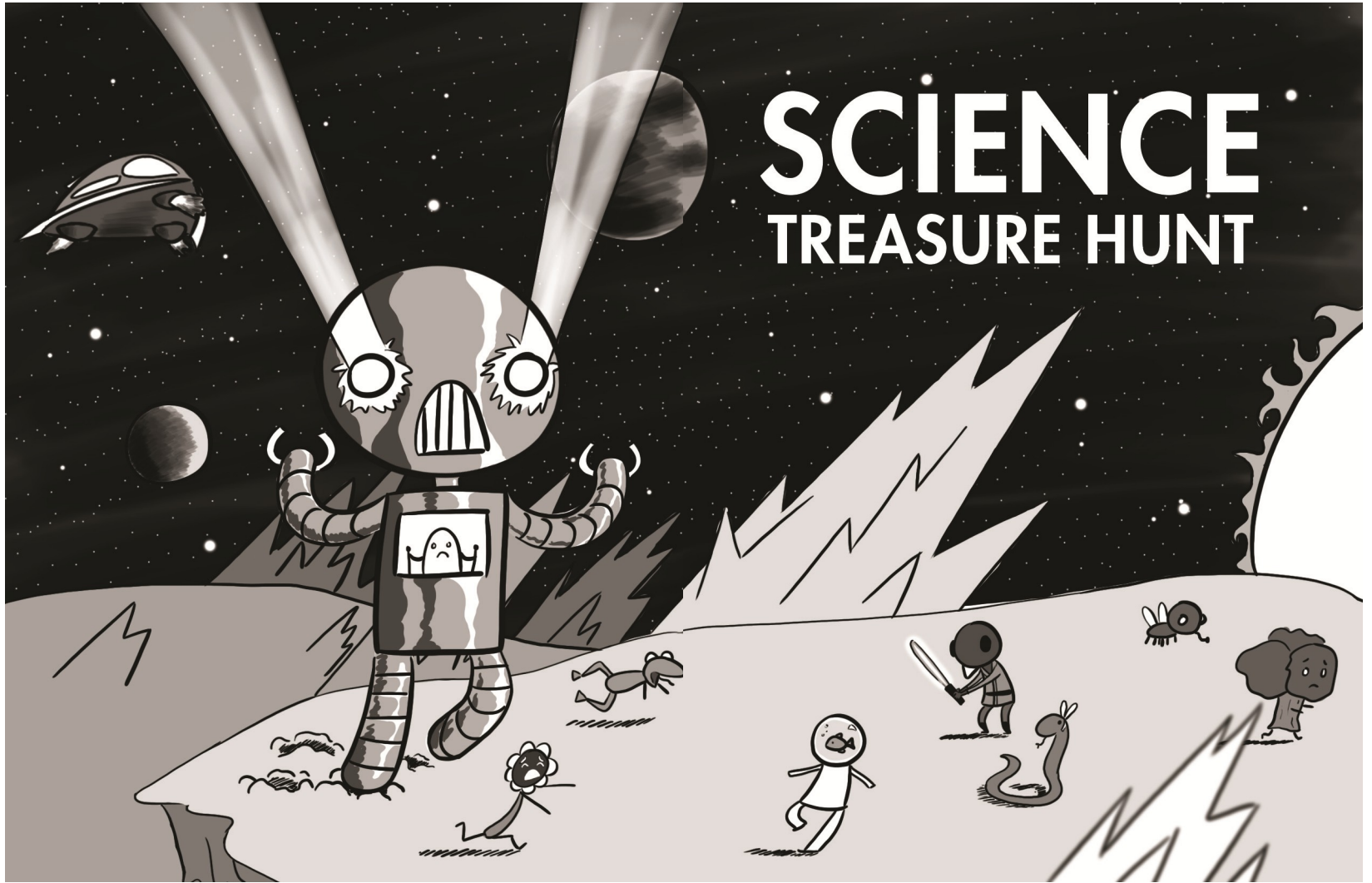


# SCIENCE TREASURE HUNT



# 2016

## Science Treasure Hunt

Thank you for participating in the 2016 Science Treasure Hunt. This year marks the 27th year of Science Treasure Hunting through a program designed to get students more involved with science and technology. Plus, the hunt gives them an opportunity to think about their own career development in science.

Mike Rucker, Chairman  
Science Treasure Hunt

**This Passport Belongs to:**

---

**Your Gift is Welcome and Needed**

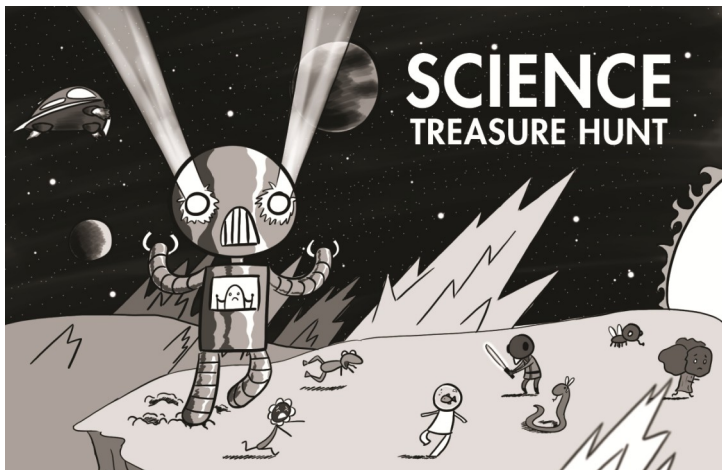
**The Peoria Treasure Hunt is supported entirely by contributions. All funds go toward the purchase of prizes. If you would like to help keep this annual event going, please mail a tax deductible donation to:**

**Peoria Academy of Science**

**P.O. Box 3412**

**Peoria, Illinois 61612**

*since 1930*



**About the cover artist...**

Illustrator, Shane Mabus is a professional Graphic Designer. This is the eighth year Shane has donated his whimsical and thought provoking drawing to the Peoria Academy of Science.

shanemabus@hotmail.com

**Table of Contents**

Rules.....2-3  
 Prizes.....4  
 Everyday Science Experiments.....C2, C3, C8  
 Official Entry Form (Yellow Center Pages).....C4-C7  
 Astronomy Section.....6  
 Geology Section.....8  
 Herpetology Section.....10  
 Ichthyology Section.....12  
 Camp Wokanda.....14  
 Caterpillar Visitor Center.....16  
 Fon-du-Lac Farm Park.....18  
 Forest Park Nature Center.....20  
 Giant Oak Park.....22  
 Illinois Air National Guard.....24  
 Jake Wolf Fish Hatchery.....26  
 Luthy Botanical Gardens.....28  
 Peoria Area First Robotics Teams.....30  
 \*Peoria Playhouse Children's Museum.....32  
 Peoria Riverfront Museum.....34  
 Peoria Zoo.....36  
 \*Sugar Grove Nature Center.....38  
 United States Coast Guard.....40  
 University of Illinois School of Medicine at Peoria.....42  
 Wheels O' Time Museum.....44  
 Wildlife Prairie Park.....46

\* New Site This Year

## Rules

### Official Dates:

Saturday April 16, 2016 — Monday, September 5, 2016

### Sponsor:

The Peoria Academy of Science and the Peoria Riverfront Museum are the proud sponsors of the 27th Annual Science Treasure Hunt. The Treasure Hunt is a combination of family adventure and scavenger hunt focusing on science and technology facilities and resources in the Peoria area.

