

the  
**Henry  
Ford**

# *EDventures*

SHAPING PERSPECTIVES FOR THE FUTURE FROM THE PAST

2010-2011

## **why history matters today**

**plus**

**LIVING LESSONS IN CITIZENSHIP**

**INNOVATION AS A STATE OF MIND**

**SCIENCE & TECHNOLOGY APPLIED  
TO THE REAL WORLD**





a welcome from  
**the president**

Dear Educator:

You might not expect us to spend much time pondering the global economy at **The Henry Ford**. But if you consider our roots as an educational institution, it makes sense.

When Henry Ford founded the Edison Institute — our original name — in 1929, his primary goal was to create an educational institution to inspire young people and prepare them for the world that lay before them.

It’s a theme that resonates today as business and government leaders question whether young people are acquiring the skills they’ll need to succeed in the 21st century.

That’s where our interest in education comes in.

*We understand that quality education is more than memorizing facts. It’s learning how to effectively process ideas and information. One of the main objectives of **The Henry Ford’s** educational programs is to help young people develop their critical thinking skills.*

As you look through the pages of this guide, you will see that theme in all of our programs. We want to be a catalyst for positive change in American education. We want to fuel the spirit of American innovation and inspire a can-do mindset in every student who comes here or who accesses our resources online.

An ambitious goal? Absolutely.

But we’re prepared to meet that goal. We’re not content if your students’ sole experience with **The Henry Ford** is a one-day field trip. Instead, we are constantly developing high-tech, forward-thinking educational programs and tools that you and your students can use long before you arrive here and well after you have returned to school.

OnInnovation.com, which offers online, high-definition interviews with some of the nation’s most

ambitious and adventurous innovators, is already up and running. And our new Transportation in America DigiKits — digital educator guides — will begin coming online in the fall of 2010, followed soon after by an innovative online interactive learning tool, ExhibitBuilder, which will allow students to build their own digital exhibits with 2D and 3D artifacts from our massive collection.

If you’ve read our earlier Educator Guides, you’ll notice a difference here, as well. For starters, there’s a new title — EDventures. We chose the name because we think it better conveys just how vibrant and fascinating our field-trip experiences have become. They’re like journeys into another world and another time — like nothing else your students can experience in just a few hours.

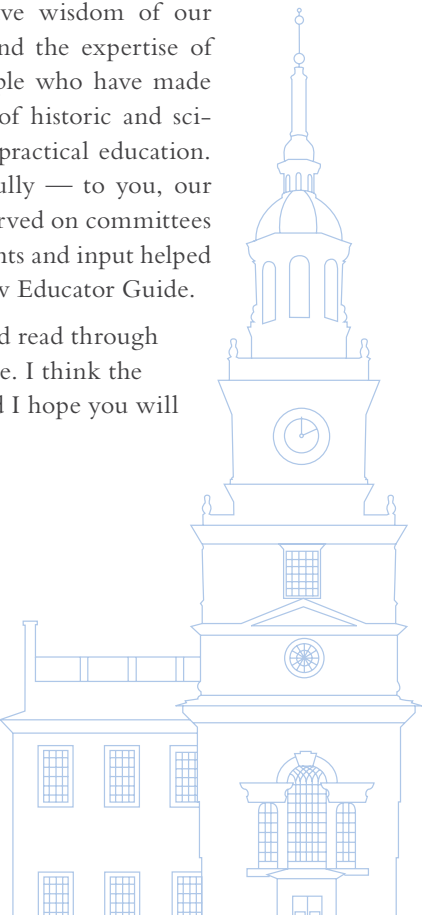
Even more exciting, I think, is that we’ve filled this guide with the collective wisdom of our world-class curatorial staff and the expertise of our Museum educators, people who have made careers meshing the worlds of historic and scientific research with that of practical education. And we’ve listened — carefully — to you, our many teacher advisers who served on committees and councils and whose insights and input helped create the content for our new Educator Guide.

So, please, take some time and read through this new and exciting resource. I think the improvement is dramatic, and I hope you will feel the same.

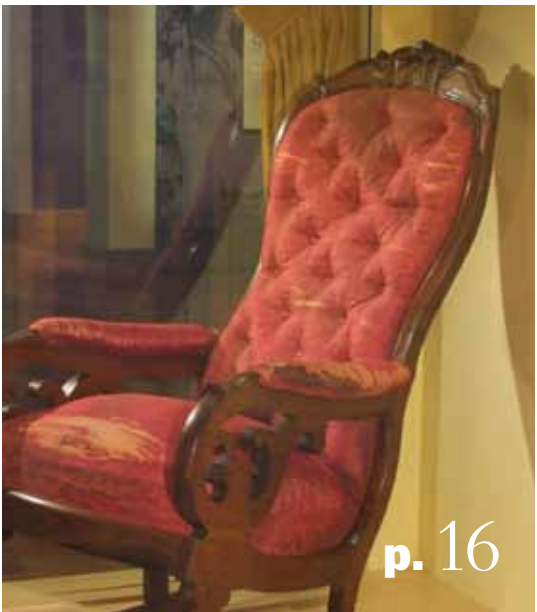
Sincerely,

*Patricia*

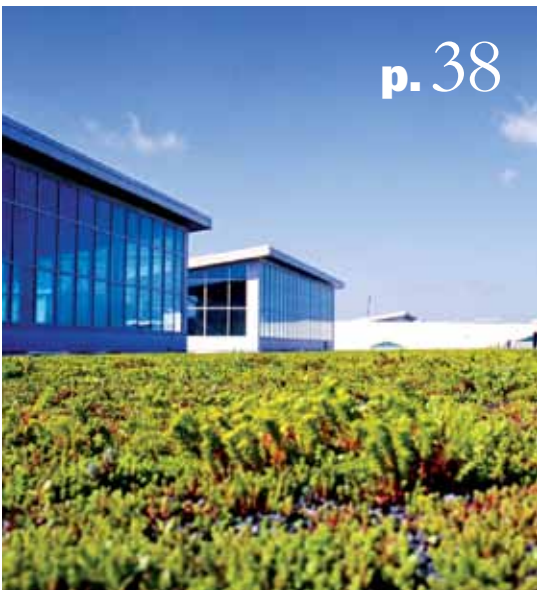
Patricia E. Mooradian  
President



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### ON THE COVER:

Elon Musk’s prototype Space Dragon space vehicle. One of the photo assets available from OnInnovation.com for use in your classroom. See page 30 for more information.

Photo: Michelle Andonian

All photos by Michelle Andonian unless otherwise noted.



### mission statement

The Henry Ford provides unique educational experiences based on authentic objects, stories and lives from America’s traditions of ingenuity, resourcefulness and innovation. Our purpose is to inspire people to learn from these traditions to help shape a better future. Contents ©2010. All rights reserved.

Educational programs at **The Henry Ford** are closely aligned to standards and grade level content expectations in Social Studies as well as other relevant disciplinary areas. Curriculum connection information is provided under each program description in this guide. For an at-a-glance look at the curriculum connection chart, please visit [thehenryford.org/education](http://thehenryford.org/education).

### stay connected



Follow **The Henry Ford** and get an insider’s view of what’s new and become a fan of our new ClubEd Facebook page at [facebook.com/thehenryfordclubed](https://facebook.com/thehenryfordclubed).



# a culture of innovation

There is a single philosophy that ties together every aspect of **The Henry Ford's** massive collection. It's what we call a Culture of Innovation. It's not new. In fact, it was the driving force when Henry Ford founded this institution. He was interested in every aspect of the world around him. He was a tinkerer, a man who wanted to know how things worked. Or, just as important, why they didn't work.

We're not just talking about cars or watches. Henry Ford wanted to know how society worked, too. He was convinced that agriculture and industry could – and should – work hand in hand. The list of things that fascinated Henry Ford is endless.

But nothing intrigued him quite so much as education. He was a hands-on learner, a believer in the concept of “learning by doing.” Underlying all of this was the idea that if young people didn't understand the past, there was no way they could be prepared to navigate the future.

To him, there was nothing quite so valuable as a sense of inquisitiveness. A month before he launched **The Henry Ford** in 1929 – it was known as the Edison Institute back then – he began the

Edison Institute Schools. His plan was that it would be a place where young people would learn not only in classrooms, but would benefit from real-life experiences as well.

His goal was to create a school where students could supplement book-learned lessons with the intellectual stimulation of a vast array of activities, historical structures and authentic artifacts.

For these students, history was not limited to what they could find on the printed page. History was three-dimensional, something they could step into, something they could explore and question. Their school experiences were filled with opportunities for face-to-face encounters with one-of-a-kind American visionaries like Walt Disney and Francis Jehl, who had been Edison's right-hand man at the Menlo Park Laboratory.

Henry Ford wanted them to understand more than the “whats” of history – the dates and places. He wanted them to understand the “whys,” the reason history unfolded the way it did. Armed with that knowledge, perhaps they would be better prepared to shape the future.

The Edison Institute Schools closed in 1969, but that legacy of learning and inquisitiveness never left. Today, we

continue that legacy of promoting a culture of learning through our staff, our many venues, our partnerships and our outreach initiatives. Quite simply, education is critical to the way we do business. **The Henry Ford** was, is and will remain first and foremost an educational institution.

In 1997, we launched *Henry Ford Academy*,<sup>®</sup> the first public charter high school to partner a global corporation (Ford Motor Company) and a nationally recognized nonprofit cultural organization (**The Henry Ford**) with public education (Wayne County Regional Educational Service Agency). It's a place where students receive a robust education, rooted in project-based learning strategies, precisely the type of education needed to negotiate the global economy in the 21st century.

Mr. Ford's “learning by doing” maxim is still at the heart of it all. Glance through the pages of EDventures and you'll see that every offering is rich with experiences: hands-on experiences, authentic experiences and human experiences.

Study Rosa Parks in the classroom, then add the emotional impact of stepping onto the very bus where she and an entire community reshaped American

history. Same with the Wright brothers. Read about two audacious shop owners from Dayton, Ohio, who dared to challenge the world of physics. Then, bring your students into the tiny back-room workshop where the brothers created their first airplane.

At **The Henry Ford**, history lessons are more than words. They are fully charged with emotion and purpose. They teach us how the world operated in the past. And, if we pay attention, they give us insight into the future.

These are experiences straight out of American history. This is how **The Henry Ford** reinforces classroom lessons with indescribable vividness.

