



# Joint Education Catalog

2017



*Planting A Brighter Future!*

## Dear Educators,

The 2016-2017 school year is full of opportunities to enhance your science curriculum with Leila Arboretum and Kingman Museum. We have merged our unique education facilities to offer more programming, events, and resources to support STEM programming. Educators and students will enjoy new themes and classes that are aligned with current benchmarks.

Leila Arboretum's Children's Garden has a new name: The **Kaleidoscope Garden**. Like the popular children's toy, our garden is always changing — highlighting different colors, shapes, and experiences as the seasons progress. Through interactive lessons and by getting their hands a little dirty, students will take a closer look at how plants grow, adapt, and evolve. **Programs are available all year long**, using the garden, the greenhouse, and the arboretum as your classroom.

The *Always Evolving* **Kingman Museum** is proud to announce a new revolving exhibit space on the lower level with lots of hands-on science activities and giant Lite Brite wall. 2017 exhibit themes include "Native Americans" and "Cabinet of Curiosities." Discover what's new at the museum: Take a walk through Michigan habitats, discover the world of Edward Brigham, get an up-close look at how the human body works, and see exotic animals and insects of the world. New classes explore the past, present, and future with activities investigating dinosaurs, outer space, and our own planet Earth.

Want to take a class at Kingman and at Leila Arboretum? **Now save 15% when you schedule a class at both facilities on the same day!** Are you focusing on a special topic in your classroom? Let us know and we will design a lesson to apply the knowledge learned during your unit at school. We are here to help you "build your own class" using our unique resources available to your students.

No busses? Not enough time for a field trip? **We will come to you!** Kingman Museum and Leila Arboretum can bring the lesson and artifacts to your classroom!

To see a digital copy of our education brochure:

Go to [www.lasgarden.org](http://www.lasgarden.org) or [www.kingmanmuseum.org](http://www.kingmanmuseum.org)

For more information please call **269-969-0270 ex. 120**, or **269-965-5117 x-12**, e-mail [katy@lasgarden.org](mailto:katy@lasgarden.org) or [epowell@kingmanmuseum.org](mailto:epowell@kingmanmuseum.org)

We look forward to working with your class!



928 W. Michigan Ave.  
Battle Creek, MI 49037

*Katy Avery*

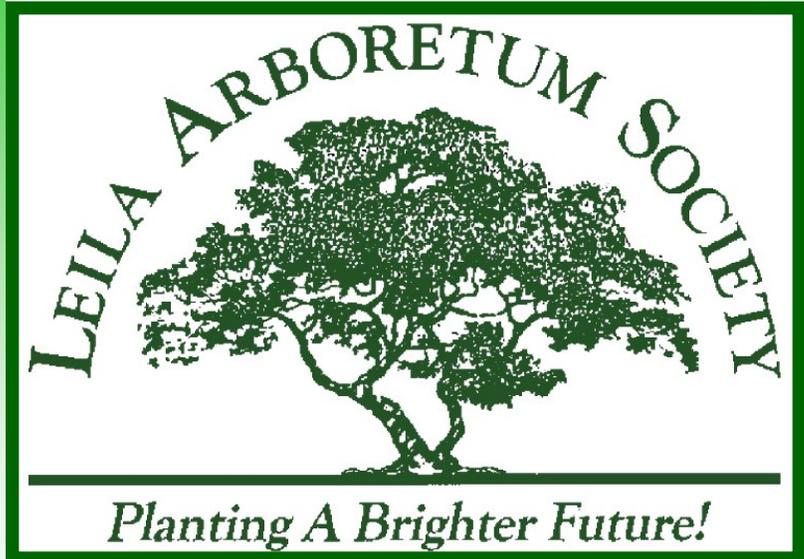
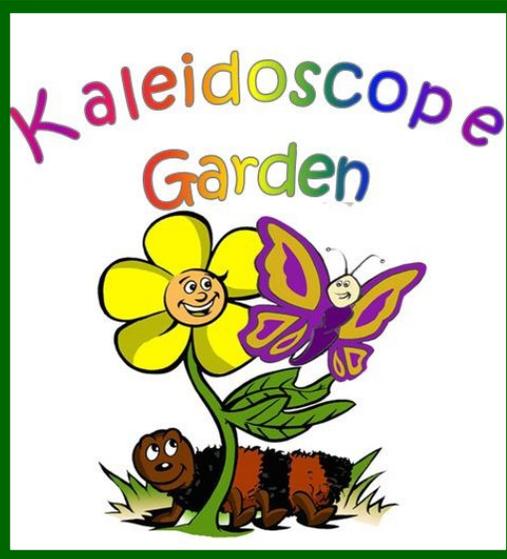
Education Manager  
Leila Arboretum