### Entrant Requirements:

All entrants must be students between 1st grade and 8th grade on April 16, 2016

1. **Visit at least eight (8) of the Science Sites** featured in this Science Treasure Hunt Passport with your family or friends and find the answers for the questions at each site.
2. **Have your answers checked** by a staff person/volunteer at each site. If your answers are correct, you will **receive an official stamp or initials** on that site's page in your Science Treasure Hunt Passport.
3. Have the staff person/volunteer at your **eighth (8th) site sign, initial, and/or stamp the certification on page C4**. You cannot be entered into the final prize drawing without this validation.
4. **Complete eight (8) or more of the Everyday Science Experiments** with your family found on pages C2, C3, and C8.

## Wildlife Prairie Park Questions

*Passports can be stamped at the Visitor Center,  
Adventure Store or Ticket Gate*

1. What is it called when an adult amphibian retains juvenile characteristics?  
\_\_\_\_\_
2. How much can an elk antler grow each day?  
\_\_\_\_\_
3. How far away can a Silver Fox hear a squeaking mouse?  
\_\_\_\_\_
4. What is it called when a butterfly breaks out of its chrysalis?  
\_\_\_\_\_

### 2016 Special Dates

May 7th: National Train Day

May 8th: Mothers Day at the Park

June 13-17th: Day Camp\*

July 11th-15th: Day Camp\*

July 16th: Pioneer Days

July 18th-22nd: Day Camp\*

\* *Requires advance registration*



Official stamp

or Initials



An adventure awaits™

## Wildlife Prairie Park

3826 N Taylor Road  
Hanna City, IL 61636  
309-676-0998

### Hours:

Memorial Day through Labor Day

9:00am-6:30pm

Jan 2 through May 29 & Sept 6 through Dec 30

9:00am-4:30pm

### Admission:

Adults: \$9.00

Children 3-12: \$6.00

2 & under: FREE

Members- FREE

***One child with passport admitted FREE with a paying adult***

Visit our website

[www.wildlifeprairiepark.org](http://www.wildlifeprairiepark.org)



Like us on  
**Facebook**

[www.facebook.com/wildlifeprairiepark](http://www.facebook.com/wildlifeprairiepark)

## Rules

**5. Complete the Official Entry Form** with the answer blanks for the Everyday Science Questions. The Official Entry Form (yellow pages) may be found in the center of the Passport on pages C4-C7.

**6. Mail the Official Entry Form** (yellow pages C4-C7 only) to:

Peoria Academy of Science

P.O. Box 3412, Peoria IL 61612

**7. Entries must be postmarked no later than Wednesday, September 7, 2016** Only one entry per person. Entries from different members of the same family may be mailed in the same envelope.

**8. One hundred (100) winners will be drawn at random** from the qualifying entries. Winners will be notified by mail, email or phone and are encouraged to attend the Prize Presentation. If unable to attend the initial 100 winners may pick up their prize packet at Peoria Riverfront Museum before October 13, 2016. If a family has more than one entrant, not all entries may be selected by random drawing.

**9. One (1) grand prize winner and five (5) additional prize winners will be drawn at random** from the 100 initial winners at the Prize Presentation and **MUST\* be present** in person at the Prize Presentation event. \*Please note this change from previous years' rules.

### Prize Presentation Event:

Sunday, October 2, 2016 at 2:00pm in the Peoria Riverfront Museum Auditorium (downstairs).

## Prizes

One hundred (100) initial prize winners selected at random from the qualifying entries. One (1) Grand Prize winner and five (5) additional winners will be selected at random at the Prize Presentation from those initial prize winners who are present.

### Prize Presentation Event

Sunday, October 2, 2016

Peoria Riverfront Museum Auditorium

#### Grand Prize:

A fantastic NASCO Science Catalog shopping spree worth \$500.

#### 2nd Prize:

A wonderful NASCO Science Catalog shopping spree worth \$250.

#### 3rd Prize:

A great NASCO Science Catalog shopping spree worth \$125.

#### 4th, 5th & 6th Prizes:

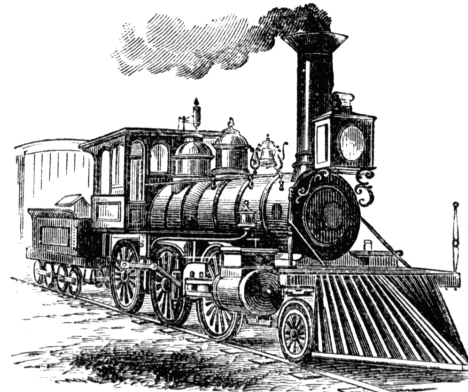
Additional special prizes and books.

#### Prize Sponsors:

NASCO Science Catalog shopping sprees are provided by the Peoria Academy of Science. Additional prizes for the top six winners are provided by the following gracious Science Treasure Hunt Sites: Forest Park Nature Center, Peoria Riverfront Museum, Peoria Zoo, Wheels O' Time Museum, and Wildlife Prairie Park.

## Wheels O' Time Museum Questions

1. How did the old time railroad engineer get his messages? (*Look in the caboose*)  
\_\_\_\_\_
2. What provided the power for the vacuum cleaner in grandma's kitchen?  
\_\_\_\_\_
3. What material when heated turns into steam to power steam engines? (*Look in Main Building Steam Room*)  
\_\_\_\_\_



Official stamp

or Initials





## Wheels O' Time Museum

1710 West Woodside Drive  
Dunlap, IL 61525  
309-243-9020

www.wheelsotime.org  
wotmuseum@aol.com

### Hours:

May through October

Wednesday Through Sunday Noon-5:00pm

*Opens May 1st*

### Admission:

Adults: \$7.00 (\$6.00 for groups of 20 or more)

Children 3-11: \$3.50 (\$3.00 for groups of 20 or more)

Children under 3: FREE

*One Child with passport admitted FREE with each paying adult*

**Take an exciting journey into history at the  
Wheels O' Time Museum!**



## Peoria Academy of Science

### Our Mission

To foster the appreciation of science, to spread scientific knowledge and to promote scientific research.

