Before the movie, there was a book...
The amazing 130-year journey in the founding and evolution of the Kalamazoo Valley Museum has “roots” tied to one man’s fascination with the growing of peppermint plants and the distillation of the plant’s oils. Albert May Todd (June 3, 1850–October 6, 1931) was an astute businessman and politician from the state of Michigan. He became known as the “Peppermint King” for founding a flourishing business in peppermint. Todd was born near Nottawa, Michigan in St. Joseph County. He graduated from Sturgis High School and then studied chemistry at Northwestern University in Evanston, Illinois. After graduating, he traveled in Europe, where he studied mint production, and brought back several varieties from European gardens. Mint was already widely cultivated in southwestern Michigan, and in 1869, after returning from Europe, he founded the A.M. Todd Company to extract flavorings and essential oils from mint and other botanicals. Todd developed scientific methods for testing various qualities of mint distillates which allowed a means of grading the oils. In 1875, he marketed the “Crystal White” brand of peppermint oil, with his own name featured prominently on the label as an assurance of quality. In 1891, he moved the company to Kalamazoo. It is estimated that by the early 20th century, 90 percent of the world’s supply of peppermint was grown within 75 miles of Kalamazoo, and most of it was refined by the A.M. Todd Company. Todd’s travels in Europe also spurred a lifelong interest in collecting rare books, artwork, and other curiosities. A portion of these collections helped to establish the Kalamazoo Public Museum in 1927. Today, Albert M. Todd would be proud to know that his diverse interests in the world around him are well represented in the Kalamazoo Valley Museum, a public institution that values history, science, and technology.

—Bill McElhone
Director, Kalamazoo Valley Museum

For more information about Albert M. Todd and his work with mint, please visit the Museum’s “Kalamazoo Direct to You” history gallery and KVM’s website. Additional information can be found in the 1969 book, “American Essence: A History of the Peppermint and Spearmint Industry in the United States,” by James E. Landing.
L. Frank Baum wrote a magical story, *The Wonderful Wizard of Oz*. It was published in 1900 with original artwork by W. W. Denslow. In no time, it became a national sensation and a cultural icon as the foremost American fairytale. Now it is also a hands-on traveling exhibit created by Great Explorations Children’s Museum of St. Petersburg, Florida.

This larger than life pop-up book exhibition dazzles the eyes and stimulates the mind using creativity, play, and exploration. Each exhibit section is designed as an open book, and visitors literally step into the pages of the story. Science, art, and history are explored through the wonder of this timeless story with hands-on activities and interactive exhibits such as puppets of Oz with a message of tolerance, the Tin Woodman sharing physiology of the heart, and Scarecrow allowing visitors to pick his brain. Visitors follow the characters on their journey along the “road of yellow brick” through the Land of Oz. By the end, visitors and the story’s characters learn more about themselves with a balance of character-building curriculum that combines math, science, history, storytelling, and the arts. The exhibit is a fitting expansion to the Wonderful Wizard of Oz story because L. Frank Baum remained imaginative and creative throughout his entire life. Baum’s great grandson Robert Baum explained, “My great grandfather’s work has a lasting and universal appeal today because his imagination was never limited as a child. As he grew up, no one admonished him for using his imagination. He used it in playing with his siblings and in the many endeavors he explored in life.

His imagination allowed him to capture children’s visions of everyday things and turn them into fanciful places and characters without a lot of detail or description. The action in his stories moved at a child’s pace and allowed readers to fill in details themselves. That is why Oz and his other stories are still fresh. You, the reader, are a part of the story, filling in details, becoming a part of the adventure and having fun with old friends.” So, let your imagination run wild through this exhibit, and find out what it inspires you and your children to do.

This exhibition is supported in part by a grant from the Institute of Museum and Library Services and is endorsed by the International Wizard of Oz Club and the L. Frank Baum Family Trust.

Dorothy and Toto meet the Scarecrow, as illustrated by W.W. Denslow in *The Wonderful Wizard of Oz*, 1900.
Long before Dorothy and Toto flew somewhere over the rainbow, theatre audiences in Kalamazoo were familiar with the story and the characters of L. Frank Baum’s *The Wizard of Oz*.

One of the earliest mentions appears in the November 1, 1903 issue of the Kalamazoo Gazette. An article announcing that a theatrical production of the story would be coming to town details the story line and introduces several of the characters, including the Scarecrow and the Tin Woodman. That production played at the Academy of Music, Kalamazoo’s premier performing arts center, on Saturday evening, November 21.

