



I-75 Exit 293 at Hwy 411, 30 miles north of Atlanta

Physical Address: 100 Tellus Drive, Cartersville, GA 30120

Mailing Address: P.O. Box 3663, Cartersville, GA 30120

Central Scheduling: 770-606-5699

## 2011 -2012 Program Descriptions for All Galleries

90 students for all Pre-K & Kindergarten, 120 students for all other grades and galleries.

### Collins Family My Big Backyard Gallery

#### ***It's ALIVE!*** Pre-K and Kindergarten

*Pre-K program available January through May only.*

Introduce your four- and five-year-old **Pre-K students** to insects in this entertaining and interactive program. These young learners will learn the parts of an insect and make their own butterfly to take home. In the Collins Family My Big Backyard gallery, students will be able to match animals to their habitats and to what they eat in the food cycle, as well as match adult to child in the life cycle of various animals.

\*Program will run 1 ½ hours.

- 30 minutes – lab
  - Compare butterflies and moths
  - Make antenna headbands
  - Make morpho butterfly rings
- 30 minutes – gallery time
  - Point out life science on the tree exterior
  - Give time to explore the gallery
- 30 minutes – store & tree activity
  - Discuss living versus non-living
  - Introduce insects

*Take home items - morpho butterfly rings and antenna headbands*

**Kindergartners** will discover that bugs are living things, compare bugs to other animals, and use their classification skills to compare insects and arachnids. In the Collins Family My Big Backyard gallery, students will have the opportunity to match the life cycle of various insects and explore other interactive exhibits of the gallery.

*Georgia Performance Standards: SKCS1a; SKCS4a; SKCS5a; SKCS6c; SKL1a, b; SKL2a, c, d*

Program will run for two hours.

- 30 minutes – lab
  - Introduce insects
  - Introduce arachnids
  - Make spiders
- 30 minutes – gallery time
  - Point out life science on the tree exterior
  - Give time to explore the gallery
- 30 minutes – theater
  - Bees are insects
  - Play and dance insect songs
- 30 minutes – store & tree activity
  - Compare butterflies and moths

*Take home items – pom spider pin*

## **What's the Matter? Second Grade**

**Second graders** will examine the states of matter. "Chilling" demonstrations using liquid nitrogen allow students to experience condensation and evaporation. Students find out how molecules behave when matter changes from state to state and take part in a tasty experiment while changing a liquid to a solid. Time will be given for exploration of the Collins Family My Big Backyard gallery.

*Georgia Performance Standards: S2CS1a; S2CS4b, c; S2CS6a, b; S2P1a, b*

Program will run for two hours.

- 30 minutes – intro in theater, ALL STUDENTS
  - Introduce the three states of matter
  - Introduce concepts of condensation, evaporation, melting, freezing
  - Demonstration on condensation and evaporation using balloons and liquid nitrogen
- 30 minutes – lab
  - Experience matter changing from liquid to solid/freezing experiment
- 30 minutes – gallery time
  - Introduce the Collins Family My Big Backyard
  - Encourage students to look for items that are solid, liquid, or gas
  - Give time to explore the gallery
- 30 minutes – store & tree activity
  - Kinesthetic demonstration of solid, liquid, and gas molecules
  - The freezing song

*Take home items - bubbles*

## **Magnet Mania First and Third Grades**

**First graders** will explore magnetic attraction and repulsion through prediction and experimentation. Hands-on exploration of magnets encourages students to discover what objects are magnetic and whether magnets attract through other materials. Investigation of magnets will include exhibits in the workshop area of the Collins Family My Big Backyard gallery.

*Georgia Performance Standards: S1CS1a; S1CS5a, b; S1CS6a, b; S1P2a, b, c*

Program will run for two hours.

- 30 minutes – intro in theater, ALL STUDENTS
  - Introduce basic concepts of magnetism
- 30 minutes – lab
  - Introduce magnetic field
  - Students explore whether magnets attract through objects
- 30 minutes – gallery time
  - Introduce the Collins Family My Big Backyard pointing out magnet activities
  - Give time to explore the gallery
- 30 minutes – store & tree activity
  - Mr. Red Magnet and Mr. Yellow Magnet: poles attract and repel
  - Play "Attract and Repel" game

*Take home items - bookworm magnets*

**Third graders** will build on their magnetic knowledge as they are encouraged to find out what a magnetic field will do and how to create a magnet using electricity. Students will further their knowledge while experimenting with magnets, electromagnets, and electricity in the workshop exhibit in the Collins Family My Big Backyard gallery.