The Peoria Academy of Science was founded in 1930 by a group of Peoria professional and amateur scientists who wanted to host meetings of the Illinois State academy of Science. The group hosted the state conference the next year.

The concept of a federation of science groups was so successful that within the state it became known as the Peoria Plan. It was copied in many other communities and several colleges and universities. Today, the only two remaining in Illinois are the Chicago Academy of Science and the Peoria Academy of Science.

The current sections of the Peoria Academy of Science include:

### Peoria Astronomical Society

### Peoria Audubon Society

### Entomology Section

### Geology Section

### Ichthyology Section

### Central Illinois Herpetology Society

The Academy has approximately 800 members within these various disciplines.

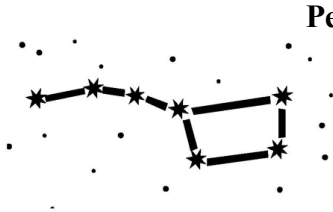
The Academy has three major projects:

**The Donald Jackson Memorial Scholarship Fund,**

**The Science Granting Fund, and**

**The Science Treasure Hunt for Children.**

**[www.peoriaacademyofscience.org](http://www.peoriaacademyofscience.org)**



## Peoria Astronomical Society

Peoria Academy of Science

P.O. Box 10111

Peoria, IL 61612-0111

309-645-2433

[www.astronomical.org](http://www.astronomical.org)

**Visit the Northmoor Observatory to view the sky  
through the 12 foot long refractor telescope!**

### **Where:**

The observatory is located on the Peoria Park District's former Donovan Golf Course, 500 feet south of the observatory parking lot, which is accessible from the 5800 block of Knoxville Avenue.

### **When:**

On any clear Saturday evening after dark,  
from May 21st through October 15th.

### **Admission:**

FREE

The heavens are within reach at the  
**Peoria Astronomical Society**

## U of I College of Medicine Questions

1. Dr. Lasley has studied the effect of lead on which body part?  
\_\_\_\_\_
2. Name one job that a toxicologist might do.  
\_\_\_\_\_
3. Besides old paint, what is another possible source of lead exposure?  
\_\_\_\_\_
4. Name an everyday chemical that can be good in small amounts but toxic if you eat or drink too much of it.  
\_\_\_\_\_

For more information, please visit online at:  
[peoria.medicine.uic.edu](http://peoria.medicine.uic.edu)

Official stamp

or Initials





**University of Illinois  
College of Medicine at Peoria**

UNIVERSITY OF ILLINOIS

COLLEGE OF MEDICINE AT PEORIA

One Illini Drive  
Peoria, IL 61605  
309-671-8000

**Hours:**

Monday-Friday 9:00am-5:00pm

Saturday Noon-5:00pm

**Admission:**

FREE

**Directions:**

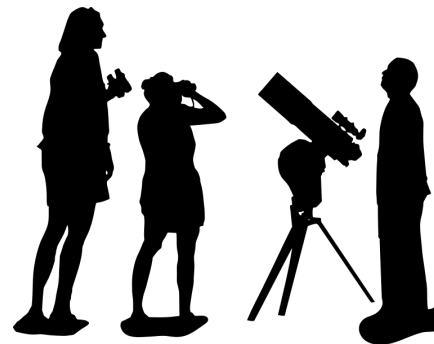
The College of Medicine is located in downtown Peoria near Main Street and Kumpf Boulevard, visitor parking costs \$1. Enter the building with the large "sail". Science Treasure Hunt participants will find answers to their questions in the UIC Library of Health Sciences on the second floor.

The University of Illinois College of Medicine at Peoria (UICOMP) is one of four campuses that make up one of the largest public medical schools in the U.S., educating about 150 students annually and offering 20 graduate medical training programs.

UICOMP is home to the cutting edge Cancer Research Center, the Library of Health Sciences, and UIC College of Nursing Peoria Program. UICOMP also is a partner in the Jump Trading Simulation and Education Center.

**Peoria Astronomical Society Questions**

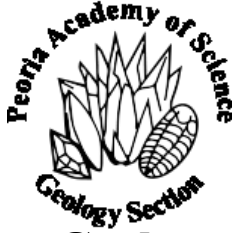
1. From which planet did we receive a special "valentine" last summer?  
\_\_\_\_\_
2. Only Mercury and Venus have transits of the sun that can be seen from Earth. Why is this?  
\_\_\_\_\_  
\_\_\_\_\_
3. On May 9th of this year, Mercury passes across the face of the sun as viewed from Earth. What is this type of astronomical event called?  
\_\_\_\_\_
4. How long will it take Mercury to move across the face of the sun? \_\_\_\_\_



Official stamp

or Initials





## Geology Section

Peoria Academy of Science  
P.O. Box 10294  
Peoria, IL 61612  
309-645-3609  
www.pasgeology.com

# Geology Section Annual Show

### Where:

Travelodge

4400 North Brandywine Drive, Peoria, IL 61614

### When:

Saturday, August 27th 9:00am-5:00pm

Sunday, August 28th 10:00am-5:00pm

### Admission:

FREE

Have your passport stamped and be amazed at the beautiful and intriguing minerals and fossils on display during this educational event. You will remember this event for years!

### Meetings:

Fourth Tuesday of the month at 7:00pm at Forest Park Nature Center, Peoria Heights. The public is welcome!

## U.S. Coast Guard Questions

1. What piece of equipment is used to make the boat engines go forward and reverse?  
\_\_\_\_\_
2. The Coast Guard continuously monitors VHF radio Channel \_\_\_\_\_ for distress calls.
3. What happens when oil spills in the water?  
A. It sinks to the bottom  
B. It mixes with the water  
C. It floats on top of the water
4. The density of oil is \_\_\_\_\_ the density of water.  
A. less than (<)  
B. equal to (=)  
C. greater than (>)
5. What are the three sides that make up the Fire Triangle?

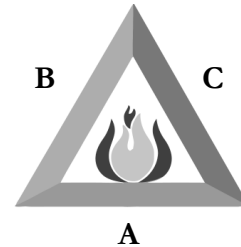
A. \_\_\_\_\_

B

C

B. \_\_\_\_\_

C. \_\_\_\_\_



Official stamp

or Initials





## U.S. Coast Guard

Marine Safety Detachment Peoria  
97 Conference Center Drive  
East Peoria, IL 61611  
309-694-7779

### Hours:

You **MUST** phone ahead for reservations.  
Reservations are taken 9:00am-2:00pm  
Please call 309-694-7779 for reservations.