No review of the play was published that year, but two years later, in April 1905, the play returned to the Academy’s stage. The Gazette wrote that the extravaganza would “always be popular with the great amusement loving public which, after all, seeks for that which requires not too much thought and which will divert the mind from the troubles of everyday life.”

The following day, April 9, 1905, the Gazette noted *The Wizard of Oz* “has often been seen by the Kalamazoo theater-going people.” The clear implication is that these two performances, one in 1903 as well as the 1905 production, were not the only times the play had been staged here. And, much like devoted fans of the contemporary musical, *Wicked*, the paper reported that in New York, one youth claimed to have seen the production over 200 times.

There are some curious differences between the early stage version of *The Wizard* and the beloved film classic. In its review of the 1905 production, the Gazette writer noted that from the very start, when Dorothy and her favorite cow, Imogene, not her dog, Toto, were swept up by the tornado and carried from Kansas to Oz, the audience was completely mesmerized by the performance.

One other detail about the stage version stands out. Every account of the play, as well as the advertisements, notes that there are more than fifty pretty girls, “blondes and brunettes, tall girls, short girls, lithe girls and plump girls,” all of whom are “extravagantly costumed and brilliantly gowned.” Obviously, the production company felt that the female cast was a strong selling point.

*The Wizard of Oz*, though, was not the only L. Frank Baum story that the Kalamazoo Gazette promoted. Several times in the weeks before Christmas in 1902, the newspaper advertised that they had exclusive rights to the local distribution of Baum’s tale, *The Life and Adventures of Santa Claus*. The story would explain how Santa Claus was raised by fairies who taught him their secrets and granted him immortality. For just 75 cents, it would, thought the Gazette, make a great Christmas gift.
A national traveling exhibit called Go Figure! has been added to the offerings at the Kalamazoo Valley Museum and will stay through August 21, 2011.

The exhibit introduces early math concepts such as sorting and measuring through kid-sized environments that were inspired by popular children’s books. Go Figure! is meant to bring the world of math and its everyday uses to children ages two to seven. Children and adults can explore math with familiar characters such as Arthur, Frog and Toad, and The Three Bears. Each of the five larger-than-life books in the exhibit includes a math-related activity and labels to guide adults.

Featured are the books Arthur’s Pet Business, by Marc Brown; The Doorbell Rang, by Pat Hutchins; The Quilt, by Ann Jonas; Frog and Toad Are Friends: A Lost Button, by Arnold Lobel; and Goldilocks and The Three Bears, illustrated by James Marshall. “Using familiar children’s books, the exhibit offers our community delightful experiences with simple math and demonstrates that math is learned naturally by the inventive, curious mind,” says Museum programs coordinator Annette Hoppenworth, “Children ages two to seven years old and their parents or caregivers will enjoy the lively graphics of the exhibit and the related programs and activities.”

A free brochure for adults contains helpful information on fun-filled and age-appropriate ways of helping children recognize and use math concepts such as patterns and shapes, counting, and estimating in their everyday lives. The brochure also suggests children’s books that will help reinforce specific math activities. Go Figure! addresses four critical strategies to create interest and a mathematical view of the world: start early, make math real, involve parents, and engage curiosity in books. The goals of the project are to stimulate parents’ awareness of children’s readiness to learn math, to teach parents and children that math is everywhere, to provide parents with the means to actively support and participate in their children’s math education, and to promote books and family reading as a tool for learning math. The exhibit is based on the knowledge that parents can have an impact on their child’s interest in math. Their involvement can foster a child’s natural curiosity and intuitive sense of math and make a difference in school and later in life.

Created by Minnesota Children’s Museum, St. Paul, Minnesota, and the American Library Association, the traveling exhibit is made possible, in part, through a major grant from the National Science Foundation.

Visitors work together to measure heights and compare themselves to the size of other people and The Three Bears.

kalamazoomuseum.org

Museography Summer 2011 3
Last winter, the Museum reopened the history gallery. The new exhibit, Kalamazoo Direct to You, addresses many factors that contributed to the growth of Kalamazoo and the surrounding region. Some are familiar, while others may be less well-known. One example of the latter is the exhibit display entitled “Smelting Pot.”

This section examines the rise of metalworking industries in Kalamazoo and its basis in the rich bog iron resources in the banks of the Kalamazoo River. Bog iron is found along rivers and in marshy, swampy lands. Lying in layers or in clumps near the surface, bog iron was an easily accessible resource for the manufacture of metal goods in early America.