And thanks to the countless opportunities presented by the Digital Age,

**The Henry Ford** experience is now possible long before you leave the classroom — and long after you return to it. **The Henry Ford** recently launched OnInnovation.com, a repository of video interviews we conducted with some of the world's greatest contemporary innovators, people like Microsoft co-founder Bill Gates, Apple co-founder Steve Wozniak, “green” architect Bill McDonough and open-source champion Mitchell Baker. With the help of the supplemental online module, you can now teach innovation in your classroom.

We've always been proud of our printed teacher guides. But now, we are able to expand teaching resources with our new “DigiKits,” filled with an abundance of virtual resources previously unimaginable

and often inaccessible. Want to redefine homework? Try our “ExhibitBuilder” module where students can create and post their own online exhibitions.

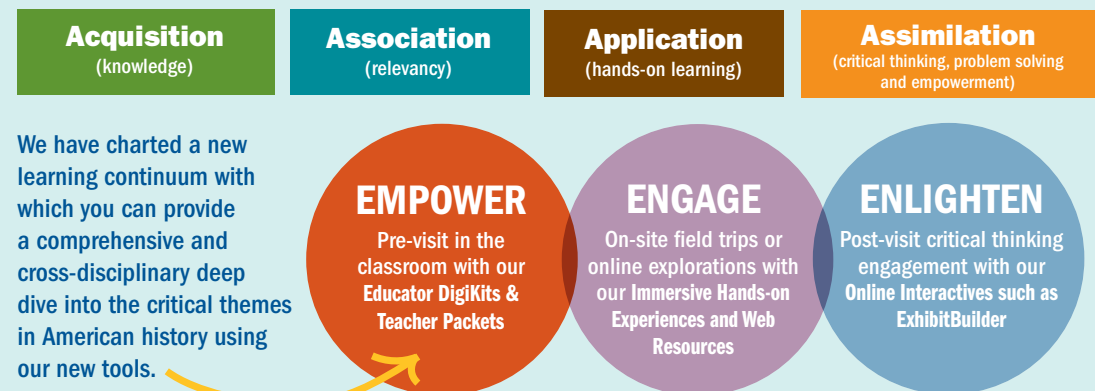
Can history really inspire? Can it help a young person find direction? Can it make the connection between past and future so vivid that a student feels a part of it?

The answer is “yes.” Definitely. And we believe that the dozens of programs outlined in these pages – inspiring, enlightening, fascinating and occasionally even entertaining – can help achieve exactly that. ■

## Continuing the Legacy of Education Innovation

At **The Henry Ford**, we take our vision of being “a catalyst for change in American education” seriously. We are constantly working on ways we can be the essential partner in education, helping teachers teach innovatively and fueling the imaginative spirit within a child, the core seed for overall success. We are trying to change the curriculum that is often a “mile long but an inch deep.” We are doing so through some of these paradigm-shifting strategies that can appeal to ALL learning styles.

### We base experiential learning on the **Four A's of Learning**:



### Learn about our many new educational initiatives, including:

- ✓ **Educator DigiKits** allow for paradigm-shifting teaching and learning with hyperlinked, curriculum-aligned digital media. (See pg 24 for details)
  - ✓ **ExhibitBuilder** allows students to think critically and creatively build their own online exhibitions. (See pg 24 for details)
  - ✓ **Literacy Enhancement programs** use historical facts and primary sources in a fun and engaging manner to inspire a love of reading. (See pg 25 for details)
  - ✓ **Teacher Fellow program** proactively engages fellow teachers in educational resource development. (See pg 13 for details)
  - ✓ **Learning Spas** re-energize teachers with immersive environments and tools that transform theory into practice for effective teaching. (See pg 12 for details)
- Please contact **Paula Gangopadhyay**, director of Education, at [paulag@thehenryford.org](mailto:paulag@thehenryford.org) or at 313.982.6063 with questions, comments and ideas.







PICTURED: Larger than life! DC3 in Henry Ford Museum.



# the *ED*venture of a lifetime.

The Henry Ford is a legendary place.

Huge and imposing, it's filled with an unparalleled collection of artifacts cataloging the human stories that make up American history. It's been visited by presidents and prime ministers, by movie stars and business tycoons and more than a few of the world's greatest inventors.

But don't be intimidated.

The Henry Ford is a place for the rest of us, too. In fact, it was *intended* for the rest of us. In some ways, The Henry Ford is a teacher's best friend. A field trip to The Henry Ford, you see, is like a license to learn. Or, more accurately, it's a license to have fun while you learn.

Henry Ford believed that history was not just about people. It was also for people. He believed it should be accessible and understandable and – most important – inspiring. He thought that history could inspire generations of Americans to greatness. But somehow, history can be uninteresting for many students. Perhaps it's because history tends to look backward, while everything about young people's lives seems to look forward.

Here's where The Henry Ford can make a difference.

As the No. 1 field-trip destination in metro Detroit, The Henry Ford has an uncanny knack for linking the past to the present and the future in a way that makes history lively and engaging and personal. No need to rely solely on history told the two-dimensional way. At The Henry Ford, your students can learn history three-dimensionally.

They can touch it. They can hear it. They can even taste it.

It's a place where students can come face-to-face with the tales of the inventors, scientists and social visionaries who steered and are still steering America into a place of global pre-eminence. History is what we do every day. And it's what we're eager to engage you and your students with. Maybe your story will be featured here one day!

So if you haven't been here lately – or if you have been and want a quick refresher – let's take a glance at the four components that make up the 21st-century edition of The Henry Ford.



# THE HENRY FORD

america's greatest history attraction



climb  
aboard  
THE MIGHTY  
ALLEGHENY  
see inside!

WHAT STARTED AS HENRY FORD'S PERSONAL MISSION HAS GROWN INTO A NATIONAL TREASURE, A SPRAWLING REPOSITORY FILLED WITH THE ACCOUNTS OF PEOPLE WHOSE IDEAS AND PASSIONS CHANGED THE WORLD.

## HENRY FORD MUSEUM

This is a museum like no other.

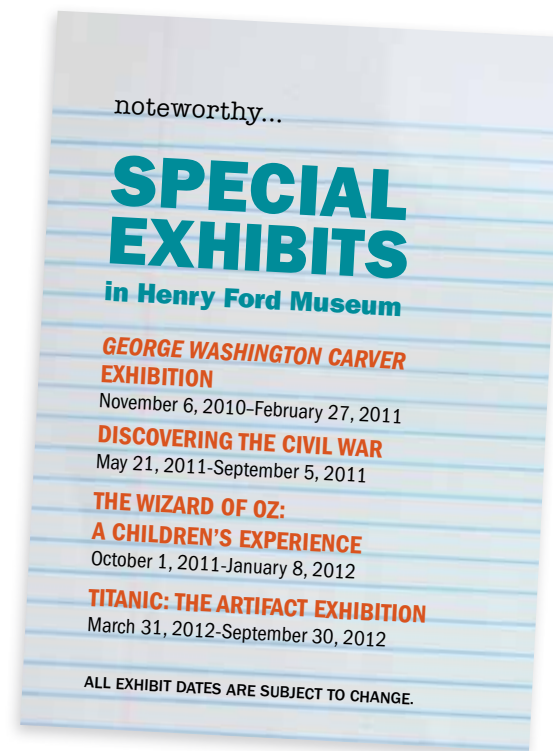
Enlightening and entertaining, sobering and emotionally charged, this is a place that can unleash your students' inquisitiveness, a place that can help them understand that history is a window into the future.

This museum's massive expanse – it's 12 acres under a single roof – bristles with the unbridled energy of American ingenuity. It's everywhere you look: more than 300 years of ideas and inventions, of social activism and upheaval, of technology and agriculture. It's as if the entire expanse of the American story is just waiting for you.

It is a collection as wildly diverse and wonderfully imaginative as America itself. From our 1823 copy of the Declaration of Independence to the Oscar Mayer Wienermobile™, from a gleaming 1940s diner to Texas Instruments' legendary Speak and Spell, from ornate dollhouses to the chair where Abraham Lincoln was assassinated.

This is American history in all its glory.

So bring your students and immerse them in this mix of singularly American stories – the innovators, the visionaries, the people whose know-how shaped the nation we live in today.



MEET AMERICAN GREATS LIKE THE WRIGHT BROTHERS AS THEY SHARE THEIR STORIES IN GREENFIELD VILLAGE.  
(SEE PAGE 33 FOR MORE DETAILS AND PERFORMANCE DATES.)

## GREENFIELD VILLAGE

Step through *Greenfield Village's* front gate and you can feel it right away. This is a place where anything is possible.

It's a place where you and your students can walk right into history. Into the small workshop where the Wright brothers created the airplane. Into the laboratory where Thomas Edison perfected the light bulb. Into the rooms where Noah Webster created the first significant American dictionary.

*Greenfield Village* is abundant with unbridled optimism. It's a place to rekindle your students' imagination.

And yours, too.

This is a place where you can blow glass or clamber under the belly of a 40-ton locomotive. It's a place where you can experience life on the farm or spend an entire day in a 19th-century schoolhouse.

At *Greenfield Village*, authentic American traditions are more than words on a page – they're hands-on experiences.

Inspiring. Genuine. And endlessly entertaining.



## crafts

Liberty Craftworks is a village within a village: eight small shops gathered around a picturesque mill pond. Step inside and see dozens of artisans hand-crafting work with techniques that are, in some cases, centuries old. Glassblowers, potters, tinsmiths – all are creating works that can be purchased in **The Henry Ford** stores.





GAINING ADMISSION TO  
EACH ATTRACTION:  
**\$8 per student**

CREATING  
AHA MOMENTS THAT  
LAST A LIFETIME:  
**priceless!**

#### FORD ROUGE FACTORY TOUR

Factory tours have been favorite field trips for decades. They're active and intriguing – everything you hope a field trip will be.

But *Ford Rouge Factory Tour* takes factory tours into an entirely new realm.

For one thing, the factory itself is a showcase of modern manufacturing techniques. Gone are the days of dark, dingy assembly lines. The Rouge is spacious and airy, filled with a complex web of overhead conveyors, vehicle elevators and just-in-time parts-delivery systems that place it at the technological cutting edge.

But the process of creating the massive Ford F-150 truck is just one part of the Rouge experience.

Your students also will learn about responsible manufacturing and sustainability. They'll see the world's largest living roof and, weather permitting, they'll get an up-close view of the factory's

award-winning environmental innovations: mammoth solar collection panels, vegetation that cleans the air and soil, and the intricate system of ponds that treats and stores storm water, creating new habitats for birds and other small animals.