*Georgia Performance Standards: S3CS4a; S3P2a, b*

Program will run for two hours.

- 30 minutes – intro in theater, ALL STUDENTS  
Review basic concepts of magnetism  
Demonstration of an electromagnet
- 30 minutes – lab  
Investigate 3 electromagnet activities and identify variables that affect the strength of an electromagnet
- 30 minutes – gallery time  
Introduce the Collins Family My Big Backyard pointing out magnet activities  
Demonstrate electromagnetic exhibits  
Give time to explore the gallery
- 30 minutes – store & tree activity  
Game review “What attracts to a magnet and what doesn’t?”

*Take home items - magnets*

### ***Energy Quest!* Fourth Grade and Fifth Grades**

Enhance your **fourth graders’** energy unit with this “enlightening” program. This presentation introduces light as a form of energy, examines the properties of light, offers hands-on opportunities to discover what types of images are formed by different types of mirrors, as well as giving students a first-hand opportunity to experience light exhibits in the greenhouse of the Collins Family My Big Backyard gallery.

*Georgia Performance Standards: S4P1a, b, c; S4CS1b, c, d; S4CS8a, b*

Program will run for two hours.

- 30 minutes – intro in theater, ALL STUDENTS  
Introduce characteristics of light  
Demonstration of properties of light using a laser
- 30 minutes – lab  
Students compare how reflections change with the various types of mirrors (plane/flat, concave, and convex)
- 30 minutes – gallery time  
Introduce the Collins Family My Big Backyard pointing out greenhouse and light activities  
Students compare the changes in images to the shape of the mirror  
Review translucent, transparent, opaque  
Give time to explore the gallery
- 30 minutes – store & tree activity  
Practical applications of plane (flat) mirrors  
Mirrors reverse images

*Take home items – rainbow glasses*

Highlight your **fifth grade** study of electrical energy with this electrifying program. This program introduces students to the “hair-raising” topic of static electricity, gives them the basics for designing their own circuit boards and allows them to explore electricity and magnetism in the garage exhibit in the Collins Family My Big Backyard gallery.

*Georgia Performance Standards: S5P3a, b, c; S5CS1b, c, d; S5CS3a, d; S5CS4a*

Program will run for two hours.

- 30 minutes – intro in theater, ALL STUDENTS  
Introduce static and current electricity  
Demo using electrostatic generator (static)  
Demo using energy balls (current)

- 30 minutes – lab  
Explore current electricity using the circuit boards
- 30 minutes – gallery time  
Introduce the Collins Family My Big Backyard pointing out electricity activities  
Give time to explore the gallery
- 30 minutes – store & tree activity  
Do electricity review using circuit quiz boards

*Take home items - static bags*

## Science in Motion Gallery

### **Day & Night** Kindergarten, and Pre-K

*Pre-K program available January through May only.*

Have your four- and five-year-old **Pre-K students** join Big Bird and Elmo with their friend Hu Hu Zhu from China as they explore the sky in **One World, One Sky** planetarium show. They learn about the Big Dipper and the North Star and take an imaginary trip to the Moon.

*Georgia Performance Standards: SKP3, SKE1, SKCS6*

*Program will run for two hours.*

- 30 minutes - Planetarium Show: One World One Sky, ALL STUDENTS
- 30 minutes - lab  
Students will explore the concepts of Day & Night and explore the effects of gravity
- 30 minutes – gallery time  
Students will go on a scavenger hunt looking for cars, trains and spacecraft  
Students will discuss different careers in transportation
- 30 minutes – store & lobby for Foucault pendulum

*Take home items – gliders*

### **Galactic Weather** First and Third & Fourth Grades

The PBS award winning **Zula Patrol**'s zany characters discover Dark Truder's plan to steal the Kaboobie Ruby and go after him - discovering all about weather in the process, both on Earth and on other planets in our solar system. Students will enjoy an introduction to the night sky, find the Big Dipper and a few seasonal constellations.