As early as 1840, C. C. Douglas, Michigan’s Assistant State Geologist, reported the extensive bed of bog iron along the Kalamazoo River stretching north from East Michigan Avenue. Mr. Douglas wrote, “it is sincerely to be hoped that ere long, sufficient drafts will be made upon it, to supply at least the inhabitants of that portion of the country, with all the iron which their wants may demand.”

Douglas wasn’t the first to notice the bog iron. A British account from 1772 identifies the Kalamazoo River as the Pusawpaca Sippy which meant “Iron Mine River.”

In the late 1840s, Ezra Wilder, Jr., an iron worker from New York, built an iron foundry near the current intersection of Riverview Drive and Mount Olivet. His enterprise attracted the attention and support of Volney Hascall, publisher of the Kalamazoo Gazette, who reported regularly and enthusiastically about the iron works.

Unfortunately, Wilder lacked sufficient capital to both complete his project and pay for operating costs. He was forced to sell, but two prominent investors, Jeremiah P. Woodbury and Allen Potter, bought the foundry. They re-opened it in 1850 and,
within five years, it was the largest bog iron works in Michigan.

Woodbury and Potter manufactured cook stoves but also pig iron ingots that other local iron working shops purchased. The iron they refined would contribute to the growth of other metalworking industries in Kalamazoo.

Five years after they purchased the iron-works from Ezra Wilder, Woodbury and Potter sold the business to William M. Burtt. (As an aside, despite the similarity in their names, Kalamazoo’s William M. Burtt is not related to the more famous William A. Burt who is credited with the discovery of the iron deposits in the Upper Peninsula.)

Burtt operated the iron foundry until 1867, as well as a separate Eagle Foundry near the Michigan Central Railroad station. By then, the richest iron deposits had been exhausted, but bog iron would continue to be taken from the river until the first decades of the 20th century.

Among the shops that opened in Kalamazoo in the first decades after Kalamazoo was founded were carriage and wagon manufacturers, agricultural implement makers, blacksmith shops, and others. During the 19th century, carriage making would develop into a major local industry, as would the manufacture of farm equipment. New industries that made products that used metal, such as windmills and stoves, would also become part of Kalamazoo’s metalworking heritage.

The names of some of these firms would become closely associated with Kalamazoo. Jeremiah Woodbury’s son, Edward, would serve as the first president of the Kalamazoo Stove Company. The B. S. Williams Company, an early windmill manufacturer, later became known as the Kalamazoo Tank and Silo Company, and then simply KTS, which produced band saws. That firm remained in business until the end of the 20th century.

Kalamazoo’s carriage industry became the basis of several early automobile manufacturers, including the Michigan Buggy Company. When that firm went bankrupt, Albert Barley took over their factory and produced the elegant Roamer automobile.

In the early 20th century, William Burtt’s son, Frank, opened a factory on Water Street that produced gasoline-powered internal combustion engines.

The growth of metalworking in Kalamazoo, which pre-dated the paper industry, played a key role in the village transition from an agricultural based economy to a manufacturing economy. One can only wonder what the city’s name might be if, when the Michigan Territorial Council changed it to match that of the river, “Iron Mine River” had retained the name by which the British knew it—Pusawpaca Sippy.

Above: The new history gallery also shows how Kalamazoo’s early iron foundries helped start metalworking industries which manufactured such products as water pumps, steam radiators, and stoves.

Did you know...?

- Cast iron was first invented in China in the 4th century B.C.
- At one time, cast iron was like today’s plastic—almost everything was made with it including toys, tools, and many household items. It was also an important material used for steam engines as well as to create frameworks for buildings, helping to reduce ever-present fire hazards.
To mark the Sesquicentennial of the Civil War, this is the first in a series of articles in Museography tracking how the citizens of Kalamazoo responded to the Civil War.

Kalamazoo’s patriotic response to the outbreak of the Civil War did not end when the first units left from the Michigan Central Railroad Station on April 30, 1861. Soon, local citizens petitioned Governor Austin Blair to commission additional infantry units to join the U.S. Army.

In its August 2 edition, the Kalamazoo Gazette carried the news that Governor Blair had authorized the creation of the 6th Regiment Michigan Volunteer Infantry in Kalamazoo. Local banker Frederick W. Curtenius, a veteran of the Mexican War, was placed in command of recruiting the unit.