*Emily Powell*

Education Manager  
Kingman Museum



175 Limit St.  
Battle Creek, MI 49037



## 2016-2017 Education Catalog



The mission of LAS is to preserve and enhance Leila Arboretum for all to appreciate horticulture and the arts in a natural environment

928 W. Michigan Ave. Battle Creek, MI 49017

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



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## FAQ's

### **What are the rates?**

Group rates and class fees are listed on page 6.

### **What is the minimum group size?**

School and group rates apply to groups with a minimum of 10 paid visitors. Minimum Fees may apply to groups smaller than 10 students.

### **How do I register?**

Call or e-mail the education manager to register.

Katy Avery, Education Manager

**269-969-0270 or [katy@lasgarden.org](mailto:katy@lasgarden.org)**

### **When is the best time to visit?**

Education programs can be offered all year, winter programs will take place in the Greenhouse.

### **How far in advance should I make a reservation?**

General self-tour group reservations require 48 hours notice to receive the group rate and to make sure that the garden is staffed for your visit. If you would like to explore the children's garden and take a class please contact us at least two weeks in advance. This will ensure that you will be able to take a class on the day you would like!

### **How and when do I pay?**

The educator will greet your group upon arrival and will accept payment. Please have an accurate count of the number of students and adults in your group. You can pay by check, cash or credit card.

### **Can we eat lunch at the garden?**

A pavilion with tables and benches is available in the Children's Garden. We do ask that all groups be responsible for their garbage. We will provide garbage bags. Another option is to go into the Arboretum and sit in one of the many grassy areas. Bring blankets for your group if you would like to choose this option!

### **Where can we park?**

Leila Arboretum has a FREE parking lot for cars and buses.

### **Other Questions?**

Please feel free to call, e-mail, or log onto our website for more information.

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





## Group Prices

**Guided Tour of Children's Garden:** \$35 per tour

**Leila Education Class:** \$3/person  
*\*Minimum fee: \$30*

**Outreach Program at your site:** \$125 – \$200  
*\*1 classroom. Additional fees may apply for large groups. Multiple program discounts available.*

**Cancellation Policy:** At least 48 hours notice is required when canceling a group visit or class.





## Arboretum Classes

*All programs will have content customized for your students. Please let us know the students' grade and any specific topics you would like us to cover to support your curriculum.*

### Life Cycles

Journey through the life cycle of a plant and a butterfly and see how the two are alike and different! **Pot a seed to take home** and watch the life cycle of a plant happen in front of your very own eyes.

### How Does Your Garden Grow?

Discover how plants begin their life by **Dissecting a Seed**, and learn what ingredients plants need in order to survive.

### Who Lives in a Garden?

Learn about the plants, animals, and creepy crawlies that call the garden "home." Discover living versus non-living things and the basic needs to keep things alive! This lesson includes a **Hands-On Worm investigation**.

### Garden Tales

During this Garden Storytime, We will read a garden or nature themed story and **make a related craft to take home**.

### Art in the Garden

Plants come in a Kaleidoscope of shapes, colors, and sizes. Learn about artists who have drawn inspiration from the natural world and **create an art project** made of things found in the garden.