*Georgia Performance Standards: S1E1a, S1CS4a, S1E2a, b; S3P1d; S4E3e, S4E4a,b,c*

*Program will run for two hours.*

- 30 minutes - Planetarium Show: Under the Weather, ALL STUDENTS
- 30 minutes - lab  
**First Grade** - explore weather using weather stations  
**Third & Fourth Grade** - explore temperature with thermometers and other temperature sensitive materials
- 30 minutes – gallery time  
**First Grade** – explore Science in Motion gallery by discovering how weather affects transportation  
**Third & Fourth Grade** – exploring and contrasting clouds on other planets and the Earth. Students will use Science in Motion gallery to discover ways to study clouds.
- 30 minutes – store & lobby for cloud/weather activity

*Take home items –*

*First Grade, Weather Log*

*Third & Fourth Grade, Cloud viewer*

## **Stars & Constellations** Second and Fourth Grades

Are all stars alike? What is the difference between stars and planets? Do they really move through the sky each night? How do you find the constellations and why are they in different places throughout the year? How do astronomers know what stars and planets are really like? We will look at these questions and more in this two-hour program.

*Georgia Performance Standards: S2CS4, S2CS6, S2E1, S2E2, S2E3, S4CS4, S4E1, S4P1, S4P3*

- 30 minutes – Planetarium Live Presentation and viewing of “Two Pieces of Glass” covering the invention of the telescope and how it is used in Astronomy
- 30 minutes – lab  
**Second Grade** - use models to investigate the size, brightness and patterns formed by stars; observe major constellations through Constellation Viewers; create your own constellation exercise  
**Fourth Grade** - use models to investigate physical attributes of stars and compare them to planets and moons; observe apparent movement of stars and draw conclusions about their use; build a simple telescope and experiment with different lenses
- 30 minutes – gallery time (use reflector and refractor telescopes; investigate inventions that led to the development of space travel and exploration
- 30 minutes - store/Foucault pendulum/coin vortex, Observe how Earth’s rotation/revolution cause stars to appear to move in the sky; explore effects of gravity on coins and discuss gravitational attraction of planets to our Sun

*Take home items -*

*Second Grade: Constellation Finder for the current month and Tellus bookmark*

*Fourth Grade: Planisphere and Tellus Constellation Bookmark*

## **Exploring Moons & Solar System** Fourth & Sixth Grade

Are you an explorer, a geographer, an astronomer or a doctor? With these careers in mind identify which inventions in the Science in Motion gallery will be most useful to you! Take a tour of the solar system in the planetarium show “Oasis in Space”. This show explores the planets, moons and some of the smaller objects in the solar system. The lab will examine an Earth-Moon model and reinforce why the Moon has phases and where to locate the Moon in the night sky.

*Georgia Performance Standards: S4E1, S4E2; S6E1b,S6E1c,S6E2a,S6E2b*

Program will run for two hours.

- 30 minutes - Planetarium show: Oasis in Space, ALL STUDENTS
- 30 minutes - lab  
Moon Phase activity using models and power point
- 30 minutes – gallery time  
Assigned profession and use a scavenger hunt to locate vehicles, aircraft, and spacecraft that might assist you
- 30 minutes – store & Foucault pendulum

*Take home items – souvenir compass, magnifying glass, telescope, or globe key chain based on occupations assigned*

## ***Farming for Fuel: Biofuels and Alternative Energy***

### **Fifth, Sixth, Seventh and Eighth Grades**

This program explores the energy we use to power cars, aircraft, and rockets and in the planetarium show, "Stars" we learn about the ultimate energy source, the Sun. Alternative energy sources, with an emphasis on Biofuels made from non-food plants, are appropriate for transportation and do not put as much carbon dioxide into the atmosphere as fossil fuels. Students will investigate how plants can be converted into fuels for combustion engines. In the Science in Motion gallery students will investigate how combustion engines work and how other engines propel on the ground, into the air, and out to the planets.

*Georgia Performance Standards: S5P2, S5L3, S5L4, S6E6, S7L2, SEC5*

Program will run for two hours and ten minutes.

- 40 minutes - Planetarium show: "Stars", carbon cycle demonstration, and Solar D-House introduction, ALL STUDENTS
- 30 minutes – lab  
Making ethanol, measuring sugar levels, manipulating hydrogen car, Solar & wind cars, and demonstration of an internal combustion engine
- 30 minutes – gallery time  
Observe other types of engines in the Science in Motion gallery  
Investigating plant cells with a microscope
- 30 minutes - store & Foucault pendulum

*Take home items – grass terrariums*

**This program is partially funded by the U.S. Department of Energy and the BioEnergy Science Center.**

## ***Exploring the Sun and Solar Energy***

### **Eighth and Ninth - Twelfth Grades and College**

This program explores the Sun as a star and how we can harness its energy to use here on Earth. In the planetarium we learn about our closest star, the Sun, in our program "Stars". In the Science in Motion gallery we investigate alternative energies that are used to power vehicles and rockets. We will also tour the Georgia Tech Solar Decathlon House to allow students to see an environment totally run by energy from the Sun. In addition, students will investigate the large solar panels that help power the Tellus Science Museum.