The National Driving Park, a racetrack on Portage Street between today’s Stockbridge Avenue and Reed Street, provided training grounds, called Camp Fremont, for the new unit. The same August 2 issue of the Gazette reported that the Park would be closed to the public for several weeks but once “the men had made some proficiency in drill... the officers will be pleased to admit citizens and visitors under proper regulations.”

Morning reveille sounded at 5 a.m., and the troops were drilling by 5:30. Training occupied the better part of the day. On Wednesday, August 21, the same date on which tents, blankets, and other camp equipment finally arrived at Camp Fremont, the troops were formally mustered into Federal service. The Gazette reported the camp was open for public visitation, but urged residents to do so soon because all units across the country had received orders to depart for Washington immediately.

On August 30, all 945 men in the 6th Regiment Michigan Volunteer Infantry left Kalamazoo on their way to the nation’s capital. Over the next three and a half years, the unit would serve with distinction, notably under General Benjamin Butler in New Orleans and along the Mississippi River. It would suffer 65 deaths from combat or combat-related wounds, and hundreds more died from disease.

Although the fighting started just six months earlier, by September 1861, Kalamazoo had experienced its impact and responded enthusiastically.

To mark the 150th Anniversary of the Civil War, the Museum is planning a series of exhibitions and programs as well as articles in Museography. The first exhibit, scheduled for early 2012, will be a photographic exhibit of men from Southwest Michigan who served in the War. We hope to supplement the exhibit with images from the community, particularly descendants of local soldiers. Anyone who has period photographs of Civil War Veterans that they would like us to consider for the exhibit should contact Tom Dietz at the Museum [tdietz@kvcc.edu or 269.373.7984].
Kalamazoo has many claims to fame—Gibson guitars, Checker cabs, and Shakespeare fishing reels—but even more recognizable is the name itself—the word “Kalamazoo” seems to spark the imagination.

Take one unknown writer’s fascination with the name back in the 1890s…

O Kalamozozle—mazzizzle—
Mazzizzle, mazeezle-mazoo!
The liquid, harmonious, easy euphonious
Name known as Kalamazoo!

Of all that has been inspired by the word Kalamazoo, the most famous is the poem “The Sins of Kalamazoo” by Carl Sandburg, written in 1922.

Kalamazoo kisses a hand to something far off.
Kalamazoo calls to a long horizon, to a shivering silver angel,
to a creeping mystic what-is-it.

But Sandburg’s poem doesn’t capitalize on the rhyming wealth of Kalamazoo. That’s where children’s authors have made their mark, bringing “Kalamazoo” into the whimsical world of rhyme.

Dr. Seuss used Kalamazoo to tell the story of Horton the elephant in “Horton Hatches the Egg”…

They took him to Boston, to Kalamazoo,
Chicago, Weehawken and Washington, too.

And the popular children’s book “The Train to Timbuctoo” (1951) put the words Kalamazoo and Timbuctoo into many American children’s vocabulary …

They were on their way home to Timbuctoo.
And they had just left the town of Kalamazoo.

Even Tweety bird and his bulldog pal Lou got into the act. In the 1953 Whitman Book titled “Tweety,” each and every line rhymes with Kalamazoo, from avenue and grew to blue and cockatoo…

If we had a dog, he’d know what to do
He’d chase all those cats back to Kalamazoo!

“But we haven’t a dog!” said the bright cockatoo.

But it doesn’t stop there. According to www.rhymes.net, Kalamazoo rhymes with nearly 200 words, so…

If you’re looking for a rhyme that’s new,
Give some thought to “Kalamazoo.”
In the Museum’s new history gallery, *Kalamazoo Direct to You*, one section explores the medical and pharmaceutical technology developed in the region. It includes the Circ-O-Lectric bed developed by Dr. Homer Stryker; an X-ray tube used by Dr. Augustus Crane, an international pioneer in medical radiation (see story on the following pages); and a display of Upjohn pharmaceuticals, advertisements, and pill-making equipment. This year marks the 125th year of the founding of the Upjohn Company. Here are some of the images and artifacts given to the Museum by the Upjohn Company and its successor, Pfizer, Inc.