Because the *Ford Rouge Factory Tour* also provides a perspective on the evolution of this site over the past 90 years, students can discover and reflect on the past, present and future of the Rouge, as well as the art of manufacturing and engineering.

#### IMAX® THEATRE

Today's students are media-savvy and visually sophisticated to an extent that would have been unimaginable even a decade ago. Small wonder that the run-of-the-mill audio-visual tools have little impact on them.

*IMAX* is different. *IMAX* is not just larger than life. It is larger than large – a technological wonder. The theater features a 5,000-square-foot screen as tall

as a six-story building. The projector's 15,000-watt Xenon projector lamp is so bright that if you were on the moon you could see it on Earth with the naked eye. And the 12,000-watt sound system is so powerful that it's capable of making the fabric of your clothing flutter.

And then, of course, there are the films themselves: riveting stories of scientific, historical and cultural discovery as compelling as the technology we use to bring them to you. And best of all, **The Henry Ford** aligns its educational films to Michigan GLCEs and HSCEs so they offer even stronger ties to your curriculum.

See page 41 for a list of upcoming *IMAX* films. That way, you can plan your next field trip around a specific show or combine a show with a Museum/Village visit. ■

## A field trip to The Henry Ford is a license to have fun while you learn.

Immerse your students in authentic American traditions through **one-of-a-kind experiences.**



### rides!

Learn about historic transportation firsthand and see the scenery from the seat of one of the many 19th- and early 20th-century vehicles in *Greenfield Village*. Go for a spin in a **vintage Model T**, the car that put the world on wheels. Or see it all from the seat of a **railcar pulled by a historic steam engine**. Climb aboard the **Herschell-Spillman Carousel**, populated by a fanciful menagerie of ostriches, dogs, swans and, most eye-catching, a giant frog. Who knew history could be so much fun?



**BEST  
value!**

**ALL DAY  
Ride Pass**

For just **\$8 per student**, make your field trip even better with unlimited train, Model T, carousel and other historic rides in *Greenfield Village*.



### hands-on!

Let your students get up close and personal with the car that put the world on wheels. **Students can grab a wrench and help assemble an authentic Model T!** Only in *Henry Ford Museum!*



## NEW! LEARNING SPAS FOR EDUCATORS

**Learn, share, co-design and get energized and rejuvenated to teach!**

Every individual can remember a teacher that who made an unforgettable impact on his or her life. Teachers are passionate, hardworking, positive influences on a child's life. Besides imparting knowledge, they subtly mold who we become. Teachers are learners, too. They strive to explore ways with which they can make learning fun for the students. Teachers are the epitome of perseverance as they creatively address challenges, such as funding cuts, long hours of work and preparation, test mandates and various student learning styles.

At The Henry Ford, we believe teachers are our partners in education, and they need to be empowered in inspiring ways.

Our new Learning Spas are designed to engage, empower, enlighten and re-energize teachers with immersive learning experiences!

### CHANCE TO WIN A SPA GETAWAY!

At each Learning Spa, we'll be giving away one getaway to Crystal Mountain Resort & Spa for further rejuvenation.



### LEARNING SPA BENEFITS:

- ✓ Unique professional development opportunity to delve deep into educational topics with notable scholars, innovators, museum educators, curators and master teachers.
- ✓ Networking and small group working opportunity on lesson plan development around topics.
- ✓ Content-based thematic site visits enhanced with artifactual stories.
- ✓ Online tools and other professional development opportunities.

CEUs offered through Wayne RESA (Fee \$10) pending approval. **Fee: \$80 per person** (includes materials, coffee, lunch and admission to the related site.) **Teachers who attend all spas will receive a content training endorsement certificate from The Henry Ford.**

To register, contact Mary Wyatt at 313.982.6100 ext.2261 or email at [marywy@thehenryford.org](mailto:marywy@thehenryford.org)



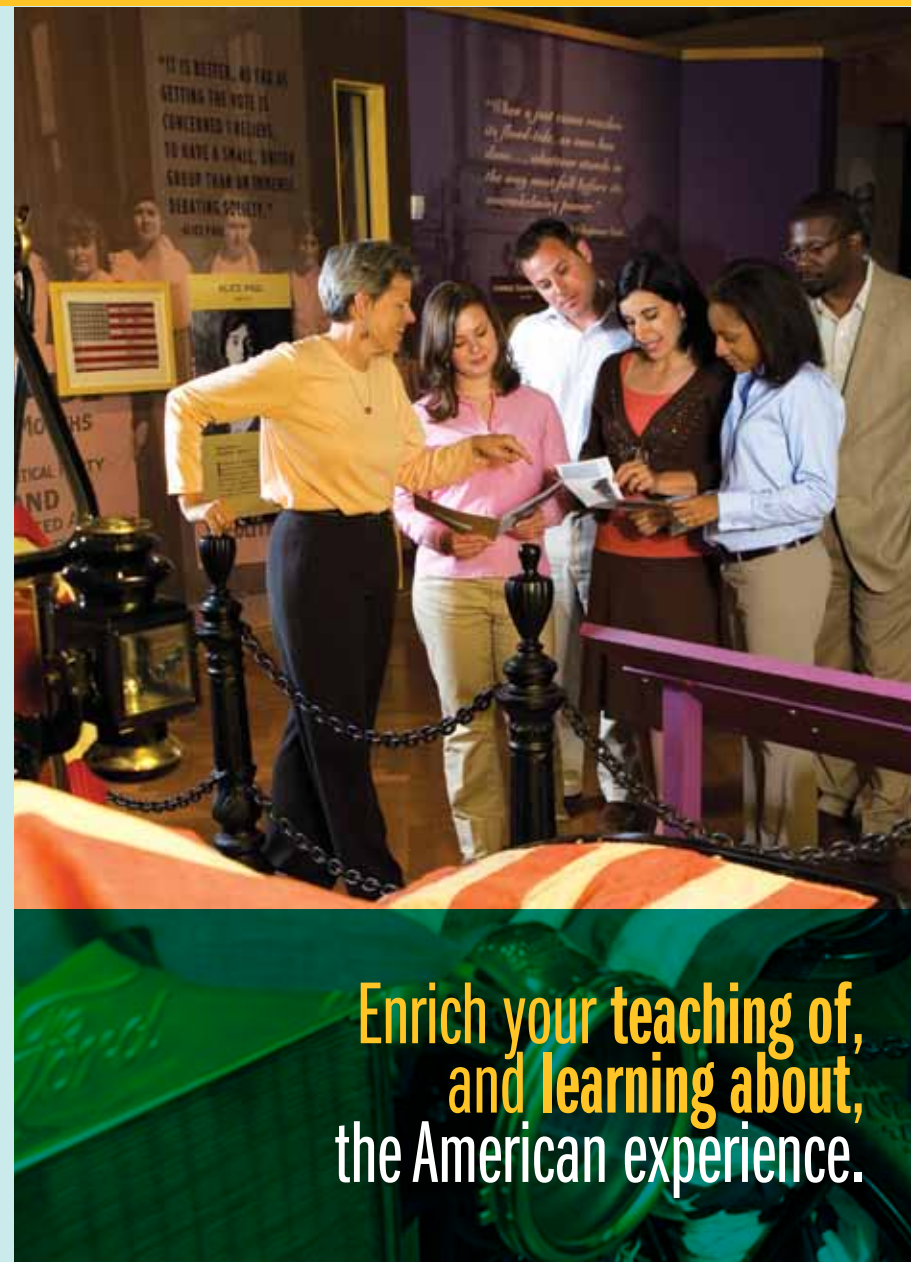
Photo: Rudy Ruzicka

### Mark your calendar!

Choose one or all of our Learning Spas this school year and redefine teaching and learning!

**Saturdays, 8:30am-5pm**

TOPIC	DATE OFFERED
<b>American Innovation</b> (pg.33)	<b>October 23, 2010</b>
<b>America's Industrial Revolution</b> (pg.29)	<b>November 13, 2010</b>
<b>Transportation in America</b> (pg.25)	<b>January 22, 2011</b>
<b>American Democracy &amp; Civil Rights</b> (pg.19)	<b>February 12, 2011</b>
<b>Science &amp; Technology</b> (pg.41)	<b>March 12, 2011</b>
<b>Family &amp; Community Life</b> (pg.37)	<b>April 30, 2011</b>



For every professional who feels the need to stay current of instructional needs and availability, applying for a spot as a Teacher Fellow is crucial. The opportunity to see behind the scenes at The Henry Ford is life-changing.

—Connie Atkisson,  
O.W. Holmes Middle School



## TEACHER FELLOW PROGRAM

**A “by the teachers, for the teachers” program**

Become an active partner in education with The Henry Ford to help inspire and shape the minds of tomorrow's innovators! Teacher Fellows work with our Education Team to create cutting-edge and innovative educational programs that can become national models and aid classroom instruction. The Henry Ford selects 12 to 16 K-12 social studies and science/technology teachers through a competitive application process.

### TEACHER FELLOW BENEFITS:

- ✓ Honorarium
- ✓ One FREE field trip for your class (up to 30 students and 2 group leaders) to one of the following sites: Henry Ford Museum, Greenfield Village or Ford Rouge Factory Tour.
- ✓ Free one-year Family Membership to The Henry Ford.
- ✓ Two complimentary tickets to selected IMAX® film previews.
- ✓ Behind-the-scenes learning experiences with the curators and historians at The Henry Ford.
- ✓ Certificate of appreciation and recognition event at conclusion of service.

Applications will be accepted through March 15, 2011 and the 2011 Teacher Fellows will be selected by April 30, 2011. Sessions will be held May–August, 2011. Required commitment of 90 hours. For more information, visit [thehenryford.org/education/development.aspx](http://thehenryford.org/education/development.aspx)



Teacher Fellows Graduation Class of 2009 with The Henry Ford staff.





## educator previews and more

### TEACHER APPRECIATION DAYS\*

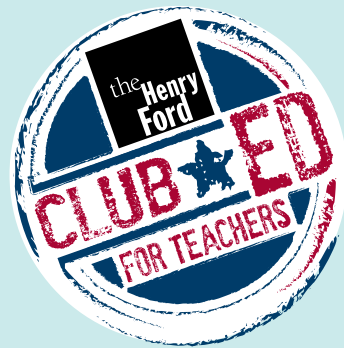
September 25, 2010 and April 16, 2011

**FREE** admission for educators and one guest to Henry Ford Museum and Greenfield Village.

### IMAX FILM PREVIEWS\*

Join us for a changing menu of after-school and Saturday morning events that introduce new *IMAX* films as educational opportunities at The Henry Ford. We provide curriculum connections and educational materials with each show.