*Georgia Performance Standards: S8P1, S8P2, SAST5, SEV1, SEV2, SEV4, SEV5, SM4, SM5*

\*Program will run for two hours and ten minutes.

- 40 minutes - Planetarium show: "Stars" and solar cell introduction  
ALL STUDENTS
- 30 minutes - Solar Decathlon House exploration
- 30 minutes – gallery time  
Investigate fuels for rockets and alternative energies that are used to power other vehicles
- 30 minutes - store & solar viewing (Inclement weather birth & death of stars)

*Take home items - Solar bead backpack pulls or bracelets*

## Fossil Gallery

### **Meet Stan the *T. rex*** Kindergarten and First Grades

Ask a child which dinosaur is their favorite and they are likely to say, “The *T. rex*.” Stan the *T. rex* is the star of this program at Tellus. Students will tour the Fossil Gallery and meet Stan along with his prehistoric friends. They will explore, through an original story, where Stan lived, what his world was like, compare Stan to other dinosaurs, and how he may have behaved and even measure a *T. rex* tooth.

*Georgia Performance Standards: SKCS4a-c, SKCS5a-b, SKCS6a, SKL1b, SKL2a, S1CS1, S1CS2a, S1CS2c, S1CS2d, S1CS3a, S1CS4c, S1CS5b, S1CS6, S1L1d*

Program will run for two hours.

- 30 minutes – gallery time
  - Short story about Stan the *T. rex*
  - Other large iconic dinosaurs
- 30 minutes – lab
  - Each student will make their own *T. rex* mask
  - Measure and graph *T. rex* teeth
- 30 minutes - Fossil Dig and Careers in Paleontology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus

*Take home items – Three genuine Fossils from the Fossil Dig, T. rex mask*

### **Fossiliferous** Second, Third, Fourth, Sixth and Seventh Grades

What is a fossil? How is it made? These questions are answered in our Fossil Gallery walk through. Students learn how a fossil forms and discuss factors that affect the survival or extinction of organisms. Manipulatives will include make it/take it fossil rubbings, a mold, and three real fossils to keep!

*Georgia Performance Standards: S2CS1a, S2CS6, S2E3a, S3CS1b, S3CS4c, S3CS7, S3CS8, S3E2a-b, S3L1d, S4L1a, S4L1c, S4L1d, S4L2a-b, S4CS8a-d, S4L1c, S4L2b, S6E5g, S7L4d, S7L5c*

Program will run for two hours.

- 30 minutes – gallery time
  - Define a fossil
  - Learn how fossils form and are dated
  - Learn about the different types of fossils
- 30 minutes – lab
  - Explain what a fossil is and how fossils form
  - Students will make fossil mold and discuss molds and casts
  - Fossil rubbings
- 30 minutes - Fossil Dig and Careers in Paleontology information
- 30 minutes - Store, Foucault pendulum & Apatosaurus

*Take home items – Three genuine fossils from the Fossil Dig, Mold of real fossil*

### **The Key to Fossils** Fifth, Sixth, Seventh and Ninth – Twelfth Grades

After studying a huge variety of early life in the Fossil Gallery, students learn how to use a dichotomous key to classify and identify actual fossil specimens. They then get to experience a fossil dig keeping their three favorite specimens.

*Georgia Performance Standards: S5L1, S5L4a-b, S5E1a-b, S6CS6c, S6E5g, S7L1a-b, SES6d, S7L5c, S7CS6c, S8CS6a-c, SCSh4a, SCSh7c, SCSh8a-f, SEC1a-d, SB3c, SB4c, SB4e, SB4f, SB5a-e, SAST6c-d,*

*SZ2a, SZ2c, SZ3a-b, SZ4a-b, SG1c, SEV3c, SES4c- e, SES6d-e*

Program will run for two hours.