### Fresh from the Farm

Visit the 365 Urban Farm or Greenhouse to learn about food grown in Battle Creek. **Touch, smell, and TASTE your way through the garden!**

(continued on next page)





## Arboretum Classes (continued)

### Guided Tours

Experience the Kaleidoscope Garden, the Fantasy Forest, or the arboretum any month of the year! Join an experienced guide to explore the history, landscape, and stories behind our gardens. Each season offers something new!

### Kaleidoscope Garden Summer Events (June-August)

Explore the Kaleidoscope Garden through a series of self-guided, hands-on activity stations. At each event, visitors will investigate a new topic through games, crafts, and fun activities. Programs typically fall on Wednesday Mornings from 10am-12pm.

Topics include:	Dinosaurs	Butterflies
	Garden Critters	Art in the Garden
	Flying Things	Soakin' and Splashin'
	Enchanted Garden	Mad Hatter Tea Party
	And More!	

*Please RSVP for these programs. Cost: \$2/person. Email [Katy@LASgarden.org](mailto:Katy@LASgarden.org) for the current schedule.*

**Can't find what you are looking for?**

**Contact the education department and we'll help you design  
the perfect class at Leila!**





## Other Programs

- Picnics and Rentals
- Children's Garden Events
- Scout Badges
- Home School Programming
- Spooky Science Saturday
- Volunteer Opportunities



## Contact Information

**Leila Arboretum Society**

**928 W. Michigan Ave.**

**Battle Creek, MI 49017**

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

**Education Manager**

**Katy Avery**

**269-969-0270 ex. 120**





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Leila Arboretum Society  
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Battle Creek, MI 49037  
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[www.LASgarden.org](http://www.LASgarden.org)



## 2016-2017 Education Catalog

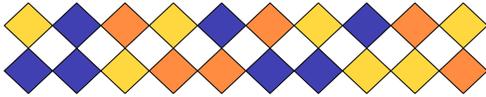


**A resource and destination for lifelong learning opportunities**  
*in natural history, the universe, world cultures and S.T.E.A.M.*  
*(Science, Technology, Engineering, Arts and Mathematics)*

**175 Limit St. Battle Creek, MI 49037**

**[www.kingmanmuseum.org](http://www.kingmanmuseum.org) 269-965-5117**

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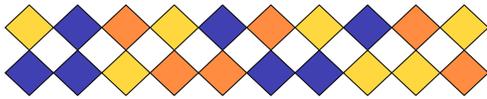
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## FAQ's



### **What are the rates?**

Group rates and class fees are listed on page 2.

### **What is the minimum group size?**

School and group rates apply to groups with a minimum of 10 paid visitors. Home school groups do not require a minimum group size.

### **How do I register?**

Call or e-mail our Education Manager, Emily Powell:

**269-965-5117 ex. 12** or [epowell@kingmanmuseum.org](mailto:epowell@kingmanmuseum.org)

### **When is the best time to visit?**

Education programs are offered all year, but programs become busy in the spring and summer. September through March is the best time for availability!

### **How far in advance should I make a reservation?**

General self-tour group reservations require 48 hours notice to receive the group rate. If you would like to explore the museum and take a class please contact us at least two weeks in advance. This will ensure that you will be able to take a class on the day you would like!

### **How and when do I pay?**

The educator will greet your group upon arrival and will direct you to the gift shop to pay. Please have an accurate count of the number of students and adults in your group. You can pay by check, cash or credit card.

### **Can we eat lunch at the museum?**

During nice weather groups are encouraged to eat outside either on the front steps of the museum or in any of the large grassy and shaded areas. Lunch space for large groups is limited inside the museum. Food is not available for purchase at the museum or the arboretum.

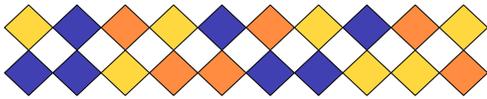
### **Where can we park?**

Kingman Museum has a FREE parking lot for cars and buses.

### **How do I cancel a visit?**

At least 48 hours notice is required when canceling a group visit or class.