For more information, visit [thehenryford.org/education](http://thehenryford.org/education), or contact Geri Bond at 313.982.6048 or [geralynb@thehenryford.org](mailto:geralynb@thehenryford.org). \*ADVANCE REGISTRATION IS REQUIRED.



### FREE to join! Sign up at [thehenryford.org/education](http://thehenryford.org/education)

More than 8,500 educators throughout the United States are helping us inspire others by using the rich and abundant resources of The Henry Ford and expanding their classroom assets.

Join our Club Ed and you'll have access to experts and inside information on everything The Henry Ford has to offer. In addition, you'll receive Club Ed member-only discounts and special preview opportunities to experience our newest exhibits, events and services. We've also started a Club Ed Facebook page where you can get questions answered, share tips and exchange ideas with other educators and experts at The Henry Ford.

### BENSON FORD RESEARCH CENTER

It's the least-known piece of The Henry Ford. But in some ways, the *Benson Ford Research Center* is the centerpiece of everything we do.

This state-of-the-art, 66,000-square-foot facility is where our entire collection of artifacts is catalogued and maintained. Letters, designs, historic garments, blueprints, furniture, illustrations, recordings – this is the organizational hub of our collection.

And, in keeping with Henry Ford's belief that history is a public trust, the center is open to the public. For more information on how you and your students can access this information, go to [TheHenryFord.org/research](http://TheHenryFord.org/research).



A WORLD-CLASS  
RESOURCE FOR  
YOU AND YOUR  
STUDENTS.

# the learning experience

## EDUCATION PROGRAM OVERVIEW

Here at The Henry Ford, we have created a wide array of educational programs to supplement classroom instruction in grades K-12. All are aligned to Michigan GLCEs/HSCes and national standards. For your ease, you can explore the American experience by theme:

- AMERICAN DEMOCRACY & CIVIL RIGHTS • TRANSPORTATION IN AMERICA
- AMERICA'S INDUSTRIAL REVOLUTION • AMERICAN INNOVATION
- FAMILY & COMMUNITY LIFE • SCIENCE & TECHNOLOGY

We offer a wide range of activities and resources in each category. Some activities, such as special dramatic presentations, self-guided itineraries and History Hunter scavenger hunts, take place during your field trips and are included in our admission fees. Through our online lesson and unit plans, and rich pre- and post-visit supplemental materials, we offer you deeper context and learning application tools that can inspire and motivate *your* students.

[find out more](#) >>

**NOTE:** All prices and programs subject to change.



**sit in**  
THE SEAT  
WHERE  
ROSA PARKS  
STARTED A  
MOVEMENT AND  
INSPIRED  
A GENERATION.

# living lessons in citizenship

Grand concepts: democracy in action, social activism.

But to many students, they are elusive notions, viewed as relics of some long-ago era. What could they possibly have to do with an age defined by texting and tweeting and the “Twilight” saga?

Like generations of young people before them, today’s students often think it’s futile to even attempt to influence the world around them. It doesn’t have to be that way. Here at **The Henry Ford**, we can give your students compelling hands-on lessons about the extraordinary power that ordinary people – even young people – have to change the world.

For instance, most students find it unfathomable to think that there was a time when American women

couldn’t vote. After all, these kids have grown up in a world where women are governors and CEOs, where they’re sports stars and Supreme Court justices.

But when they are confronted with the rich storytelling in *Votes for All*, which chronicles our 20th-century suffragist movement, you can feel the disbelief in the room.

Even more enlightening is when they see photos of women who made it all happen. Some of them were barely out of high school, others no older than their mothers. But united by a cause, there they are marching through the streets of Washington, D.C., demanding a right that today’s students take for granted.

cont...



It’s a sobering lesson. And an incredibly memorable one.

The same thing happens when students wander into *Greenfield Village’s* tiny Logan County Courthouse. It’s not an imposing place, rustic by modern standards. But then, when they hear a presenter tell them how a young attorney named Abraham Lincoln began his career in this very building, their astonishment is palpable.

They’ve heard of Abraham Lincoln. The idea that the work he did in this creaking old structure led him to the White House is shocking. And unforgettable.

Suddenly, history is more than a small photo on a page of text, more than an image on a five-dollar bill.

This is the genuine three-dimensional face of history, filled with emotions and sensations – the sorts of things textbooks are hard-pressed to communicate.

One of **The Henry Ford’s** most notable exhibits – and a perennial favorite among student groups – is **With Liberty and**

Justice for All in *Henry Ford Museum*, which features many of the monumental icons of America’s struggle for equal rights: our 1823 copy of the Declaration of Independence, an original copy of “Common Sense”, Thomas Paine’s call to action to American colonists and, one of **The Henry Ford’s** most noted recent artifacts, the Rosa Parks bus.

Your students are no stranger to Mrs. Rosa Parks. They’ve read about her act of civil disobedience, about the Montgomery bus boycott, about the legislation that followed. Those are the essential pieces of her story.

But when they come here, they can actually step into Rosa Parks’ story. They can board the cramped bus and sit in the seat where she and her fellow Montgomery, Alabama, residents altered the course of America’s civil rights history.

“The bus is a touchstone for generations of people who know the story of Rosa Parks from a variety of perspectives,” says Dorothy Ebersole, **The Henry Ford’s** curator of Education. “Regardless of where they’re com-

ing from, whether you’re talking to a Michigan fourth-grader or a lifelong resident of Alabama, everyone brings something to the Rosa Parks bus.”

There are guides, as well, both printed and online, to usher you and your students through the exhibit. Dramatic presentations, too, and History Hunters, where the search for information becomes something of a scavenger hunt. (See page 19 for details.)

“One of the central missions of schools is to educate and help form responsible citizens,” says Ebersole.

And at every turn, **The Henry Ford** is filled with real-life examples of how people just like you and your students have participated in this democracy. About how they have changed it. And how they have improved it. ■

As you will see on the next page, there are dozens of curriculum-aligned opportunities to broaden your students’ perspectives and prepare them for lives as responsible citizens.

FROM LEFT: Lincoln Chair; Declaration of Independence, both part of *Henry Ford Museum’s* **With Liberty and Justice** for All exhibit.



on-site programs

With Liberty and Justice for All EXHIBIT

**FREE with Museum admission**

Our **With Liberty and Justice for All** exhibit focuses on four transformative eras in America’s quest for freedom: the Revolutionary Era, the Antislavery Movement and Civil War Era, the Women’s Suffrage Movement and the modern Civil Rights Movement. *Henry Ford Museum* is unparalleled in artifacts that spur dialogue and debate – everything from the bus where Rosa Parks sparked the nation’s social conscience to a rare 1823 reproduction of the Declaration of Independence.

By coming face-to-face with these primary sources, combined with classroom discussion and project-based learning activities, students can gain new insights into the nation’s core democratic values and the power of civic participation.

Visit our **With Liberty and Justice for All** website at [thehenryford.org/museum/liberty](http://thehenryford.org/museum/liberty) to learn more about the exhibit and to explore related artifacts, a timeline and curriculum-aligned classroom and Museum resources.

NEW! Discovering the Civil War EXHIBIT

**FREE with Museum admission**

Celebrate the sesquicentennial of the American Civil War with your students by visiting our limited engagement exhibit “**Discovering the Civil War**.” This exhibition presents the most extensive display ever assembled from the incomparable Civil War holdings of the National Archives and takes a fresh look at the Civil War through little-known stories, seldom-seen documents and unusual perspectives.

The exhibition was created by The National Archives in partnership with the Foundation for the National Archives.

**Location:** Henry Ford Museum Gallery  
**Offered:** May 21–September 5, 2011

Celebrate Black History! Minds on Freedom

**DRAMATIC PRESENTATION**

**FREE with Museum admission**

“**Minds on Freedom**” is an interactive musical and dramatic program. America’s civil rights movement of the 1950s and 1960s is recounted in a rich tapestry of spoken word, images and music that celebrates the groups and individuals who had the courage to ask for more from their nation.

**Location:** Henry Ford Museum  
**Offered:** February 2011  
**Program Length:** 30 minutes

**National Curriculum Standards for Social Studies Strands**  
II, V, VI, X

**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H1.0.6 **2** - H2.0.3, H2.0.5 **6** - H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG 8.3.1 **9-12** - Civics 1.1.1, 6.2.3, 6.2.5, 6.2.8

**Votes for All**

**DRAMATIC PRESENTATION**

**FREE with Village admission**

Meet inspirational suffragists and experience the decades of struggles they encountered to earn the right to vote in this interactive presentation.

**Location:** Greenfield Village  
**Offered:** May 2–June 10, 2011  
**Program Length:** 20 minutes

**National Curriculum Standards for Social Studies Strands**  
II, V, VI, X

**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3, H2.0.5 **3** - C5.0.1 **4** - C5.0.4 **6** - H1.2.5, H1.4.1 **7** - H1.2.6, H1.4.1 **8** - U4.3.3 **9-12** - USHG 6.3.3 **9-12** - Civics 1.1.1, 6.2.3, 6.2.5

**“C” is for Citizenship**

**DRAMATIC PRESENTATION**

**FREE with Village admission**

Brush up on your 19th-century civics lessons in a one-room schoolhouse in this fun interactive program.