### Tour Dates:

July 21-22nd and August 18-19th  
9:00am-1:00pm

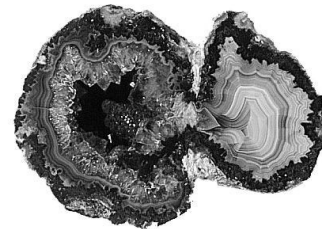
### Admission:

FREE

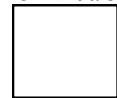


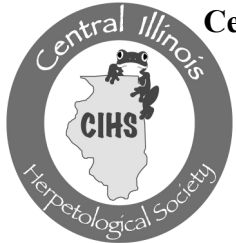
## Geology Section Questions

1. The outer shell of Illinois geodes are generally composed of what material?  
\_\_\_\_\_
2. What period is the Mazon Creek fossils from?
  - A. Pennsylvanian
  - B. Mississippian
  - C. Devonian
3. Besides quartz, what other mineral is often found in geodes? \_\_\_\_\_



Official stamp  
or Initials





## Central Illinois Herpetological Society

Peoria Academy of Science  
P.O. Box 6413  
Peoria, IL 61601-6413  
309-682-6208  
www.centralillinoisherp.com

### 25th Annual Reptile & Amphibian Fair

#### Where:

Travelodge

4400 North Brandywine Drive, Peoria, IL 61614

#### When:

Saturday, August 13th 10:00am-5:00pm

Sunday, August 14th noon-5:00pm

#### Admission:

\$4.00 per person

One child with passport admitted FREE with each paying adult.

Passport can be stamped at the Annual Fair or at any meeting of the Society. Answer the questions and then ask any volunteer for help.

#### Meetings:

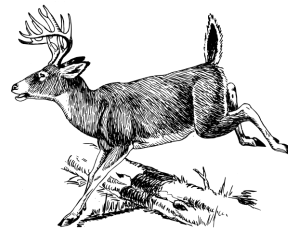
First Thursday of the month at 7:00pm at Forest Park Nature Center, Peoria Heights. The public is welcome!

### Sugar Grove Nature Center Questions

1. Go over the Covered Bridge to Imagination Grove, where you can tromp in the creek, dig to China, fly on the zip line, and have more nature-related fun! How many steps go up the climbing tree?  
\_\_\_\_\_  
\_\_\_\_\_

2. Inside the Nature Center, you'll find lots to touch, see, and do! Name three different animals you see in or around the Nature Center.  
\_\_\_\_\_  
\_\_\_\_\_

3. Past the Nature Center, there is a white building that looks like a barn. This is the Corn Crib. Search the side with rocking chairs for a box marked Peoria Academy of Science. Use the combination 2-4-6 to open the lock. Inside the box you will find a stamp for this passport page.



Official stamp

or Initials



**Hours:**

Tuesday-Friday 9:00am-5:00pm

Saturday 10:00am-3:00pm

Sunday Noon-4:00pm

Grounds, Trails, and Imagination Grove

open daily from dawn until dusk

See our website for winter hours

**Admission:**

FREE

*Groups of 10 or more required to make a reservation  
and pay a nominal fee.*

In addition to our Nature Center, 7 miles of trails, and  
Imagination Grove (our nature play area), we also  
offer a wide variety of programs throughout the year  
for all ages.

For more information and directions visit:

**[www.sugargrovenaturecenter.org](http://www.sugargrovenaturecenter.org)**

(Do not use Mapquest since it is incorrect)

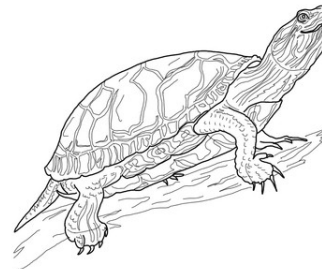


**Central Illinois Herpetological Society Questions**

*See signs at Annual Fair for answers or attend one the  
monthly meetings.*



1. Name the Illinois State Reptile?  
\_\_\_\_\_
2. Name the Illinois State Amphibian?  
\_\_\_\_\_
3. What is the name of the fungus that will probably  
destroy 50% or more of all amphibians on Earth  
within the next 20 years? \_\_\_\_\_
4. Would you like to attend one of the monthly  
meetings of the Central Illinois Herpetological  
Society?  Yes  No



Official stamp  
or Initials





## Tri-County Tropical Fish Society

Peoria Academy of Science

www.peoriafishclub.com

*Promoting the Tropical fish hobby through education  
and active involvement*

### Tri-County Tropical Fish Society Annual Display

**Where:**

Northwoods Mall • Peoria, IL

**When:**

September 3-4th During Mall hours

**Admission:**

FREE

**Meetings:**

Second Wednesday of the month at 7:00pm at  
Immanuel Lutheran Church, 526 E. Washington St, East Peoria.



## Peoria Zoo Questions

*Look for Science Treasure Hunt on signs to help find  
your answers!*

1. How far underground can a Three-banded armadillo smell?  
\_\_\_\_\_
2. Males of this bird species build nests for females. Each female decides whether or not its acceptable based on the quality of the nest.  
\_\_\_\_\_  
\_\_\_\_\_
3. This species found in China and along the eastern Himalayas in Asia are extremely agile and can jump as high as six feet.  
\_\_\_\_\_



### What's New at the Zoo?

Memorial Day through Labor Day

Daily Keeper Chats

Zoo camp starts June 6th

Grades K-8 Register Now!

Call 681-3559 for details

Official stamp

or Initials





**Peoria Zoo**

2320 North Prospect Road  
Peoria, IL 61603  
309-686-3365  
www.peoriazoo.org

**Mission:**

To create connections that inspire an appreciation for the natural world.