1. Illustration of the Upjohn factory, ca. 1910
2. Product catalog, 1891
3. Cheracol—a pleasant-tasting cough syrup—was developed in the 1920s. Their morphine-based formula was discontinued in 1930, in favor of the non-addictive codeine formula.
4. This ad from 1896 implied that other manufacturers’ pills were so hard they could be hammered into a board without breaking. Upjohn’s pills were friable and dissolved easily in the body.
5. Delivery trucks loaded with crates of Cheracol, 1926
6. Upjohn’s corporate baseball team, 1940s

7. Phenolax wafers were introduced in 1908 and were the first pleasant-tasting laxative marketed in the United States.

8. The antacid Citrocarbonate was introduced in 1921 and became a top seller for the company.

9. Upjohn vitamins were advertised in this 1947 poster.

10. In the 1930s, production of Upjohn pills became more streamlined. Here, two employees used a single machine to form, count, and bottle tablets.

11. The red employee ID badge was used during the war years from 1942–1945. This one was worn by Agnes DeVries, who worked for the company for 40 years.
At first glance, the Kalamazoo Valley Museum seems to be divided between exhibits about local history, science, and technology. But there are some ideas that cross boundaries and appear in many places throughout the Museum galleries. One of these is the idea of X-rays.

Let’s imagine a short tour through the galleries to see all the different places where X-rays can be found in the Museum. The Museum’s Science In Motion gallery is divided among three themes—Energy, the Body, and Technology. Each theme area has a History Wall of rotating panels where a timeline puts some of the discoveries related to these themes into a chronological order. We will start our tour at the Energy History Wall.

The top timeline is about Light and Optics, and near the right end of the timeline is an image showing an X-ray of a hand with a ring on the finger. This is a copy of the first X-ray image, created by Wilhelm Conrad Roentgen in 1895, showing his wife’s hand and her wedding ring. So we can wonder briefly, “What are X-rays and how can they show what’s inside of us?” Turn to the right to find a nearby interactive station offering a clue.

In a dark corner of the Energy area is a table with three colored lights overhead. Visitors are encouraged to experiment with mixing the three colors of light, casting shadows, and observing the effects of each lamp color on colored blocks on the tabletop below. The back panel of the exhibit explains that light is one aspect of electromagnetic radiation, as are radio waves, heat and X-rays. It graphically shows that an X-ray has a wavelength comparable in size to that of a molecule. Not stated is that the short wavelength X-rays have more energy than the longer wavelength visible light, so they pass through soft tissues of our bodies but not through our bones. An X-ray image is a shadow of our bones recorded on a sheet of film.

In 1895, Roentgen’s X-ray image was a curiosity, but it wasn’t long before the medical field discovered it was a very useful tool. We find evidence in another area of the Museum that X-ray technology went into use quickly after its discovery. Walking over to the Kalamazoo Direct to You gallery, we proceed to an exhibit of medical technology titled “May We Help you?” On the left side is a darkened glass object—a Crooke’s Tube, used to make X-rays. The owner of this tube was Dr. Augustus Crane, a pioneer in radiology who practiced in Kalamazoo. He used the X-ray generating tube from 1913 through 1937, starting just 18 years after
the first X-ray image was made by Roentgen. X-rays allow us to see the skeletal system that is under our skin, one of many systems explored in Science In Motion's The Body theme. On the central table, beside a torso showing the organs within our bodies, there is an interactive computer station that allows exploration of the systems, including the skeletal system revealed by X-rays. On a nearby wall is a exhibit called Bony Pieces, where you can find plastic casts of several human bones and a light board with magnetic X-ray images of different bones within the body. The images can be assembled to reveal an X-ray image of the entire body. The medical field uses X-rays as a tool to see the skeletal features hidden within our bodies. But the Museum has evidence that we can learn even more using X-rays as a tool.

Climbing the stairs to the third floor, we enter the exhibit Mystery of the Mummy. The mummy rests inside a display case with a variety of Egyptian artifacts, some contemporary to her lifetime and others from different periods. Proceeding past the mummy, there is a brief video interactive which explains how mummies were made and has a clip about our mummy’s trip to be scanned so that we could learn what was hidden beneath the bandages. The CAT scan of the mummy uses a newer technology, which allowed the Museum to see the internal organs and have a facial reconstruction of the mummy. The reconstructed head looks across the aisle at several X-rays made of the mummy at an earlier time. These X-rays give us a deeper understanding of who the mummy was, and what her life in Egypt was like.

The X-rays show the mummy was a woman, probably in her thirties. She had given birth, suffered from arthritis, and had problems with her teeth.

So the theme of X-rays can be found throughout the Museum galleries, but making the connections requires you to behave like an X-ray—using a little more energy to look below the surface.