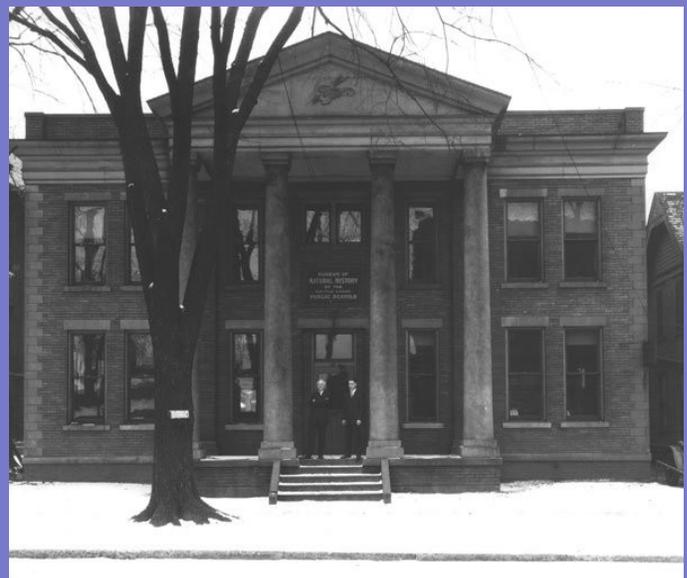
# Group Prices



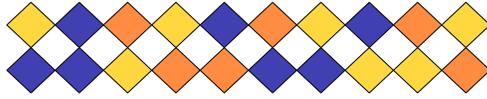
10 person minimum required for group rate

<b>Self-Tour of Kingman Museum:</b> Includes all exhibits and scavenger hunt	\$3 per person
<b>Kingman Education Class:</b>	\$35
<b>Planetarium Program:</b> Choose from nineteen shows; see page 17	\$45 for up to 30 people <i>\$35 for each additional show</i>
<b>Outreach Program:</b> We come to you!	\$100 for up to 35 people <i>*additional person \$3 each</i>

**Cancellation Policy:** At least 48 hours notice is required when canceling a group visit or class.



## K-2 Classes



### My Earth

Get your hands dirty and explore our amazing planet Earth! Take a closer look at rocks, sand, soil, and water.

### It's Alive!

Air, Food, and Water! These are things all living things need to survive. Compare museum items and identify what is living and non-living.

### Digging for Dinosaurs

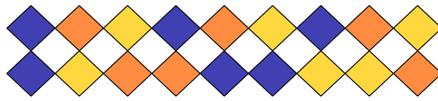
Apatosaurus, T.Rex, and Stegosaurus...oh my! Become a paleontologist and examine museum fossils while exploring the life of a dinosaur.

### Weather Wonders

Take an incredible journey as a drop of water and explore the water cycle! Float up to the clouds and discover all the wonders of weather.

*\*Include a 20 minute planetarium show for an additional fee: Zula Patrol: Under the Weather*

## 3-5 Classes



### Earth, Moon, Sun

Head into orbit and take a closer look at the Earth, Moon and Sun. How are they alike? How are they different? How do they affect each other?

*\*Include a 20 minute planetarium show for an additional fee: Earth, Moon, Sun.*

### Animal Adaptations

Could a Polar Bear live in the desert? Could a fish live in a tree? Check out museum animals and find out how animals adapt to their environments in order to survive.

### The Age of Dinosaurs

Long necks, sharp claws, plates, spikes, and more! Dinosaurs came in all shapes and sizes and lived in a world much different than our own. Study fossils and go back in time to explore the age of dinosaurs!

### The Ice Ages

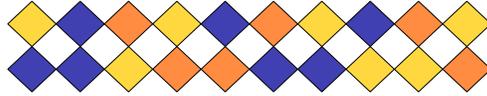
Giant sheets of ice once covered Michigan while Woolly Mammoths and Saber Tooth Cats roamed the land. Explore life on a very cold Earth in the Ice Ages!

**Can't find what you are looking for?**

**Contact the education department and we'll help you design**

**the perfect class at Kingman!**

## 6-12 Classes



### Amazing Planet

The Earth is full of amazing things to explore! Learn about the formation of the Earth, identify rocks, follow the motion of plate tectonics, and compare our planet to others in the solar system.