**Hours:**

Daily 10:00am-5:00pm  
Gate closes at 4:30pm

**Admission:**

\$9.00 adults; \$6.00 Children (2-12)  
\$8.00 Seniors/Active Military  
Members FREE

**Stay in Touch:**

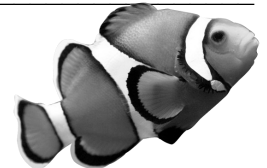
Become our friend on Facebook  
Visit [www.peoriazoo.org](http://www.peoriazoo.org)  
Check out our Youtube page at  
[www.youtube.com/peoriazoo](http://www.youtube.com/peoriazoo)



**Tri-County Tropical Fish Society Questions**

*Answers to questions may be found during the Annual Display in September*

1. When keeping tropical fish there is a general rule as to how many inches of fish should be kept per gallon of water. How many 3 inch fish should be in a 20 gallon tank?  
\_\_\_\_\_
2. How many fish are in this years display?  
\_\_\_\_\_
3. Name one fish that is native to North America that is also kept as an aquarium fish.  
\_\_\_\_\_



[www.facebook.com/TriCountyTropicalFishSociety](http://www.facebook.com/TriCountyTropicalFishSociety)

Join the discussion through yahoo groups at  
[Www.yahoo.com/groups/tctfs](http://Www.yahoo.com/groups/tctfs)

Official stamp  
or Initials





## Camp Wokanda

Peoria Park District  
620 East Boy Scout Road  
Chillicothe, IL 61523  
(309)579-2157  
www.peoriaparks.org

### Hours of Operation:

Dawn to Dusk

Staff usually on site Monday-Friday 9:00am-4:30pm

Saturday & Sunday Hours vary

(If not at Camp Office, there is a contact phone number on the door for anyone to call)

### Directions:

To get to Camp Wokanda from Peoria, take Route 29 north and turn left on Old Galena Road just north of Route 6.

Follow this past Mossville Grade School, then turn left on Boy Scout Road and proceed to the park entrance.

Camp Wokanda is a 267 acre woodland setting including a lake, trails, dining hall, cabins, program buildings and tent camping. Since 1936, Wokanda has been building memories “around” the glow and warmth of a campfire. Our cabins offer groups with excellent base camp to explore the natural beauty of Central Illinois’ wooded bluffs. In the process, campers learn a little bit more about their role in the natural world. Get back to nature! We offer hiking, canoeing, cabin and tent rentals, special events, facility rentals, educational classes and more!  
Plan a PADDLE PARTY today for only \$10 per canoe rental!

## Peoria Riverfront Museum Questions

1. Visit the hunting display in the Illinois River gallery and check out the “Duck, Duck, Goose” Kiosk. Find the Canada Goose and learn about its migratory habits. Where do Canada Geese return to when they are ready to nest and hatch their eggs?  
\_\_\_\_\_
2. Visit the fish tank in the Illinois River gallery. Find the spotted gar and read the label about this ancient fish that is native to our river. What makes up the spotted gar’s diet?  
\_\_\_\_\_
3. Visit the Education Garden on the lower level of the museum by following the sidewalk on Liberty Street to the stepping stones leading to the fenced-in garden. Read the sign and answer this question. Why is it good to have native plants in a garden?  
\_\_\_\_\_
4. Visit the Dome Planetarium lobby and read about the Orion Nebula. Why are brown dwarfs sometimes called “failed stars”?  
\_\_\_\_\_

For a full list of museum hours, show schedules, and admission prices, visit our website:

[www.PeoriaRiverfrontMuseum.org](http://www.PeoriaRiverfrontMuseum.org)



Official stamp

or Initials







PEORIA  
RIVERFRONT  
MUSEUM

**Peoria Riverfront Museum**

222 SW Washington Street  
Peoria, IL 61602  
309-686-7000

**Hours:**

Through May 29th  
Tuesday-Saturday 10am-5pm • Sunday Noon-5pm  
May 30th through September 5th  
Monday-Friday 10am-5pm  
Saturday 10am-7pm • Sunday Noon-5pm

**Admission:**

Members- FREE  
Non-members  
Adults (18-59) \$11.00 • Children (3-17) \$9.00  
Seniors (60+) & Students (with college ID) \$10.00  
There is an additional charge for special exhibitions.  
*One child with passport admitted free with each paying adult (includes special exhibitions).*

Visit Peoria’s past in *The Street*, explore the *Illinois River Encounter*, and engage young minds in *Discovery Worlds*. Enjoy art exhibits in our *International Gallery* and *Folk Art Gallery*. Challenge yourself in the *Peak Performance Center*. Experience the *Giant Screen Theater* on a screen that’s five stories tall and seven stories wide, and get a glimpse into infinity and beyond in the *Dome Planetarium*. There’s something for everyone at Peoria Riverfront Museum.

**Camp Wokanda Questions**

1. Each May, the Peoria Park District holds a \_\_\_\_\_ Challenge to which facility can pull the most of this invasive species. It was introduced to Illinois by settlers as a edible salad option.
2. What is the name of the trail that runs through Camp Wokanda to Detweiller Park?  
\_\_\_\_\_
3. Approximately how many miles is the Trail mentioned above? \_\_\_\_\_
4. A \_\_\_\_\_ is an introduced fire that mimics the ancient fires that used to burn through the forests of Illinois.

This is an “Honor Site”. If no staff person is available an adult who has accompanied the student may initial.



[www.facebook.com/CampWokanda](http://www.facebook.com/CampWokanda)

Official stamp

or Initials





## Caterpillar Visitors Center

110 SW Washington Street  
Peoria, IL 61602  
(309)675-0606  
www.visitcaterpillar.com

### Hours:

Monday-Saturday  
10:00am-5:00pm

Last ticket sale and entry is at 3:30pm

### Admission:

General Admission: \$7.00

Seniors (55+): \$6.00

Active Military and Veterans: \$6.00

Military(55+): \$5.00

Children 12 and under accompanied by an adult:

**FREE**

*(Limit 4 per 1 adult ticket)*

**\$1.00 off admission**

Limit one per person. Coupon Code: Science  
Expires 9/20/2016

## Peoria PlayHouse Children's Museum Questions

1. Spend some time exploring the PlayHouse. What is one scientific field you see represented at the museum?  
\_\_\_\_\_
2. Find a Playologist (a Museum Staff member) and ask them to show you the Bernoulli Blower. Spend some time learning about Bernoulli's Principle and testing the machine. What is the maximum number of balls you can get to float in the blower?  
\_\_\_\_\_
3. Head to the Sci-Lab and use the stethoscope to listen to various creatures' heart beats. Which animal has the fastest heart beat?  
\_\_\_\_\_



[www.facebook.com/peoriaplayhouse](http://www.facebook.com/peoriaplayhouse)

Official stamp

or Initials





## Peoria PlayHouse Children's Museum

2218 N Prospect Rd  
 Peoria, IL 61603  
 (309)323-6900  
 www.peoriaplayhouse.org

### Hours:

Monday-Saturday  
 9:00am-4:00pm  
 Sunday  
 12:00pm-4:00pm

### Admission:

General Admission: \$8.00  
 Children under 1: FREE



## Caterpillar Visitor Center Questions

1. How many gallons of "Caterpillar yellow" paint does it take to cover the 797F Mining Truck?  
 \_\_\_\_\_
2. What is one of the most important ergonomic features in the design of the Cat machine cab?  
 \_\_\_\_\_
3. Cat powered pumps are capable of draining an Olympic-size swimming pool in less than \_\_\_\_\_.  
 (*Hint: Industrial Engines and Power Display*)
4. Name two pieces of Cat equipment on display at the Caterpillar Visitor Center.  
 \_\_\_\_\_



Official stamp

or Initials





**Fon du Lac Farm Park**  
 305 Neumann Drive  
 East Peoria, IL 61611  
 309-694-2195  
 info@fondulacpark.com

**Spring Hours:**

April 11th - May 27th

Monday - Friday 9:00am-3:00pm (Closed Weekends)

**Summer Hours:**

May 28th - September 5th

Tuesday - Sunday 9:00am-3:00pm  
 (Closed Mondays except for Memorial Day,  
 4th of July & Labor Day)

**Admission:**

Adults \$3.00; Children 1-15 \$2.50

One Child with passport admitted FREE with each  
 paying adult.