**Location:** Greenfield Village  
**Offered:** May 2–June 10, 2011  
**Program Length:** 20 minutes

**National Curriculum Standards for Social Studies Strands**  
II, V, VI, X

**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H2.0.4, H2.0.5, H2.0.6 **2** - H2.0.3, H2.0.4 **3** - C5.0.1 **4** - C5.0.1, C5.0.4 **6** - H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.6, H1.4.1, H1.4.2 **8** - U4.3.3 **9-12** - Civics 1.1.1, 6.2.2, 6.2.3, 6.2.5, 6.2.8

field trip enhancements

With Liberty and Justice for All ONLINE RESOURCE

Instructional Unit/Lesson Plans, Self-guided Exhibit Exploration Guide, *Discovering Democracy in Action: Looking for Evidence and Taking a Stand, Grades 4-5*; *Discovering Democracy in Action: Looking for Evidence and Taking Sides, Grades 6-8*; *Discovering Democracy in Action: Looking for Evidence and Taking Action, Grades 9-12*

**National Curriculum Standards for Social Studies Strands**  
I, II, V, VI, X

**National Standards for English Language Arts**  
1, 4, 7

**Michigan Social Studies Grade Level and High School Content Expectations**  
**4** - C5.0.4 **5** - U3.1.5, U3.1.6, U3.1.8 **6** - H1.2.1, H1.2.2, H1.2.5, H1.4.1, H1.4.2, H1.4.3 **7** - H1.2.1, H1.2.2, H1.2.6, H1.4.1, H1.4.2, H1.4.3 **8** - F1.1, F1.2, U4.3.2, U4.3.3, U5.1.1, U5.1.5, U5.1.6, U5.2.3, U5.2.4, U5.3.3, P3.1.1 **9-12** - USHG 6.3.3, 8.3.1, 8.3.2 **9-12** - Civics 1.1.1, 1.1.4, 2.1.4, 2.2.2, 2.2.3, 2.2.4, 3.5.8, 6.1.1, 6.1.2, 6.1.4, 6.1.5, 6.2.3, 6.2.5, 6.2.8

**Michigan English Language Arts Grade Level and High School Content Expectations**  
**4** - R.CM.04.04, S.CN.04.03, L.CN.04.02 **5** - R.CM.05.04, S.CN.05.02, S.CN.05.03, S.DS.05.04, L.CN.05.02 **6** - R.CM.06.04, L.RP06.01, L.RP06.05, W.GR.06.01, W.SP06.01 **7** - R.CM.07.04, W.GR.07.01, L.RP07.05 **8** - R.CM.08.04, W.GR.08.01, W.SP08.01, L.RP08.05 **9-12** - CE 1.3.7, CE 1.4.4, CE 3.1.5, CE 3.1.10



History Hunters: Citizenship SCAVENGER HUNT

**Henry Ford Museum**

■ Investigating Taking a Stand in **With Liberty and Justice for All**

**National Curriculum Standards for Social Studies Strands**  
II, V, VI, X

**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3 **4** - C5.0.4 **5** - U3.1.5, U3.1.6, U3.1.8 **6** - H1.2.2, H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.2, H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG F1.1, F1.2, 6.3.3, 8.3.1, 8.3.2

classroom resources

Lincoln’s Legacy: Race, Freedom and Equality of Opportunity VIDEO

Explore what progress has been made on the unfinished work of equality and opportunity that Abraham Lincoln cited in his Gettysburg Address with scholars and leaders, Professor Adam Green, Professor Douglas Brinkley, Professor Darlene Clark Hine, Professor John Stauffer and Ambassador Andrew Young. Visit [thehenryford.org/education](http://thehenryford.org/education) to view and share the video.

Produced in collaboration with Detroit Public Television

professional development

With Liberty and Justice for All Symposium

**FREE with Museum admission!**  
**Great for teachers!**

This annual symposium in 2011 features keynote speaker Martha S. Jones, professor of history at the University of Michigan, and student panelists addressing the themes, ideas, individuals and groups associated with America’s freedom movements.

**Location:** Henry Ford Museum  
**Offered:** Martin Luther King Jr. Day – January 17, 2011  
**Program Length:** Half-day

NEW! Learning Spa

**Topic:** American Democracy and Civil Rights  
**Date:** February 12, 2011  
**Time:** 8:30am–5pm  
**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)  
**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).

**Contact Mary Wyatt at [marywy@thehenryford.org](mailto:marywy@thehenryford.org) to register for the Learning Spa. SPACE IS LIMITED.**

For more information on our Learning Spas, see page 12.



# WHY THE HISTORY OF TRANSPORTATION MATTERS TODAY

A world without cars or planes or trucks? Unthinkable. Or at least it must seem that way to your students. It's not an unreasonable reaction. They've never known a day without interstate highways or transoceanic flights or road trips.

So consider how difficult it must be for them to grasp the significance of the Model T. Or of the spindly little plane that the Wright brothers flew on the beach in North Carolina.

"It really is a difficult concept," says Bob Casey, The Henry Ford's curator of Transportation and a noted authority on the Model T Ford. "If you're 10 years old, this world – the world of cars and jets and readily available transportation – has been around your whole life. It's like air – you just assume it's there. You never think of how it got that way.

cont...

look  
inside

THE BAGLEY  
AVENUE  
WORKSHOP  
WHERE  
HENRY FORD  
DESIGNED  
AND BUILT THE  
QUADRICYCLE.

BELOW: Henry Ford stands with the Quadricycle outside the Bagley Avenue Workshop 1933. ID# THF22231. From the collections of The Henry Ford.





TRANSPORTATION IN AMERICA

Here at The Henry Ford, your students can see that remarkable evolution firsthand, as rustic carriages gave way to more ornate and complex ones and finally grew into stage coaches, Conestoga wagons and the horse-drawn omnibus. (In *Greenfield Village* you can even ride in an authentic omnibus.)

With the advent of the Industrial Revolution, that evolution abruptly changed gears. The horse was eclipsed by steam-powered locomotives and, 100 years later, by diesel power. That's all here, too, from the Stephenson's Rocket, built in 1829 for the Liverpool and Manchester Railway to the steam locomotives pulling passenger cars in *Greenfield Village* to the Allegheny locomotive.

"Each change in transportation changed the country in its own way," says Casey. "But ultimately, transportation is freedom. The more sophisticated and individual transportation got, the greater our freedom was. The story of transportation really is the story of America."

But how do you present all of that in a way that makes it relevant to a young person living today? Henry Ford's Quadricycle is wonderfully quaint, but what connection can it possibly have to life in the 21st century?

Catherine Tucek, The Henry Ford's curator of Education K-12, says there are many ways to initiate a conversation that resonates with young people. "At the beginning of the 1900s, there were automakers building electric cars," says Tucek, who spent several years teaching 9th and 10th graders. "There were steam cars, too, and hybrids that combined electric and gasoline power.

"All those possibilities – things we are still talking about today – existed more than 100 years ago," says Tucek. "When

When kids look at the past, they begin to understand that where we are now was not necessarily predictable 100 years ago.

the students understand that, they start asking why we decided on the internal combustion engine."

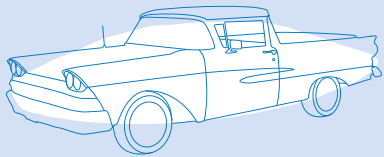
And that, of course, is the beginning of new discussions. And more stories. And more exploration.

"Of course, this process that we're talking about – this process of learning – has to begin before the students arrive," says Tucek. "And it has to continue after they leave."

To facilitate all of that, The Henry Ford has developed a collection of digital guides we call DigiKits. "I know that every time I went on a field trip, I wished that I had done more to prepare," says Tucek. "I wish I'd had these DigiKits when I was teaching. There's a teacher guide and a unit plan and page after page of supplemental resources. And since they are all based on Michigan and na-

tional standards, they help with everything from state testing to justifying the field trip to school administrators or the PTA."

And educationally? Do they really help young people understand the relationships between the past, the present and the future? "When you manage to put history into that sort of context, when you organize it so that it's easier to understand, it's a very short jump from the Model T to discussing the oil spill in the Gulf of Mexico," says Casey. "Or the possible benefits of solar power. Or of mass transportation. Or the cutting edge research that is being done throughout the transportation industry. Before long, students forget that history is supposed to be boring. Before long, it's the most fascinating thing they ever imagined." ■



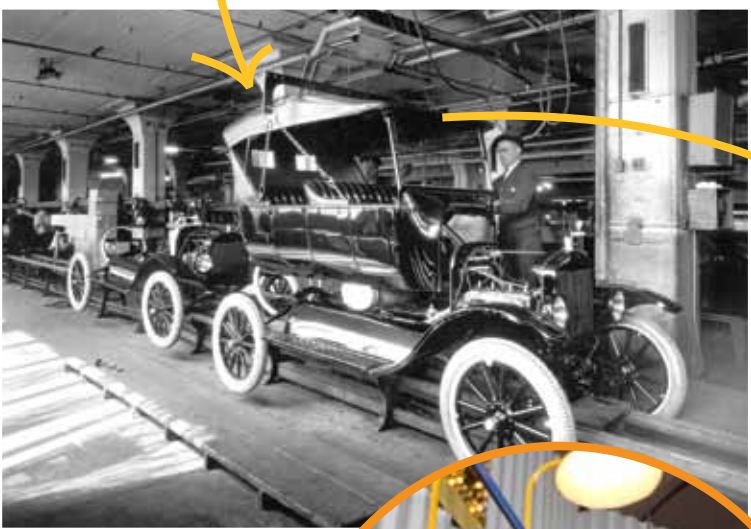
Enhancing The Experience

For more than 80 years, The Henry Ford has been a major field trip destination, giving students a one-of-a-kind opportunity to explore the richness of American life past, present and future.

So that students and other visitors can engage with compelling stories of innovation and interact in meaningful ways with our distinctive offerings, The Henry Ford provides new experiences each time you visit our five attractions.

Over the next year, we will be updating our signature exhibition, The Automobile in American Life in Henry Ford Museum. You will notice changes and parts of the exhibition space under construction through late 2011.

That's how history is. One story connects to another to another. And eventually it brings us to where we are today.



TOP: Horse-drawn carriage in *Greenfield Village*. LEFT: 1924 Ford Model T cars on Assembly Line at Highland Park Plant, October, 1923 ID# THF23577 From the collections of The Henry Ford. ABOVE: F-150 trucks on the assembly line at Ford Rouge Factory Tour.

hands-on fun  
FOR YOUR STUDENTS IN HENRY'S  
ASSEMBLY LINE GUIDED ACTIVITY.





## DOWNLOADABLE DIGIKITS

A complete array of supplemental online materials for each of the units includes Michigan GLCE and HSCE, national standards, digital gallery with more than 160 images, selected videos and audio clips, history timelines, field trip reinforcing ideas, bibliographies, reports written by The Henry Ford curators with in-depth information on the topics and more! **Download @ [thehenryford.org/education](http://thehenryford.org/education).**

Thanks to generous funding provided, in part, by the Ford Foundation, the online educational resources related to Transportation in America now will be available for teaching and learning to schools across the nation and throughout the world.

### on-site programs

#### Henry's Assembly Line

GUIDED ACTIVITY

**FREE** with Museum admission

Learn about the assembly line by working on one! In this hands-on program, your students assemble miniature wooden Model Ts using the station and moving assembly line methods.

**Location:** Henry Ford Museum  
**Offered:** Daily year-round  
**Program Length:** 20 minutes

**National Curriculum Standards for Social Studies Strands II, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations**

**1** - H2.0.6 **2** - H2.0.3, H2.0.4 **4** - H3.0.1, H3.0.5, H3.0.6, E1.05 **9-12** - USHG 6.1.1, 6.1.5  
**9-12** - Economics 1.2.2

#### Build A Model T

GUIDED ACTIVITY

**FREE** with Museum admission

Lend a hand in our daily build of a 1917 Model T. No experience required!