- 30 minutes – gallery time
  - Definition of a fossil
  - Explain how fossils form and are dated
  - Explain the different types of fossils
  - Discuss adaptations and extinctions
- 30 minutes – lab
  - Define classification
  - Define a dichotomous key and how it is used
  - Students will then utilize a dichotomous key to classify several actual fossils
- 30 minutes - Fossil Dig and Careers in Paleontology information
- 30 minutes - Store, Foucault pendulum & Apatosaurus

*Take home items – Three genuine fossils from the Fossil Dig*

### **Geologic Time Scale Sixth, Seventh and Ninth – Twelfth Grades**

Students travel through geologic time in the Fossil Gallery beginning with the formation of planet earth then moving through the various eras of prehistoric life to the present, observing the evolutionary changes in species of fossilized life. The concept of the relatively short amount of time that living things have been present on planet earth are driven home as the students physically model the time line in the gallery and then play a unique geologic time game in the lab.

*Georgia Performance Standards: S6E3a-c, S6E5e-g, S7CS6c, S7L5c, SCSh4a-b, SCSh7c, SCSh8a-f, SES1c-d, SES3d-e, SES4a-e, SES6d-e, SG1a-d, SZ2a, SZ2c, SZ3a-c, SAST6c-d, SB4c, SB4e, SB4f, SB5a-e, SEV3c, SEC1a-d*

Program will run for two hours.

- 30 minutes – gallery time
  - Travel through geologic time
  - Discuss geologic time periods and the creatures that lived during that time
  - Major events that scientist believed occurred to cause mass extinctions
  - Geologic time rope activity to emphasize the brief period of time of life
- 30 minutes – lab
  - Define and identify the various divisions on a geologic time scale, eon, era, etc. using original “Go Dig” cards.
  - Game of “Geo-parady”
- 30 minutes - Fossil Dig and Careers in Paleontology information
- 30 minutes - Store, Foucault pendulum & Apatosaurus

*Take home items – Three genuine fossils from the Fossil Dig, Geologic Time Bookmark*

## **Weinman Mineral Gallery**

### **Let’s Rock and Roll Third, Sixth and Ninth – Twelfth Grades**

Isn’t a rock a rock? Students discuss, study, and sort specimens into the three major rock types. Focal points of the Weinman Mineral Gallery include the Rock Cycle Wall and our extensive mineral collections.

*Georgia Performance Standards: S3CS1b, S3CS7a-b, S3CS8a-d, S3E1a-b, S3E1d, S6CS6c, S6E1f, S6E5a-e, SES1a, SES1e, SES2d, SES3a-b, SES6c, SG2a-d, SG4a, SG5a-b*

Program will run for two hours.

- 30 minutes – gallery time  
Anatomy of the Planet  
Rock Cycle Wall  
Magic Planet  
McNitt Mining Area
- 30 minutes – lab  
Define classification and why it is important in our lives  
Classify rocks into three major categories – igneous, sedimentary, metamorphic  
Depending on the grade level, further classify rocks, identify and name  
Discuss various parts of the rock cycle using hand specimens
- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus

*Take home items – Keep the gemstones that you find at the Gem Panning*

### **Messy Minerals** Third and Sixth Grades

Learn about minerals mined in Georgia, types of mines, and the many uses of minerals. The Mining in Georgia, McNitt Mining Area, and the Kitchen Cutaway Corner will be features in the Weinman Mineral Gallery.

*Georgia Performance Standards: S3CS1b, S3CS7a-b, S3CS8a-d, S3E1a-b, S3E1d, S6E5a-e*

Program will run for two hours.

- 30 minutes – gallery time  
Rock Cycle Wall  
Mining in Georgia  
McNitt Mining Area  
Mineral properties
- 30 minutes – lab  
Define a mineral  
Show and manipulate various minerals and their uses  
Demonstrate, discuss, and experience uses of various minerals
- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus

*Take home items – Keep the gemstones that you find at the Gem Panning*

### **Rocks From Space** Fifth and Sixth Grades

The sky is falling, the sky is falling! Visit our extensive meteorite display in the Weinman Mineral Gallery including the story of the Cartersville Meteorite. Learn what a tektite is and how they form. Fifth and sixth graders will investigate the properties and characteristics of meteoroids, meteors, meteorites, meteor-wrongs, and tektites.

*Georgia Performance Standards: S5CS7a-b, S5P1a, S5CS8a-d, S6CS1a-b, S6CS3a-d, S6CS4c, S6E1f, S6E3c, S6E5a-f, S6E6*

Program will run for two hours.