Since 1981 the Farm Park has been a treasured destination for school children and families. The park offers a variety of outdoor activities that a child would have experienced living on a farm in the early 1920's. Visit the gift store and the concession stand.

**Peoria Area FIRST Robotics Teams Questions**

1. What does the acronym *FIRST* stand for?  
 F \_\_\_\_\_  
 I \_\_\_\_\_  
 R \_\_\_\_\_  
 S \_\_\_\_\_  
 T \_\_\_\_\_
2. \_\_\_\_\_ countries participate in *FIRST* robotics programs and there are \_\_\_\_\_ teams world-wide.
3. What was the name of the 2016 *FIRST* Robotics competition?  
 \_\_\_\_\_
4. How can a robot “see” if it doesn’t have a camera?  
 \_\_\_\_\_



Official stamp  
 or Initials



**Peoria Area *FIRST* Robotics Teams**

www.robotcasserole.org  
www.usfirst.org

**RoboRumble**

**Where:**

Peoria Riverfront Museum  
222 SW Water Street, Peoria, IL 61602

**When:**

Saturday, June 11th 12:00pm-4:00pm

**Robomania**

**Where:**

Peoria Public Library– North Branch  
3001 W Grand Parkway, Peoria, IL 61615

**When:**

Saturday, June 25th 12:00pm-4:00pm

**Sponsored by Peoria Area *FIRST* Robotics Teams**

**Admission: Free**

Come join several area robotics teams at the Peoria Riverfront Museum & the Peoria Public Library - North Branch for robot demonstrations, interactive displays, Lego Mindstorms robots, and science and technology displays.

**Learn more at [www.robotcasserole.org](http://www.robotcasserole.org) and [www.usfirst.org](http://www.usfirst.org)**

**Fon du Lac Farm Park Questions**

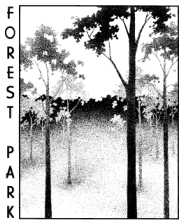
Monarch Butterflies are beautiful. Their brilliant orange and black wings make them the most widely recognized butterfly in the garden. However, the monarch butterfly is slowly disappearing and needs our help to flourish.

1. What is the main reason monarchs are disappearing?  
\_\_\_\_\_
2. Name the only food monarch caterpillars eat.  
\_\_\_\_\_
3. What is the most important thing you can do to help save the monarch butterfly?  
\_\_\_\_\_
4. How should you plant your garden?  
\_\_\_\_\_  
\_\_\_\_\_
5. What should you never use in your garden?  
\_\_\_\_\_
6. Name the four stages of a butterfly's life.  
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_ , Official stamp  
\_\_\_\_\_  
& \_\_\_\_\_

or Initials





## Forest Park Nature Center

5809 Forest Park Drive  
Peoria Heights, IL 61616  
(309)686-3360  
www.peoriaparks.org

### Hours:

Monday-Saturday 9:00am-5:00pm  
Sunday 1:00pm-5:00pm

### Admission:

FREE

Enjoy 7 miles of hiking trails, 540 acres of dedicated Illinois State Nature Preserve, Interpretive Center, interactive exhibits and the Trailhead Nature Store. Pick up a copy of our latest newsletter, *Tracks and Trails*, for all the latest nature news and program information.

### Plan a Woodland Birthday Party!

Forest Park Nature Center is a great place to have your Birthday Party. A naturalist will lead your group on an exciting hike to explore the forest! You then have exclusive use of our woodland picnic area to open presents and enjoy refreshments. The birthday girl or boy will receive a \$2.00 gift certificate from the Trailhead Nature Store.

Invitations are provided.

Birthday Party packages start at \$60.00.

Call and schedule yours today!

## Luthy Botanical Garden Questions

1. Within the Conservatory: Find and name two fruit bearing plants (*There are four*).

---

---

2. Within the Conservatory there are several signs concerning the importance of rainforest. Find one that answers this question: Why are rainforests being destroyed?

---

---

3. Near the west fence (along Prospect Road) and to the left of the gazebo is a tree that sports leaves of three different shapes.

A. Can you find a leaf of each shape? \_\_ Yes \_\_ No

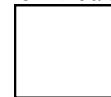
B. What kind of tree is it? \_\_\_\_\_

C. What tasty drink can be made from the roots of this plant if the roots are dug when the plant is small? \_\_\_\_\_

*This is an "Honor Site". If a Luthy staff person is available you may ask that person to initial this passport page. If no staff person is available an adult who has accompanied the student may initial.*

Official stamp

or Initials





**LUTHY  
BOTANICAL  
GARDEN**

**Luthy Botanical Garden**

2520 N. Prospect Road  
Peoria, IL 61603  
309-681-3506

**Hours:**

10:00am – 5:00pm Daily

**Admission:**

No admission fee.