SEE IT at the KVM
Not that long ago, wringer washers were the state-of-the-art in washing clothing and linens for most American households. The popular use of both electric and non-electric wringer washers spanned nearly a century, longer than our current top-loading automatic washing machines.

The development of an electric washer was preceded by many forms of hand-operated machines that all had ways of agitating fabric inside a water-filled tub. Beyond that, filling the tub with water, draining it, and wringing the water out of the fabric took on many mechanical forms—all physically taxing. As the 19th century drew to a close, new infrastructure in the country’s urban areas made possible the development and commercial success of modern home appliances. While many inventors and entrepreneurs had been experimenting with and producing machines (some even powered by gasoline) that would make clothes-washing a less arduous task, it wasn’t until home electrification and indoor plumbing with hot and cold water and sewage drain systems that the electric wringer washer came into its own.

During the 1920s and ‘30s, advertisements for electric washing machines depicted housewives, not servants, merrily doing laundry with this modern device. The underlying message was that housewives would now be able to do easily the work that servants once did, and that it would require little effort. For a growing middle class, particularly in the North, this was seen as a solution to the increasing “problems” in the workforce of the 1920s. Advertisements even suggested that households were better off without servants, who could be unreliable, even undesirable, in their habits.

The KVM’s “Universal” brand electric wringer-washer was manufactured by Landers, Frary & Clark, a Connecticut company founded in 1862, that produced a vast variety of products for the home—everything from the wringer washer machines to cutlery, even ice skates! During the 1920s, the company claimed that 60% of American households had at least one Universal company product. In 1923, the company employed 3,000 people. In 1965, Universal brand and its products were purchased by General Electric Company.

Southwest Michigan, meanwhile, was also on the home appliance scene by 1912. The Upton Machine Company, now Whirlpool, produced what it claims was the first electric motor-driven wringer washer. Brothers Louis and Emory Upton had founded the company just one year earlier. By 1916, the Upton Machine Company was selling its washerers to Sears, Roebuck & Company, and in the early post-World War II years, was the first to sell top-loading automatic washers.

Maytag, a subsidiary of Whirlpool, ceased production of wringer washers in 1983, though many of the old models are still traded and in use today. In fact, wringer washers, considered efficient if not labor-saving, are still used in many parts of the world where water conservation is essential—the original “green” washing machine!
#1 This tall, narrow bottle is truly a mystery, even to us. Does its long, skinny design give you a clue to its use?

#2 Its design might give it away—it has a roller and a pad.

#3 Believe it or not, they help keep baby warm.

Have a question about a person, object, or artifact that relates to the history of Southwest Michigan?

Send your question to Tom Dietz, curator of research, [tdietz@kvcc.edu](mailto:tdietz@kvcc.edu) or 269.373.7984 and you might see it answered in a future issue of Museography.
**CALENDAR**

**FREE GENERAL ADMISSION**
Open Mon. through Thurs. and Sat. 9–5
Friday 9–9 (Summer 9–5)
Sunday and Holidays 1–5

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**SPECIAL EXHIBITIONS**

**WIZARD OF OZ** — June 18–Sept. 5
Based on the 14 books in the Oz series written by L. Frank Baum, including more characters than the movie.

From Great Explorations Children’s Museum

**GO FIGURE!** — Through Aug. 21
Five popular children’s books are brought to life in gigantic reproductions of the artists’ original illustrations with a math-based interactive.

From Minnesota Children’s Museum

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**SUMMER BREAK HANDS-ON HAPPENINGS**

**Children’s Tales**
Each week, we will focus on a different children’s book series. Create masks, puppets, and memorabilia representing the different characters and events that take place in each of these story classics.

June 29: Wizard of Oz
1 p.m. Planetarium: The Little Star That Could — $3
July 6: Harry Potter
1 p.m. Planetarium: Mystery of the Missing Seasons — $3
July 13: Magic Tree House
1 p.m. Planetarium: In My Backyard — $3
July 20: Boxcar Mysteries
1 p.m. Planetarium: Secret of the Cardboard Rocket — $3
July 27: Little House on the Prairie
1 p.m. Planetarium: Sky Legends of the Three Fires — $3
Aug. 3: Curious George
1 p.m. Planetarium: Little Star That Could — $3
Aug. 10: Star Wars
1 p.m. Planetarium: Secret of the Cardboard Rocket — $3
Special Challenger Learning Center Missions — $3
12:30 & 1:30 p.m.—The Challenger Experience
3 p.m.—Voyage to Mars

**PLANETARIUM**

Spectacular sights and sounds guide your imagination through our amazing universe. Come and enjoy our brand new, state-of-the-art full dome system! **Summer season shows run from June 18–Sept. 16.**$3/person.