*\*Include a 20 minute planetarium show for an additional fee: Invaders of Mars.*

### Pre-Historic Past

From huge oceans to giant sheets of ice, dinosaurs to mammoths, and hot to cold, our Earth has gone through many changes. Examine how these changes happen and step into the pre-historic past!

### Great Lakes Ecosystems

The Great Lakes contain 22% of the world's surface freshwater! All of that water is home to many different mammals, insects, birds, and fish. Visit museum exhibits to discover habitats of the Great Lakes, how the Great Lakes were formed, and investigate the Great Lakes food chain.

### The Universe

Exploration of the Universe began long before rockets and space ships. Take a trip through time as we examine the Big Bang Theory, the Milky Way, motion of objects in space, and the people involved in the evolution of Astronomy.

*\*Include a 20 minute planetarium show for an additional fee: Two Small Pieces of Glass OR Universe.*

### Earth History

The Earth has a history full of fire, ice, eruptions, and impacts. The face of the Earth has changed many times, so have the living things calling it home. Take a closer look at the major events in Earth's history and examine rocks and fossils that help us tell this amazing story.

### Extinctions

How does something become extinct? Examine the major extinctions and compare their causes and effects. Find out which animals survived and which animals weren't so lucky. Look at fossils and rocks as keys to understanding extinctions.





# Planetarium Shows:

## **Cosmic Safari**

We have yet to find life elsewhere in the universe, but if we did what would it look like? This show imagines life on other planets by using environmental conditions to predict what adaptations an animal living there would need to thrive. *21 minutes*

## **Dark Star Adventure**

A teenager bored with science must find her way home after a technical glitch launches her father's rocket into space without her. She must utilize her knowledge of science to solve the problems she encounters and find safe passage home. *28 minutes*

## **Earth, Moon, Sun**

Explore the Earth, Moon, and Sun system and learn how this relationship has influenced life on Earth. Watch the Moon form during the early days of Earth, visit places that could be the origin of life, learn about the phases of the Moon, seasons, and witness solar and lunar eclipses. Created by Northern Kentucky University. *23 minutes*

## **Force 5**

During this show, you'll be thrown into the sea to ride out a massive hurricane, swept into the massive funnel cloud of a violent tornado, and launched into the heart of a gigantic solar flare as you learn about these amazing and dangerous "force 5" events. *21 minutes*

## **The Future Is Wild**

Based on an Animal Planet television series, The Future is Wild uses science to imagine the future of animals on Earth. Using real science this show gives audiences a visual image of how animals and plants will change and evolve over the next 5 to 200 million years. *20 minutes*

## **Ice Worlds**

Traveling to the Arctic and Antarctic regions of our planet, we'll discover the ecosystems that exist and thrive there and learn how their survival impacts life elsewhere on our planet. Traveling beyond Earth, we'll see how the existence of ice shapes the landscape and the natural systems on other planets and moons in our solar system. *25 minutes*

## **Invader's of Mars!**

The people of Earth have long been fascinated by our neighboring planet, Mars and its curious geologic features. In this show you'll explore the Martian surface as seen by Earth's various spacecraft "invaders" and gain a new understanding of the red planet. *25 minutes*

## **Mystery of the Christmas Star**

Journey back over 2000 years to Bethlehem as we seek to discover a scientific explanation for the star the wise men followed to find the baby Jesus. This modern retelling of the Christmas Story is sure to charm and captivate audiences of all ages. *31 minutes*





# Planetarium Shows:

## Two Small Pieces of Glass: The Amazing Telescope

While attending a local star party, two teenage students learn how the telescope has helped us understand our place in space and how telescopes continue to expand our understanding of the Universe. The students see how telescopes work and how the largest observatories in the world use these instruments to explore the mysteries of the universe. *23 minutes*

## Universe

A historical look at how our understanding of the universe has changed. The show starts by exploring ancient sites that appear to have astronomical significance and ends by looking at how modern scientists study the universe and how our understanding of it has evolved. *23 minutes*