Contributions are welcomed – and needed



**2016 Special Events:**

Open Memorial Day– May 30th

Star Wars Day, Father’s Day– June 19th

*(Fathers & Grandfathers are free)*

Super Hero Weekend- July 30th-31st

Open Labor Day– September 5th

*Hogwarts Botanical Garden*

Chrysanthemum Show– October 6th –November 6th

Hall-Zoo-ween- October 7th-8th

Poinsettia Show- November 18th-December 31st

Candle Light Walks– November 18th-December 23

*(6pm-9pm, Friday & Saturday ONLY)*

**Check out our website for more information:**

**[www.peoriaparks.org/Luthy-botanical-garden](http://www.peoriaparks.org/Luthy-botanical-garden)**

**Forest Park Nature Center Questions**

1. What is one way you can help protect our sanctuary? *(Found on trail entrance sign behind Nature Center)*  
\_\_\_\_\_
2. What was one animal hunted by people of the Woodland era in Illinois? *(Found in main room of Nature Center)*  
\_\_\_\_\_
3. What is the top part of a turtle’s shell called? *(Found in indoor animal area)*  
\_\_\_\_\_
4. Which prairie plant is toxic to livestock? *(Found on sign in the prairie planting on Valley Trail)*  
\_\_\_\_\_



[www.facebook.com/ForestParkNatureCenter](http://www.facebook.com/ForestParkNatureCenter)

Official stamp

or Initials





**Giant Oak Park**  
426 West High Street  
Peoria, IL 61605  
www.peoriaparks.org

**Hours:**  
Monday-Sunday  
Dawn to Dusk

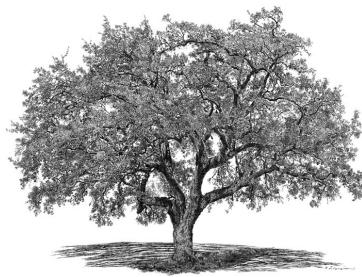
**Admission:**  
FREE

Giant Oak Park is one of the Peoria Park Districts smallest parks;  
it has a single tree and a giant name.

It is home to a large bur oak tree,  
believed to be at least 300 years old.

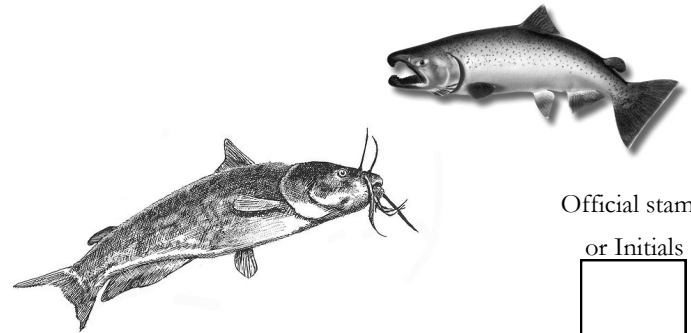
Its branches span at least 100 feet and the  
trunk is 13 feet in circumference.

This is an honor site. There is  
no staff to stamp or sign the  
passport page. An adult  
accompanying the child is to  
initial the page noting the date  
of your visit.



## Jake Wolf Fish Hatchery Questions

1. What organ does a fish have that allows it to breathe under water?  
\_\_\_\_\_
2. What fish is named after the colorful arch seen in the sky after a rainstorm?  
\_\_\_\_\_
3. How much did the State Record Blue Catfish caught in 2005 weigh?  
\_\_\_\_\_
4. How many days do Chinook Salmon eggs stay in incubation?  
\_\_\_\_\_



Official stamp  
or Initials







### Jake Wolf Fish Hatchery

25410 Fish Hatchery Road  
Topeka, IL 61567  
309-968-7531  
steve.krueger@illinois.gov

#### Hours:

8:00am-3:30pm

Visitor Center is open seven days a week,  
except for Illinois state holidays.

No need to phone, unless a guided tour is desired.

#### Admission:

FREE

#### Directions:

From Peoria area, take Illinois Route 29 south through  
Pekin, turn right on the Manito blacktop into Manito.

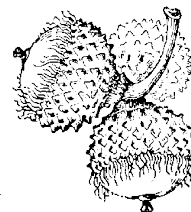
Take the first right past the Country Companies building  
onto Country Road 2500 North.

Follow 2500 North for five miles and turn right at the Jake  
Wolf sign. Follow the lane to the Jake Wolf Fish Hatchery.

For questions regarding the Treasure Hunt, please inquire at  
the office located in the back of the Visitor Center.

### Giant Oak Park Questions

1. What is the local name given to this giant tree?  
\_\_\_\_\_
2. What is the scientific name of the bur oak?  
\_\_\_\_\_
3. Some Scientist believe the tree may have sprouted  
as early as \_\_\_\_\_.
4. What are the dimensions of this tree: \_\_\_\_\_ feet  
tall, \_\_\_\_\_ feet spread, \_\_\_\_\_ feet trunk  
diameter.
5. What family saved the bur oak in the 1930's?  
\_\_\_\_\_
6. All oak species are identified by their seed. What  
is the seed of all oak trees called?  
\_\_\_\_\_



Date of Visit: \_\_\_\_\_

Official stamp  
or Initials



# 2016 Science Treasure Hunt

## Important Dates

### Start Date:

Saturday, April 16, 2016

### Final Date:

Monday September 5, 2016

### Final Submission Postmark Date:

Wednesday, September 7, 2016

### Presentation Event:

Sunday, October 2, 2016

An explanation for each Everyday Science Experiment will be posted, after the contest ends, on the Peoria Academy of Science website:  
[www.peoriaacademyofscience.org](http://www.peoriaacademyofscience.org)

## Illinois Air National Guard Questions

1. What is the mission of the C-130 Hercules aircraft?

\_\_\_\_\_

2. Name three ways you can purify water in a survival situation.

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. What are three things necessary to have fire?

\_\_\_\_\_ , \_\_\_\_\_ , \_\_\_\_\_

\_\_\_\_\_

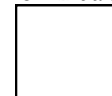
4. Would you like to join the Air National Guard someday?    \_\_\_Yes        \_\_\_No



[www.facebook.com/182AW](http://www.facebook.com/182AW)

Official stamp

or Initials





## Illinois Air National Guard

182nd Airlift Wing  
2416 South Falcon Blvd.  
Peoria, IL 61607  
(309)633-5118

### Hours:

Must phone ahead to schedule a tour of the base.

Tours are scheduled from 9:00am-1:00pm  
Tuesday and Thursday only on a first come first re-  
served basis.

Please call 309-633-5118 to schedule a time.

### Admission:

Tours are FREE of charge

### Tours:

Tours consist of Aircrew Flight Equipment ship, Fire  
House, Aircraft Maintenance and the C-130 Aircraft.



## 2016 Science Treasure Hunt Everyday Science Experiments

*Remember to answer the questions on page C5 & C6*

### 1. Green Pennies

**Supplies Needed:** Paper towel, four or five pennies, vinegar and saucer.

**What to do:** Fold the paper towel in half and fold again into a square. Place the paper towel in the saucer, Pour enough vinegar onto the paper towel to wet it. Place the pennies on the paper towel and fold the towel over onto the pennies. Wait 24 hours. Observe what happens

### 2. Taste Test

(Adult assistance required – use of a kitchen knife)

**Supplies Needed:** A peeled apple, a peeled potato, a kitchen knife.

**What to do:** Cut a small piece from both the apple and the potato of the same shape and size. Squeeze your nose tightly closed and close your eyes. Taste one piece, then the others. Try to guess which was which.