**Feature Show:** “Galaxies” **Monday, Wednesday, Friday, Saturday, Sunday 3 p.m.**
Learn about the nature of galaxies and how they interact with one another. All ages, geared for upper elementary and up—40 min.

**Family Show:** “Secret of the Cardboard Rocket” **Weekdays 11 a.m., Saturdays 1 p.m., Sundays 2 p.m.**
Join in the story of two children who build a rocket out of a cardboard box and take a fantastical journey through the solar system. All ages, geared toward K-5—40 min.

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**MUSEOGRAPHER SUMMER 2011**

**Hands-on Days are free. Tickets for the Challenger Learning Center, Planetarium and Mary Jane Stryker Theater are $3 per person and available at the front desk of the Museum.**

**Night-time Stargazing: “Treasures of the Great Lakes”**
**Tuesday, Thursday 3 p.m., Saturday 2 p.m.**
Discover constellations and special objects visible through binoculars around the Great Lakes, and learn about navigating the lakes and skies of summer. All ages, geared for upper elementary and up—35 min.

**CHILDREN’S LANDSCAPE**

Designed to introduce preschools and their parents to an interactive museum setting with hands-on activities, exhibits, and programs designed for children 5 and under. Older children may participate only if accompanying a younger child, and their play must be appropriate to the preschool surroundings. FREE

**June/July Theme: Time to Play**
Aug./Sept. Theme: In My Backyard

**Circle Time Programs**
These 20-minute programs of stories, activities, and an art project are offered FREE to families and preschool groups. Programs take place Monday through Friday and begin at 10 a.m. and Saturdays at 11 a.m. Registration for groups is encouraged, families may drop-in.

**Hours:** Mon., Tues., Thurs., Fri. 9 a.m.–3 p.m.
Wed. 9 a.m.–5 p.m. (June 29–Aug 10)
Sat. 9 a.m.–5 p.m. • Sun. 1 p.m.–5 p.m.
Closed September 26–30 for maintenance.

**CHALLENGER LEARNING CENTER**

An innovative educational facility—complete with Space Station and Mission Control—that takes thousands of visitors each year on simulated space missions. Call 269.373.7965 for reservations and for more details about our Group Junior Missions and Corporate Training Missions.

**MICHIGAN BLOOD DRIVE LOCATION**

**Thursday, June 16 from 11 a.m. – 5 p.m.**
Michigan Blood is an independent, nonprofit, community service organization that puts Michigan hospitals first. Walk-in or schedule an appointment at http://www.miblood.org/

**MARY JANE STRYKER THEATER**

**The Wizard of Oz movie**
**June 18, 11 a.m. and 2 p.m. Tickets $3 each.**
Rated G; 102 minutes; 1939
Kansas girl Dorothy Gale (Judy Garland) and her dog, Toto, are whisked by a tornado into the magical land of Oz in this much loved musical adaptation of L. Frank Baum’s classic novel.

**Sunday History Series**

**The Sixth Regiment Michigan Volunteer Infantry**
**Sept. 25, 1:30 p.m. FREE**
As the full scope of the American Civil War became clearer, the Government requested additional volunteers from the northern states to help suppress the rebellion. Kalamazoo responded by organizing several additional units for service in the Union Army. This program will provide an overview of one of these, the Sixth Michigan.
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| JUNE | JULY | AUG. | SEPT. |

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**PLANETARIUM CLOSED FOR MAINTENANCE**

**LOOK FOR NEW PLANETARIUM SHOWS BEGINNING THE WEEK OF SEPT. 17**

**CHILDREN'S LANDSCAPE CLOSED FOR MAINTENANCE**
Making a photocopy is so routine today that most of us probably take the technology for granted. So when David Gallivan of Kalamazoo brought in an early duplication machine last year, we thought it was a great tool for demonstrating about how far we’ve come from the days of mimeograph machines and carbon paper.

When most of us think of Thomas Edison, the invention of the light bulb or phonograph comes to mind. But he was also instrumental in the development of copy machine technology.

In 1876, Edison patented an electric pen. The pen was used to make stencils for copying handwritten documents. Powered with an electric motor, it caused a needle to perforate a piece of paper at the rate of 135 perforations a second. Once complete, an inked roller was used to press ink through the perforations in the stencil to the surface of a clean sheet of paper below.