**Location:** Henry Ford Museum  
**Offered:** Daily year-round  
**Program Length:** Flexible

**National Curriculum Standards for Social Studies Strands II, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations** **1** - H2.0.6 **2** - H2.0.3, H2.0.4 **4** - H3.0.1, H3.0.5, H3.0.6 **9-12** - USHG 6.1.5

### Historic Rides in Greenfield Village

Take your students on a ride to explore historic modes of transportation, including the Weiser Railroad, horsedrawn omnibus, Model T and the carousel. Additional fee required, see page 11 for more information.

## HENRY FORD AND INNOVATION

### classroom resources

#### NEW! You Can Be an Innovator... Like Henry Ford!

EDUCATOR DIGIKIT

**Grades 3-5**

Explore Henry Ford's world-changing innovation, the Model T, and its enduring influence. Inspire students to imagine, take risks and persevere as Henry Ford did.

**National History Standards** Topic 1, 2, 4  
**Michigan Social Studies Grade Level Content Expectations** **3** - H3.0.2, H3.0.8, E1.0.4 **4** - H3.0.1, H3.0.6, E1.0.5, E3.0.1

**Michigan English Language Arts Grade Level Content Expectations:** **3** - R.CM.03.01, R.CM.03.02, R.CM.03.034 - R.CM.04.01, R.CM.04.02, R.CM.04.035 - R.CM.05.01, R.CM.05.02, R.CM.05.03

**Michigan Career and Employability Skills** 4.1, 4.2



## exhibitbuilder

Use this new authentic assessment tool to inspire student learning and build critical thinking and problem-solving skills. Students can access our easy-to-use digitized artifact galleries, conduct research, then create and post their own online exhibitions to share with others.

**Get started at [thehenryford.org/education/transportationinamerica.aspx](http://thehenryford.org/education/transportationinamerica.aspx)**

### classroom resources

#### Impact of the Model T — Then and Now

EDUCATOR DIGIKIT

**Grades 9-12**

How do people create society-changing innovations? What are the causes and consequences of those innovations? Examine these important questions through a case study of Henry Ford, his Model T and the past, present and future of the automobile industry.

**National History Standards** Era 6, 7  
**National Standards for Business Education** Career Development, Entrepreneurship, Marketing

**Michigan Social Studies High School Content Expectations** **9-12** - USHG 6.1.5, 7.1.1, 9.1.1; E 1.1.2, 3.2.5; WHG 6.2.3

**Michigan English Language Arts High School Content Expectations** **9-12** - CE 2.1.3, 2.2.3, 2.3.4

#### Model T Road Trip

INTERACTIVE MODULE

Students follow a fictional family's adventures as they shop for, buy, drive and plan a vacation in a brand-new Model T in this online interactive module. Includes online lesson plans with selected primary sources.

### field trip enhancements

#### NEW! Moving On, Settling In

SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE

**Grades 3-5**

Designed to help students and think more critically about migration patterns from South to North and rural to urban, and the associated pushes and pulls.

#### Explore the Model T in Henry Ford Museum and Greenfield Village

SELF-GUIDED ITINERARY

Discover the artifacts, exhibits and sites associated with the development of the Model T.

**Location:** Henry Ford Museum and Greenfield Village

**National Curriculum Standards for Social Studies Strands I, II, IV, VII, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations**

**2** - H2.0.3, H2.0.4 3 - H3.0.8 **4** - H3.0.5, H3.0.6, E1.0.5 **6** - H1.2.2, H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.2, H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG 6.1.1, 6.1.5

#### History Hunters: Investigating the Model T

SCAVENGER HUNT

**Location:** Henry Ford Museum and Greenfield Village

**National Curriculum Standards for Social Studies Strands II, VII, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations** **1** - H2.0.6 **2** - H2.0.3, H2.0.4, E1.0.3 **3** - H3.0.1, H3.0.8 **4** - H3.0.1, H3.0.5, H3.0.6, E1.0.5 **6** - H2.5, H1.4.1, H1.4.2 **7** - H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG 6.1.1, 6.1.5

## TRANSPORTATION: PAST, PRESENT AND FUTURE

### classroom resources

#### Transportation Systems

EDUCATOR DIGIKIT

**Grades 8-12**

Our American transportation systems demonstrate how our cultural attitudes affect everyday life. Students explore a variety of topics including the movement of goods and people, the consumption of goods, the financing of public goods and services, as well as the imagining of transportation systems of the future.

**National History Standards:** Era 4, 5, 6, 7, 9, 10  
**Michigan Social Studies Grade Level and High School Content Expectations** **8** - U4.2.1, U5.2.2, U6.1.1, P3.1.1, P4.2.2, P4.2.3 **9-12** - WHG 6.1.3, 7.1.1, 7.1.4; USHG F2.1, 6.1.3, 6.1.5, 8.2.2, 9.3.1; C 2.2.3, 2.2.5, 6.1.1, 6.1.2, 6.1.4, 6.1.5; E 1.4.3, 1.4.4

**Michigan English Language Arts Grade Level & High School Content Expectations:** **8** - W.GN.08.03, S.DS.08.04 **9-12** - CE 1.3.1, 1.3.7, 1.4.1, 1.4.2, 1.4.3, 1.4.5, 1.4.6, 1.4.7, 1.5.1, 1.5.4

#### Early 20th-Century Migration

EDUCATOR DIGIKIT

**Grades 3-5**

Students discover and discuss why people were pulled from Europe and the American South by the promise of jobs to work in factories in the Northern U.S. — especially Michigan's automobile factories — and what their new lives were like. Students also will explore the connections between 20th-century migration and their lives today.

**National History Standards:** Topic 1, 2, 3  
**Michigan Social Studies Grade Level Content Expectations** **3** - H3.0.8, G4.0.2, G4.0.3 **4** - H3.0.1, H3.0.2, H3.0.6, G4.0.1, G4.0.2, E1.0.5, E3.0.1

**Michigan English Language Arts Grade Level Content Expectations:** **3** - R.CM.03.01, R.CM.03.02, R.CM.03.03 **4** - R.CM.04.01, R.CM.04.02, R.CM.04.03 **5** - R.CM.05.01, R.CM.05.02, R.CM.05.03

#### Podcasts

Have your students listen to Henry Ford Academy student-developed podcasts that examine compelling transportation issues such as alternative fuels, transportation networks and more through rap, talk shows and other fun formats.


## Moving to Michigan: Immigration, Migration and Transportation

EDUCATOR DIGIKIT

**Grades 9-12**

The growth of industry in the Northern U.S. resulted in an unprecedented cultural mosaic, especially in the Detroit area. Learn about the pulls and promises of life as an autoworker and evaluate the continuing impact on workers' lives in today's manufacturing and economic climate.

**National History Standards:** ERA 6  
**Michigan Social Studies High School Content Expectations** **9-12** - USHG 6.1.3, 6.1.4, 6.1.5, 9.1.1; WHG 6.1.2; E 2.1.9  
**Michigan English Language Arts High School Content Expectations** **9-12** - CE 2.1.3, 2.2.3, 2.3.4



**LEWIS & CLARK**  
**GREAT JOURNEY WEST**

Follow in the footsteps of Meriwether Lewis and William Clark on their historic 1804-1806 exploration of America. The film follows their grueling 8,000-mile expedition to their ultimate destination — the Pacific Ocean.

FOR INFORMATION AND SHOWTIMES VISIT [THEHENRYFORD.ORG/IMAX](http://THEHENRYFORD.ORG/IMAX)

## AUTO RACING IN AMERICA

### classroom resources

#### Science, Life Skills and Innovation in American Auto Racing

EDUCATOR DIGIKIT

**Grades 3-8**

Explore how American auto racing uses scientific concepts such as force, change in motion, speed and energy to make technological improvements. Learn about scientific innovations, teamwork and even the risks of racing through oral histories from race-car drivers, engineers, mechanics and owners.

**National Standards for Science Education:** *Science as Inquiry, Physical Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science*  
**Michigan Science Grade Level Content Expectations** **3** - S.RS.03.11, S.RS.03.17, PFM.3.36 **4** - S.RS.04.11 **5** - S.RS.05.15, S.RS.05.16, PFM.05.34, PFM.05.42 **6** - S.RS.06.19 **7** - S.RS.07.16, S.RS.07.19

## Physics, Technology and Engineering in Auto Racing

EDUCATOR DIGIKIT

**Grades 9-12**

Explore how the principles of physics — net force, acceleration, momentum — are an integral part of American auto racing. Examine how racing innovators achieve major technological advancements and learn about scientific innovations, teamwork and even the risks of racing through oral histories from race-car drivers, engineers, mechanics and owners.

**National Standards for Science Education:** *Science as Inquiry, Physical Science, Science and Technology, History and Nature of Science*

**Michigan Science Grade Level Content Expectations** **9-12** - P2.1, P2.2, P3.1, P3.2, P3.3, P3.4, P3.5x, P3.8x, P4.1, P4.1x, P4.3, P4  
**Michigan Physics High School Content Expectations:** **9-12** - P2.1A, P2.2A, P2.2D, P2.3a, P3.1A, P3.2C, P3.3b, P3.4A, P3.4B, P3.4C, P3.4D, P3.4g, P3.5a, P4.1d, P4.2A, P4.2B, P4.3C

### field trip enhancements

#### NEW! Evolution and Innovation in Personal Transportation

SELF-GUIDED ITINERARY

**Grades 9-12**

This exploration tool will help students look more closely and think more critically about the consequences of our personal transportation choices.

### professional development

#### NEW! Learning Spa

**Topic:** Transportation in America

**Date:** January 22, 2011

**Time:** 8:30am - 5pm

**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)

**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).

**Contact Mary Wyatt at [marywy@thehenryford.org](mailto:marywy@thehenryford.org) to register for the Learning Spa. SPACE IS LIMITED.**

For more information on our Learning Spas, see page 12.

### pilot programs

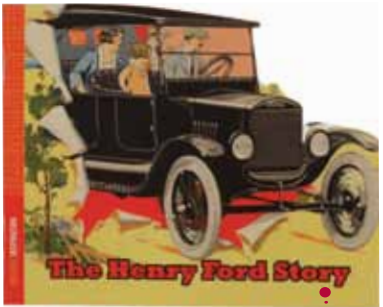
#### Henry's Alphabet Cars

LITERACY ENHANCEMENT PROGRAM

**Grades K-1**

Learn about Henry Ford's "alphabet cars" that led to his great innovation, the Model T. Employing immersive vocabulary recognition activities through storytime and hands-on activities, children will enhance their literacy skills and make relevant connections between the past and present.