### 3. Swiping from the Coin Tower

**Supplies Needed:** About 8 coins of the same size (quarters and nickels work best), a dinner knife

**What to do:** Stack the coins in an even and straight stack. Use the dinner knife to sweep the bottom coin from the stack. See how many you coins you can sweep from the stack before it collapses.

### 4. Making Waves – Transferring Energy from Air to Water

**Supplies Needed:** A large shallow pan, tap water, a drinking straw

**What to do:** Fill the pan half full with water. Hold one end of the straw near the surface of the water. Blow into the straw. Blow gently, then harder. Observe the waves as you blow gentle or hard.

#### 5. Skittering colors

**Supplies Needed:** Food coloring, lukewarm milk, several plates or shallow bowls, dishwashing detergent, several Q-tip cotton swabs.

**What to do:** Pour some of the lukewarm milk (whole milk works best) into several of the plates to a depth of about 2 cm. (about one inch). Place several drops of various food coloring in the center of the milk. Dip a Q-tip into the dishwashing detergent. Then dip the Q-tip into the center of the of the food coloring patch on the milk. Observe what happens.

#### 6. Checking Fingerprints

**Supplies Needed:** A tube of lipstick, a sheet of paper, a magnifying glass (if available), hand soap to remove the lipstick.

**What to do:** A. Lightly rub a thin coating of lipstick onto the tip of the forefinger of each of your hands. Press your forefingers onto the paper.

Examine your fingerprints.

#### 7. Dunking a Tissue

**Supplies Needed:** A sink or basin filled with water, a clear drinking glass, paper tissues.

**What to do:** Crumple several sheets of tissue and place them in the bottom of the glass. Hold the glass upside down and plunge it straight down into the water without tipping it. Then pull the glass straight up without tipping.

#### 8. Cool it!

**Supplies needed:** 2 plastic drinking bottles (the bottles should be the same size); paper towels; room temperature tap water; thermometer (optional); a windy day (or use an electric fan if it's not windy)

**What to Do:** Fill both bottles with water. Wrap one of the bottles in two layers of paper towels. Wet the paper with water. Stand the two bottles next to each other. Put them outside if it's a windy day. If it's not windy, put the fan on next to them. After 20 minutes, take a sip of water from each bottle. Check the temperature every five minutes. You can guess the temperature difference between the two bottles by tasting the water, or use a thermometer to be accurate.

#### 9. Change H<sub>2</sub>O<sub>2</sub> into H<sub>2</sub>O (Hydrogen Peroxide into Water)

**Supplies Needed:** Hydrogen peroxide, raw potato, cup or small glass.

**What to do:** Pour about an inch of hydrogen peroxide in to the glass. Take a small slice of the potato and place it in the cup. Observe the results.

#### 10. Drop that egg – hopefully without breaking it.

**Supplies Needed:** 1 small Ziploc plastic bag, 1 large Ziploc plastic bag, a hardboiled egg, box of Rice Krispies.

**What to do:** Put the egg in the small bag. Use the Krispies to encase the egg in the center of the bag. Stuff that bag full and get some good padding going! Place the small bag in the large bag. Fill the large bag with Krispies making certain that the small bag is well within the middle and protected on all sides by the Krispies. Now drop the large bag from a height of three feet, then four feet, then five feet: checking each time to see if the egg shell had been cracked.

## 2016 Science Treasure Hunt Sites

Check all the sites you visited this year

- Astronomy Section
- Geology Section
- Herpetology Section
- Ichthyology Section
- Camp Wokanda
- Caterpillar Visitor Center
- Fon-du-Lac Farm Park
- Forest Park Nature Center
- Illinois Air National Guard
- Jake Wolf Fish Hatchery
- Luthy Botanical Gardens
- Peoria Area First Robotics Teams
- Peoria Playhouse Children's Museum
- Peoria Riverfront Museum
- Peoria Zoo
- Sugar Grove Nature Center
- United States Coast Guard
- University of Illinois School of Medicine at Peoria
- Wheels O' Time Museum
- Wildlife Prairie Park

**Circle your two (2) favorite sites.**

## 2015 Science Treasure Hunt

### Official Entry Form

*(Please Print Neatly)*

**Participant's Name** \_\_\_\_\_

**Address** \_\_\_\_\_

**City** \_\_\_\_\_ **State** \_\_\_\_\_ **Zip** \_\_\_\_\_

**E-Mail (for notification only)** \_\_\_\_\_

**Families should designate a primary contact person below:**

\_\_\_\_\_ **Phone** \_\_\_\_\_

Certification: I have checked the pages in this Science Treasure Hunt Passport and verify that this book contains the site stamps or initials from a minimum of eight (8) sites.

**Signature** \_\_\_\_\_

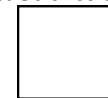
**At Science Site** \_\_\_\_\_

**Mail to: Peoria Academy of Science**

**P.O. Box 3412**

**Peoria, IL 61612**

Stamp or  
initials of your  
last Science Site



Must be post-marked no later than Wednesday, September 7, 2016.

Do not mail in entire passport, just the center yellow pages C4-C7

# 2016 Science Treasure Hunt

## Official Answer Form

*Please check one for each question*

### 1. Green Pennies

- The pennies turned green
- The pennies did not turn green

### 2. Taste Test

- I could easily tell the difference
- Both tasted the same with my nose pinched shut

### 3. Swinging from the Coin tower

- I was able to sweep \_\_\_ coins before the stack collapsed.
- The stack collapsed on my first try

### 4. Making Waves– Transferring Energy from Air to Water

- The waves were higher as I blew harder
- The waves were the same regardless how hard I blew

### 5. Skittering Colors

- A.  Nothing happened
  - The food coloring quickly spread away from the Q-tip
- B. Did all the colors react in the same way?  Yes  No

### 6. Checking Fingerprints

- A. Are your fingerprints the same?  Yes  No
- B. Most fingerprints are classified as either “Arch” or “Loop”  
The forefinger of my left hand is  Arch  Loop  
The forefinger of my right hand is  Arch  Loop

### 7. Dunking a Tissue

- The tissue was soaked
- The tissue remained dry

### 8. Cool It!

- A. The temperature of the water in the two bottles remained the same  Yes  No
- B. Which water bottle had the cooler water
  - The unwrapped bottle
  - The wrapped bottle

### 9. Change H<sub>2</sub>O<sub>2</sub> into H<sub>2</sub>O

- Nothing happened
- Tiny bubbles came from the potato

### 10. Drop that Egg

- The egg shell cracked at
  - Three feet
  - Four feet
  - Five feet
- The egg shell did not crack
- After the experiment I ate the egg