Then in 1884, Albert B. Dick of Chicago invented a duplicating machine called a mimeograph. The A. B. Dick Co. acquired Edison’s copying system patents and began working with him to manufacture and market a mimeograph system. This early Edison-Dick mimeograph technology for handwritten documents was packaged in a box with an ink roller, special waxed writing paper, blotters, ink, a writing stylus, and a frame to hold the stencil taut while it was being inked. A.B. Dick claimed that one handwritten stencil could make 3,000 copies.

Edison and Dick collaborated again in the development of the Edison Mimeoypgraph Typewriter, first introduced in 1894. The day of handwritten stencils was on its way out with this new technology. The typed stencils could be used with an Edison Mimeograph Machine such as the No. 61.

No. 61 isn’t the end of copy technology, by any means. Duplicating technology has come a long way, and today it is nearly effortless for the person making copies.

An electric pen (above right), developed by Thomas Edison, was one of the inventions important in the development of copy machine technology. With A.B. Dick of Chicago, he developed a mimeograph machine (top). Later, they produced a typewriter (above left) that made stencils for the mimeograph.

Do you have Civil War memorabilia of soldiers from Southwest Michigan? Perhaps your family saved uniforms, swords, drums, photographs, letters, diaries, or other items of interest? The Museum is planning two exhibits (scheduled for 2012 and 2014) that focus on the experiences of southwest Michigan soldiers who fought in the conflict. These exhibits will include enlarged reproduced images of the soldier and quotes from their letters and diaries, as well as equipment and clothing they used while serving from 1861 to 1865.

If you have something that could be included in these exhibits, please contact Curator of Research, Tom Dietz at 269-373-7984 or tdietz@kvcc.edu.
CAMP 9-1-1

Tuesday, July 12
or
Tuesday, July 19
at the
Kalamazoo Valley Museum
8 a.m. to 5 p.m.
FREE

An interactive camp designed to educate children on vital health and safety issues. Participants learn how to prevent injuries as well as what to do if they should find themselves in a dangerous or life-threatening situation. Each one-day camp will take place at the Kalamazoo Valley Museum.

- Limit 25 students
- Ages 9 to 11
- Registration Required

To register, go to lifeems.com

Registration opens May 1st

For more information, or to learn of other dates and locations, contact Kimberly Caton at (269) 373-3116

Sponsored by Life EMS Ambulance in partnership with the Kalamazoo Valley Museum

THE WIZARD of OZ Movie

June 18
11 a.m. & 2 p.m.
Tickets $3/each

Kansas girl Dorothy Gale (Judy Garland) and her dog, Toto, are whisked by a tornado into the magical land of Oz in this much loved musical adaptation of L. Frank Baum’s classic novel. Dorothy joins the Tin Man, the Scarecrow, and the Cowardly Lion on an adventure down the Yellow Brick Road to persuade the Wizard to help her find her way home.

Rated G; 102 minutes; 1939

Michigan Blood
MI blood saves lives.™

Michigan Blood Drive location
Thursday, June 16
from 11 a.m. – 5 p.m.

Michigan Blood is an independent, nonprofit, community service organization that puts Michigan hospitals first. Walk-in or schedule an appointment at http://www.miblood.org/
Each week focuses on a different children’s book series. Create masks, puppets, and memorabilia representing the different characters and events that take place in each of these story classics.

JUNE 29: WIZARD OF OZ
   1 p.m. Planetarium: The Little Star That Could – $3

JULY 6: HARRY POTTER
   1 p.m. Planetarium: Mystery of the Missing Seasons – $3

JULY 13: MAGIC TREE HOUSE
   1 p.m. Planetarium: In My Backyard – $3

JULY 20: BOXCAR MYSTERIES
   1 p.m. Planetarium: Secret of the Cardboard Rocket – $3

JULY 27: LITTLE HOUSE ON THE PRAIRIE
   1 p.m. Planetarium: Sky Legends of the Three Fires – $3

AUG. 3: CURIOUS GEORGE
   1 p.m. Planetarium: Little Star That Could – $3

AUG. 10: STAR WARS
   1 p.m. Planetarium: Secret of the Cardboard Rocket – $3

Plus: Special Challenger Learning Center Missions – $3
   12:30 & 1:30 p.m.—The Challenger Experience
   3 p.m.—Voyage to Mars