Idaho National Engineering and Environmental Lab www.inel.gov

- Hazmat Cam - Wireless Video System

Los Alamos National Laboratory www.lanl.gov

- Robotics

Lawrence Berkeley National Laboratory www.lbl.gov

- Saving Energy by Solid State Lighting: Investigating Nanomaterials by Digital Image Processing in Microscopy
- Seeing the Light

Lawrence Livermore National Laboratory www.llnl.gov

- Rainbows of the Universe
- Science of the Future: Biotechnology

Microsoft www.microsoft.com

- Technology for the Future

National Energy Technology Laboratory www.netl.doe.gov

- NETL 3D Data Visualization

National Renewable Energy Laboratory www.nrel.gov

- Fuel Cells and the Hydrogen Economy of the Future

Oak Ridge National Laboratory www.ornl.gov

- Radiation in the Middle School Classroom

Pacific Northwest National Laboratory www.pnl.gov

- A Geologic Solution to Global Warming
- Acoustic Inspections - Seeing with Sound
- What is a Robot? Robotics in Education and Industry

Princeton Plasma Physics Laboratory www.pppl.gov

- Plasmas

Savannah River National Laboratory www.srs.gov

- Racing Pipe Crawlers

Stanford Linear Accelerator Center www.slac.stanford.edu

- High Speed data transfer will revolutionize your lives

Thomas Jefferson National Accelerator Facility www.jlab.org

- Magnets, Electromagnets, and the World Around You

Underwriters Laboratory www.ul.com

- I am Safety Smart! ...A Lesson in Home Safety

USC, ANL, LLNL, LANL, ORNL, SNL, NCSU, UCSC, Second Sight www.doemedicalsciences.org

- Artificial Retina - Doheny Eye Institute at USC

Getting Your Passport Stamped

When you are traveling around the learning stations today, you will find a lot of exciting science and techology from all over the country.

After learning from each station, you will want to have them stamp your passport with their stamp.

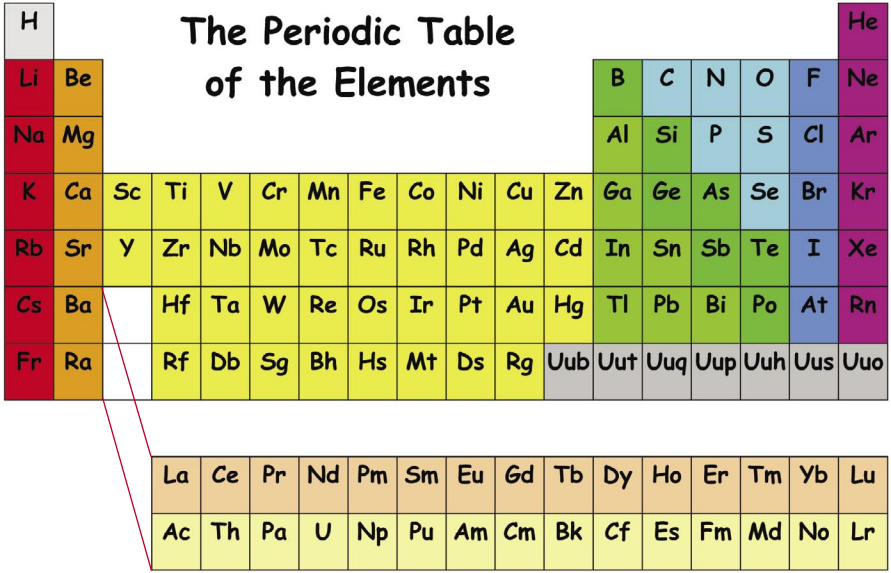
The stations are divided up into ten different groups, based on the different classifications of elements in the periodic table.

Each station has a stamp of an element from one of those groups. They will stamp your passport in the proper place for their element. For example, the Aluminum (Al) stamp can only go in the metals group.

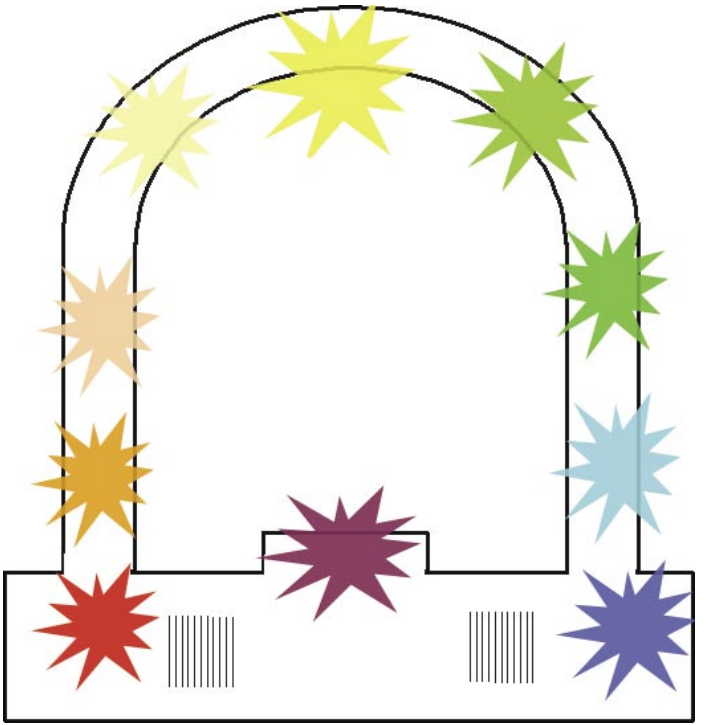
Your mission is to get at least ten stamps during your travels today.

When you are done, you can take your passport to the inspector station located in the grand ballroom and receive a goodie bag to take with you.

Most of all, have a good time and learn a lot!


The Periodic Table
of the Elements
H
He
Li
Be
B
C
N
O
F
Ne
Na
Mg
Al
Si
P
S
Cl
Ar
K
Ca
Sc
Ti
V
Cr
Mn
Fe
Co
Ni
Cu
Zn
Ga
Ge
As
Se
Br
Kr
Rb
Sr
Y
Zr
Nb
Mo
Tc
Ru
Rh
Pd
Ag
Cd
In
Sn
Sb
Te
I
Xe
Cs
Ba
Hf
Ta
W
Re
Os
Ir
Pt
Au
Hg
Tl
Pb
Bi
Po
At
Rn
Fr
Ra
Rf
Db
Sg
Bh
Hs
Mt
Ds
Rg
Uub
Uut
Uuq
Uup
Uuh
Uus
Uuo
La
Ce
Pr
Nd
Pm
Sm
Eu
Gd
Tb
Dy
Ho
Er
Tm
Yb
Lu
Ac
Th
Pa
U
Np
Pu
Am
Cm
Bk
Cf
Es
Fm
Md
No
Lr

Science Station Groupings



Alkali Metals	Lanthanides	Transition Metals	Metalloids	Halogens
Alkaline Earth Metals	Actinides	Metals	Nonmetals	Noble Gases

Alkalai Metals	Alkaline Earth Metals

LANTHANIDES	ACTINIDES

Transition Metals	Metals

Metalloids	NonMetals

Halogens

Noble Gases

Notes

Passport Created by Aaron Schuetz, Albert Einstein Distinguished Educator Fellow in conjunction with the Department of Energy's Office of Science: Workforce Development for Teachers and Scientists. For questions or comments, please send e-mail to: aaron.schuetz@science.doe.gov


DEPARTMENT OF ENERGY
UNITED STATES OF AMERICA