## Violent Universe

The beauty of a starlit sky conceals the violent forces at work within our universe. From the upheaval of a giant star that explodes to release its material into space, to a future encounter between the Earth and a large asteroid that is too close for comfort, we will witness the forces that hold the universe together and occasionally try to rip it apart. *25 minutes*

## Wonders of the Universe

Peer deep into space through the eyes of the orbiting Hubble Space Telescope and travel back billions of years in time to witness the birth of the universe. As your travels continue, you'll fly deep into our own Milky Way galaxy and return home to Earth on a spectacular tour through the solar system. *23 minutes*

## Zula Patrol: Under the Weather

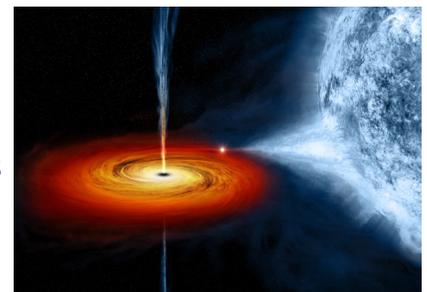
Follow the heroes of the Zula Patrol as they try to stop the interplanetary villain, Dark Truder. In the process the Zula Patrol learns about other planets in our solar system and the weather on them as well as the weather of our own planet, Earth. *24 minutes*

## Lamps of Atlantis

Our search for the lost continent of Atlantis takes us on a journey through the astronomical knowledge and understanding of the ancient Greeks. How did the constellations get their names? What different patterns did ancient cultures see in the sky? Was Atlantis a real place? Did it really sink into the sea? We will uncover clues to help us solve this age-old mystery. *40 minutes*

## Black Holes: The Other Side of Infinity

This cutting-edge production features high-resolution visualizations of cosmic phenomena, working with data generated by computer simulations to bring the current science of black holes to the dome screen. Audiences will be dazzled with striking, immersive animations of the formation of the early universe, star birth and death, the collision of giant galaxies, and a simulated flight to a super-massive black hole lurking at the center of our Milky Way galaxy. *24 minutes*





# Planetarium Shows:

## New Horizons

Following a comet through our solar system we witness breathtaking landscapes, violent volcanic eruptions, and Saturn's icy rings. The show provides a tour of the planets and moons in our solar system and all the wonders they possess. *23 minutes*

## Oasis in Space

Embark on a startling and beautiful voyage through our universe, galaxy, and solar system in search of water—a key ingredient for life on Earth. Water exists on Earth in three different states, but what role does it play elsewhere in the universe? In this show you'll explore the other water worlds of our solar system. *24 minutes*

## Secrets of the Sun

The sun is essential for life on Earth, yet is shrouded in mystery. In this feature we take an intimate look at the sun from its birth to its eventual death and the role it has played in shaping our solar system. *21 minutes.*

## Seven Wonders

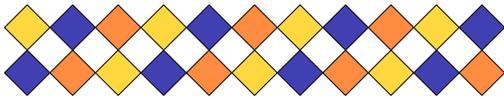
Turn back the pages of time and witness the ancient wonders of the world as they appeared thousands of years ago and investigate theories about how and why these wonders were created. The show concludes with a tour of the greatest and most beautiful wonders of our known universe. *33 minutes*

## Stars of the Pharaohs

Travel to ancient Egypt to see how science was used to tell time, make a workable calendar, and align huge buildings. You'll learn about the connection the ancient Egyptians felt with the stars and various astronomical phenomena, and experience recreations of some of the most spectacular temples and tombs of the ancient world. *36 minutes*



## Other Programs



- Volunteer Opportunities
- Girl Scout and Boy Scout Badges
- School Break Camps
- Lectures & Workshops
- 21st Century
- Spooky Science Saturday
- Science Projects



## Contact Information



**Kingman Museum**  
**175 Limit St.**  
**Battle Creek, MI 49037**

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

**Education Manager**  
**Emily Powell**  
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