- 30 minutes - gallery time  
Learn the story about the Cartersville Meteorite  
Discuss and view the various classifications of meteorites  
Define tektite and learn about the various tektite forms
- 30 minutes – lab  
Define a rock vs. mineral as well as a meteorite  
Participate in hands-on investigations of various types of meteorite, meteor-wrong and tektite specimens

Demonstrate, discuss, and experience uses of various minerals included in meteorites

- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus
- *Take home items – Keep the gemstones that you find at the Gem Panning*

### **Mineral Testing** Third, Sixth and Ninth – Twelfth Grades

The Weinman Mineral Gallery has a dedicated area to the physical properties of minerals, including a unique fluorescent mineral display. Learn how to classify minerals based on Moh's Hardness Scale as well as other physical properties of minerals, using the five senses.

*Georgia Performance Standards: S3CS7, S3CS8, S3E1a-b, S3E1d, S6E5a-b, S6E5d, S8P1f, SCSh2a-b, SCSh3, SCSh4a-b, SG2a-d, SC1b, SG5a-c, SES1a-b, SES1e, SES2d*

Program will run for two hours.

- 30 minutes – gallery time
  - Rock Cycle Wall
  - Mineral Properties
  - Mining in Georgia
  - Minerals in our Lives area
- 30 minutes – lab
  - Define minerals and their varying properties
  - Introduce how a mineral is classified
  - Discuss Mohs Hardness Scale and its purpose
  - Allow students to lay out Mohs Hardness Scale in order by scratch testing
  - Take students through the steps of testing one unknown
  - Allow students to test as many unknowns as time allows
- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus

*Take home items – Keep the gemstones that you find at the Gem Panning*

### **Plate Tectonics: Where the Action Is** Fifth, Sixth and Ninth - Twelfth Grades

The Earth's crust is continually shifting, crashing, and spreading, creating various geologic happenings. Explore our restless earth through the many displays in the Weinman Mineral Gallery, including our Magic Planet and our large floor model of the cross section of Earth.

*Georgia Performance Standards: S5CS1, S5CS4c, S5CS7, S5E1a-c, S6E5a, S6E5c-g, SES1a-e, SES2a-e, SES3a-e, SESa-e, SG1a, SG1d, SG2a-d, SG3a-d, SG3f, SG4a-d, SG5a-b, SO1a-c, SZ2a*

Program will run for two hours.

- 30 minutes – gallery time
  - Anatomy of the Planet
  - Earthquake and volcano displays
  - Iris display showing current seismic activity worldwide
  - The Magic Planet
  - Rock Cycle Wall
- 30 minutes – lab
  - Study plate movement from Pangaea to 50 million years into the future
  - Discuss how planet Earth's crust is divided into numerous plates that move
  - Students will understand through various manipulatives: plate movement, subduction zones, rift valleys, convergent, divergent, transform boundaries and hot spots

- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – Store, Foucault pendulum & Apatosaurus

*Take home items – Keep the gemstones that you find at the Gem Panning*

### **Periodic Table** Eighth & Ninth -Twelfth Grades

What is an element? Have you ever wondered why elements in the same group number on the periodic table have similar chemical reactivity? Who thought up the idea of a periodic table? How did it get its name? How does it affect our everyday lives? Come answer these questions and more as we learn about the basics and the makeup of the periodic table by visiting a life-sized version in Tellus' Weinman Mineral Gallery and then experience some hands-on manipulatives in the lab as an introduction to the Periodic Table and basic atomic structure.

*Georgia Performance Standards: S8CS5a-b, S8CS8a-c, S8CS9a-g, S8P1a-f, SCSH7a-c, SCSH8a-f, SPS1a, SPS4a-b, SC1b-c, SC3a-e, SC4b, SB4b, SES1a-d*

Program will run for two hours.

- 30 minutes – gallery time
  - Anatomy of the Planet – discuss elemental components of the various layers
  - The Magic Planet – discuss elemental differences in continental vs. oceanic plates
  - Rock Cycle Wall
  - The life size Periodic Table – discuss its organization and what information the table gives us
  - Participate in gallery wide scavenger hunt
- 30 minutes – lab
  - Discuss Earth's crust contains 92 natural elements found on the table
  - Students will understand through various manipulatives:
    - periods, groups or families, metals, non metals, transition metals, halogens, noble gases, valence electrons, basic atomic structure, etc.
- 30 minutes – Gem Panning and Careers in Geology information
- 30 minutes – - Store, Foucault pendulum & Apatosaurus

*Take home items – Keep the gemstones that you find at the Gem Panning*