**Location:** Henry Ford Museum



### Reading Inspiration

LITERACY ENHANCEMENT PROGRAM

**Grades 2-3 and 4-5**

Reading Inspiration brings the story of Henry Ford's quest to build a car for the masses to life using fiction, nonfiction, digital images and engaging hands-on activities. The program reinforces grade-specific vocabulary, spelling, reading and comprehension, writing and design thinking skills.

The Henry Ford's staff will travel to your site\* to bring engaging components of this unique learning experience to YOU! Ideal for developing and struggling readers.

\*Distance restrictions and travel fee apply in addition to participation fee.

**For more information on Pilot Programs, contact [paulag@thehenryford.org](mailto:paulag@thehenryford.org).**





# a living case study of American industrialization

We're all familiar with the story of America's Industrial Revolution.

Almost overnight, the country morphed from a fledgling nation built around agriculture to one that was defined by its cities, its machines and its manufacturing. "But that's not really a complete picture," says Marc Greuther, **The Henry Ford's** curator of Industrial Collections. "We call it a revolution. But for those living in the midst of that time of remarkable change, it was more of an evolution – it didn't just change all of a sudden."

Greuther isn't being nitpicky about words. The distinction, he says, is an important, if subtle, one. And it's one that students who participate in field trips at **The Henry Ford** are sure to grasp. "In many ways, the concept should be completely recognizable to today's young people," says Greuther. "That's because the rapidly changing technological climate that we're living in is very similar to what it must have felt like to people living through what we insist on calling the 'Industrial Revolution'."

Then, as now, the changes that were taking root were created using traditional materials and traditional skills.

cont...

**experience**  
THE MARVEL  
OF MODERN  
MANUFACTURING...  
THE FORD ROUGE  
FACTORY TOUR.







witness  
HOW AMERICA  
CHANGED  
DURING  
THIS PERIOD  
OF RAPID  
INDUSTRIAL  
GROWTH.

Greuther points to the Newcomen steam engine, sitting in the far reaches of *Henry Ford Museum's* massive main floor. Dark and forbidding, the engine was inefficient and used copious amounts of fuel. But it achieved something no machine had ever done when it was built in the mid-1700s – it harnessed the power of steam.

“It almost singlehandedly changed the rules of manufacturing,” says Greuther. “But step back from its historical significance for a moment and look at the materials and the craftsmanship that went into making it. There’s stonemasonry, carpentry, blacksmithing, casting. Its abilities were completely new. But elements of this machine would have been recognizable to craftspeople from centuries prior.”

A modern-day version of the same concept is vividly demonstrated at the *Ford Rouge Factory Tour*. The Rouge is filled with elements that assembly line workers from Henry Ford’s 1913

Highland Park, Michigan, factory would recognize immediately: the assembly line, the massive overhead windows, the teamwork necessary to build a vehicle in a short span of time.

But a century’s worth of technology has presented us with a completely changed assembly line. Today’s Rouge is a complex web of robots, lifts, conveyors, hydraulics, chutes and cranes combined with energy-efficient support systems that created a facility that those earlier generations would have found unimaginable.

Today’s line is faster, more flexible and – for the people who work there – a far less grueling experience than their predecessors experienced in the early 20th century. “The changes are truly radical,” says Greuther, “but because there are so many changes taking place and because they are happening at such a rapid pace, we don’t notice how much they are altering our lives. Think back 75 years. We had ovens and telephones and washing machines back then.



ABOVE: Newcomen engine in *Henry Ford Museum's* Made In America exhibit; Assembly line at *Ford Rouge Factory Tour*. OPPOSITE: Daggett Farm in *Greenfield Village*.

And while their modern counterparts all do the same basic tasks, they have grown so much more sophisticated ... well, that’s why we call it a revolution.”

The **Henry Ford** has been recognized and endorsed nationally as one of the top learning institutes on the American Industrial Revolution and has offered professional development to more than 400 teachers from across the nation. ■

In the customized field trips on the next page, you'll find dozens of opportunities for students to chronicle the changes made possible by our Industrial Revolution and the way it has radically altered life in the United States.

AMERICA'S INDUSTRIAL REVOLUTION PROGRAMS

on-site programs

Test Drive Smart Tools

SELF-GUIDED ACTIVITY

FREE with Ford Rouge Factory Tour admission

Handle a “smart tool” that workers use on the factory floor and simulate steering wheel installation on a Ford F-150 pickup. Discover the connections between advanced tooling (process), skilled workers (people) and the end quality of the vehicle (product).

**Location:** Ford Rouge Factory Tour

**Offered:** Daily

**Program Length:** Variable, self-directed

**National Science Education Standards**

*Science as Inquiry, Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History and Nature of Science*

**National Curriculum Standards for Social Studies Strands** VII, VIII

**Michigan Science Grade Level and High School Content Expectations**

**K-7** - S.I.P.E.1, P.F.M.E.3

**9-12** - Physics - P.3.1, P.3.1x, P.4.1, P.4.1x, P.4.3

**Michigan Social Studies Grade Level and High School Content Expectations**

**1** - H2.0.6 **2** - H2.0.4 **3** - G4.0.1

**4** - H3.0.1, H3.0.5, E1.0.5 **9-12** - USHG 9.1.1

**9-12** - Economics 1.1.1, 1.2.3

Flexing for the Future

SELF-GUIDED ACTIVITY

FREE with Ford Rouge Factory Tour admission

During this hands-on activity, students work together to discover the flexibility of the modern moving assembly line.

**Location:** Ford Rouge Factory Tour

**Offered:** Daily

**Program Length:** 10 minutes

**National Curriculum Standards for Social Studies Standards** VII, VIII

**Michigan Social Studies Grade Level and High School Content Expectations**

**1** - H2.0.6 **2** - H2.0.3, H2.0.4 **4** - H3.0.1,

H3.0.5, H3.0.6, E1.0.5 **9-12** - USHG 6.1.1, 6.1.5,

9.1.1 **9-12** - Economics 1.1.1, 1.2.3

field trip enhancements

Your students will consider the past, present and future as they reflect on the social implications, environmental consequences and economic impact of industrialization while using these themed itineraries at our sites.

An online unit plan on the Industrial Revolution will be available soon!

Industrial Revolution: Impact of Technology and Innovations

SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE AND HENRY FORD MUSEUM

In this combo field trip, we offer your students a new lens for examining the impact of the industrial era. See the world’s oldest surviving steam engine, the shop where the Wright brothers built the world’s first airplane, the lab where Thomas Edison created the first practical incandescent light bulb, and even help build a real Model T!

**Location:** Greenfield Village, Henry Ford Museum

**Offered:** Fall and spring (October 1-30; Fridays in November 2010; April 15-June 11, 2011)

**Program Length:** 2 ½ hrs minimum

**Fees:** FREE with admission. Contact the Call Center for discounted combo site pricing.

**National Curriculum Standards for Social Studies Strands:** I, II, IV, VII, VIII

**Michigan Social Studies Grade Level and High School Content Level Expectations:**

**1** - H2.0.6 **2** - H2.0.3, H2.0.4, E1.0.3 **3** - H3.0.1,

H3.0.8 **4** - H3.0.1, H3.0.2 H3.0.5, H3.0.6, G5.0.1

E1.0.5 **6** - H1.2.5, H1.4.1, H1.4.2, H1.4.3, G5.1.1,

G5.1.2 **7** - H1.2.6, H1.4.1, H1.4.2, H1.4.3, G2.2.2

G5.1.1, G5.1.2 **8** - U6.1.1 **9-12** - USHG F2.1,

6.1.1, 6.1.2, 6.1.3, 6.1.5; WHG 6.1.3, 6.1.4, 6.2.3

**Michigan Science Grade Level and High School Content Level Expectations:**

**2** - E.FE.02.21 **3** - S.RS.03.17, S.RS.03.18,

S.RS.03.19, E.ES.03.43, E.ES.03.52, E.ES.03.42,

E.ES.03.51 **4** - S.RS.04.18, S.RS.04.19,

PPM.04.53, LEC.04.21 **5** - U2 S.RS.05.17,

S.RS.05.19 **6** - S.RS.06.17, S.RS.06.19,

LEC.06.41 **7** - S.RS.07.17, S.RS.07.19,

E.ES.07.41, E.ES.07.42, E.ES.07.81 **9-12** - Biology

B1.2k, B3.1A, B3.4C, B3.5e **9-12** - Earth Science

E1.2k, E2.1B, E2.1C, E2.4B

Industrial Revolution: Past, Present and Future

SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE AND FORD ROUGE FACTORY TOUR

In this combo field trip, your students will experience the full transition from the small farms and shops of the 18th and 19th centuries to the large industrial complexes of today. Discover how today’s Rouge is trying to reverse some of the harmful effects of industrialization using green design principles.

**Location:** Greenfield Village, Ford Rouge Factory Tour

**Offered:** Fall and spring

(October 1-30; Fridays in November 2010; April 15-June 11, 2011)

**Program Length:** 3 ½ hrs minimum (including travel time to the Rouge complex)

**Fees:** FREE with admission. Contact the Call Center for discounted combo site pricing.

**National Curriculum Standards for Social Studies Strands:** I, II, IV, VII, VIII

**National Science Education Strands:** *Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History & Nature of Science*

**Michigan Social Studies Grade Level and High School Content Level Expectations:**

**1** - H2.0.6 **2** - H2.0.3, H2.0.4, E1.0.3 **3** - H3.0.1,

H3.0.8 **4** - H3.0.1, H3.0.2 H3.0.5, H3.0.6, G5.0.1

E1.0.5 **6** - H1.2.5, H1.4.1, H1.4.2, H1.4.3, G5.1.1,

G5.1.2 **7** - H1.2.6, H1.4.1, H1.4.2, H1.4.3, G2.2.2

G5.1.1, G5.1.2 **8** - U6.1.1 **9-12** - USHG F2.1,

6.1.1, 6.1.2, 6.1.3, 6.1.5; WHG 6.1.3, 6.1.4, 6.2.3

**Michigan Science Grade Level and High School Content Level Expectations:**

**2** - E.FE.02.21 **3** - S.RS.03.17, S.RS.03.18,

S.RS.03.19, E.ES.03.43, E.ES.03.52, E.ES.03.42,

E.ES.03.51 **4** - S.RS.04.18, S.RS.04.19,

PPM.04.53, LEC.04.21 **5** - U2 S.RS.05.17,

S.RS.05.19 **6** - S.RS.06.17, S.RS.06.19,

LEC.06.41 **7** - S.RS.07.17, S.RS.07.19,

E.ES.07.41, E.ES.07.42, E.ES.07.81 **9-12** - Biology

B1.2k, B3.1A, B3.4C, B3.5e **9-12** - Earth Science

E1.2k, E2.1B, E2.1C, E2.4B

The Ford Rouge Complex: A Case Study in Industrialization

CURRICULUM CONNECTOR

This curriculum-aligned tool for teachers to use during and after their visit introduces students to the natural, human and capital resources needed for manufacturing, the changing face of industrialization and entrepreneurs in southeastern Michigan.

**National Curriculum Standards for Social Studies Strands** II, III, VII

**Michigan Social Studies Grade Level and High School Content Expectations**

**2** - E1.0.2, E1.0.4 **3** - G4.0.1, E1.0.4 **4** - H3.0.1,

H3.0.5, E1.0.5 **6-7** - H1.4.1 **9-12** - USHG 6.1.5

NEW! The Industrial Revolution in the Women's Sphere

SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE

Grades 9-12

This self-guided exploration tool is designed to help students discover the the impact of technological change on women in the 20th century.

professional development

National Endowment for the Humanities Landmarks of American History Workshop  
*America's Industrial Revolution*

As a six-time recipient of National Endowment for the Humanities (NEH) grants and one of the only sites in the Midwest to offer the Landmarks in American History workshops, The Henry Ford will offer teacher workshops on America’s Industrial Revolution. Join teachers from all over the country to experience 150 years of technology evolution in a week. Explore new themes and historic sites each day; interact with scholars, museum curators, public historians, dramatic presenters and master teachers; and experience 150 years of technology evolution in a week. Participants have declared our workshops “outstanding,” “inspiring” and “the best professional development experience that I have had in 16 years of teaching.”

**Date:** July 17-22; August 7-12, 2011



NEW! Learning Spa

**Topic:** America's Industrial Revolution

**Date:** November 13, 2010

**Time:** 8:30am-5pm

**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)

**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).

**Contact Mary Wyatt at** [marywy@thehenryford.org](mailto:marywy@thehenryford.org) **to register for the Learning Spa. SPACE IS LIMITED.**

For more information on our Learning Spas, see page 12.



DON CHADWICK  
Product Designer



LYN ST. JAMES  
Record Breaker,  
Businesswoman



MARTHA STEWART  
Chef, Gardener, Designer,  
Author and unrivaled  
authority on how to run  
a home



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THESE **VISIONARIES**  
AND OTHERS AS THEY  
SHARE THEIR INSIGHTS  
AT **ONINNOVATION.COM**

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Inventor of  
breakthrough  
medical products,  
Dedicated Agent of  
Change, Humanitarian



ELON MUSK  
Founder, PayPal,  
SpaceX, Tesla Motors  
& Solar City



BILL GATES  
Co-Founder of Microsoft.  
Shaper of the software  
industry. Believer in  
enriching minds



## INSPIRE MORE CREATIVE THINKERS, CRITICAL THINKERS & **PROBLEM SOLVERS**

America is renowned for its innovative spirit. That isn't a new distinction. For more than two centuries, the United States has been regarded as a place that nurtured creativity and the people who saw the possibility for radical advancements. Think about Thomas Edison's light bulb. Or Luther Burbank's hybrid plants. Or the Wright brothers' first flight. Or Buckminster Fuller's Dymaxion house and Geodesic Domes. Or, says Christian Øverland, **The Henry Ford's** vice president of Collections & Experience Design, "America's greatest innovation — the Declaration of Independence."

Those stories — and thousands of others like them — are central to what we do at **The Henry Ford**. We are a repository for the stories of men and women who saw the world in slightly different ways from everyone around them. And rather than give in to the status quo, they found ways to change the world.

cont...

**PHOTO:** From innovator interview of Elon Musk at SpaceX, Hawthorne, California. To access photographs, interview transcripts and video for your classroom use, visit [www.OnInnovation.com](http://www.OnInnovation.com)



AMERICAN INNOVATION

Indeed, it was America’s passion for innovation that inspired Henry Ford to found this institution more than 80 years ago. He had been nurtured by a country where anything seemed possible if only you had solid ideas and the ambition to see them through.

By starting his museum and village, he hoped to inspire others to follow in his path. Some people feel that America’s innovative spirit has been dampened in recent decades. But at **The Henry Ford**, we think that innovation is a state of mind, that it can be taught, that it can be nurtured as a culture.

We recently launched an ambitious website, OnInnovation.com, filled with in-depth video interviews with some of the nation’s finest thinkers, entrepreneurs and visionaries: people like Microsoft’s Bill Gates – now a global philanthropist; Apple Computer co-founder Steve Wozniak; and racecar driver Lyn St. James, who pursued the opportunity to compete alongside men. “History teaches us that our future will depend on how quickly, and how well, we innovate and adapt. Our OnInnovation initiative will help foster and advance cultural change by teaching all of us about innovation, by promot-

ing the emergence of a new talent base of innovative thinkers and by encouraging creative problem-solving,” says Patricia Mooradian, president of **The Henry Ford**.

These innovators address tough questions about their lives. What gave you the courage to go where you did? Where do great ideas come from? How do you pursue them? For that matter, what is it that constitutes a great idea and how does it make a difference in the world?

Learning experiences are built around the same questions. What was it about Thomas Edison that drove a small-town boy of modest means to become one of the most prolific and influential inventors in history? Same with Elijah McCoy and the Wright brothers and the dozens of other American notables whose lives we explore at **The Henry Ford**. These were ordinary people who became extraordinary.

We believe that innovation is an integral part of American education. We have developed an online module, which is going to be available this fall, a five-day course called “Innovation 1‘0’1.” The idea behind it is that so much of the modern world revolves

around standardization – including educational testing – that some students aren’t given the room to grow, to realize their creativity, to innovate. “The result is that we have developed one-size-fits-all educational expectations, but the reality is that we have students with different learning styles in our schools and in our communities,” says Paula Gangopadhyay, **The Henry Ford’s** director of Education.

The goal of “Innovation 1‘0’1” – and of all of our educational opportunities – is to inspire students to broaden their points of view, to become more curious, to ask “why” and “how” instead of just “what.” Indeed, we even let them know that failure is often an inseparable part of the process.

“There is nothing that we can teach our children that is more essential to their success than innovation,” says Gangopadhyay. “Innovation is not called out as a curriculum strand. Why is that? It’s because innovation is everywhere. It is the common denominator that transcends the boundaries of all the core subjects. We believe that every child needs it to be successful in life. And we encourage them by providing tools to fuel the culture of innovation.” ■

AMERICAN INNOVATION PROGRAMS

on-site programs

Edison's Light Fantastic

DRAMATIC PRESENTATION  
FREE with Village admission

Meet Thomas Alva Edison in this interactive play and hear about one of his most “electrifying” inventions!

**Location:** Greenfield Village  
**Offered:** Fridays in October 2010; May 2-June 10, 2011  
**Program Length:** 15 minutes

National Curriculum Standards for Social Studies Strands II, VIII  
Michigan Social Studies Grade Level and High School Content Expectations  
2 - H2.0.3, H2.0.4 6 - H1.2.5, H1.4.1, H1.4.2  
7 - H1.2.6, H1.4.1, H1.4.2 9-12 - USHG 6.1.1

Home from Kitty Hawk

DRAMATIC PRESENTATION  
FREE with Village admission

Experience the thrill of the Wright brothers’ first flight as they take you back to that amazing and inspiring day.  
**Location:** Greenfield Village  
**Offered:** Fridays in October 2010; May 2-June 10, 2011  
**Program Length:** 20 minutes

National Curriculum Standards for Social Studies Strands II, VIII  
Michigan Social Studies Grade Level and High School Content Expectations  
2 - H2.0.3 6 - H1.2.5, H1.4.1, H1.4.2  
7 - H1.2.6, H1.4.1, H1.4.2 9-12 - USHG 6.1.1

Elijah: The Real McCoy

DRAMATIC PRESENTATION  
FREE with Village admission

Meet inventor Elijah McCoy, discover why his life and work remain an inspiration to this day.

**Location:** Greenfield Village  
**Offered:** May 2-June 10, 2011  
**Program Length:** 15 minutes

National Curriculum Standards for Social Studies Strands II, VIII  
Michigan Social Studies Grade Level and High School Content Expectations  
2 - H2.0.3 4 - H3.0.7 6 - H1.2.5, H1.4.1, H1.4.2 7 - H1.2.6, H1.4.1, H1.4.2  
9-12 - USHG 6.1.1

If I Had a Hammer

FACILITATED PROGRAM

Put core subjects such as math and language arts to work in “If I Had a Hammer.” Students immerse themselves in this problem solver’s delight, as they work together to construct an 8- by 11-foot house inside *Henry Ford Museum*.

**Location:** Henry Ford Museum  
**Offered:** September 2010-June 2011  
**Program Length:** 2 hours  
**Fee:** \$14.50 includes Museum admission  
**Online Resources:** Teacher Guide

National Principles and Standards for School Mathematics  
Number and Operation, Measurement, Problem Solving, Communication, Connection  
National Standards for the English Language Arts 4, 12  
National Career and Employability Skills Standards 1, 5, 6, 7  
Michigan Math Grade Level and High School Content Expectations  
4 - N.FL.04.08, N.FL.04.34, N.FL.04.36, M.UN.04.01 5 - N.FL.05.05  
Michigan ELA Grade Level and High School Content Expectations 4 - L.CN.04.01, L.CN.04.02 5 - L.CN.05.02 6 - L.CN.06.02

field trip enhancements

NEW! Life of an Inventor

SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE  
Grades 3-5

This self-guided exploration tool is designed to help students discover the contributions of Thomas Edison, Henry Ford and Orville and Wilbur Wright.

NEW! Innovation in 20th Century Design

SELF-GUIDED ITINERARY FOR HENRY FORD MUSEUM  
Grades 4-12

This self-guided exploration tool is designed to help students think, observe and sketch innovations and inventions as they discover and analyze examples in the Museum.

field trip enhancements



History Hunters: Innovation

SCAVENGER HUNT  
Henry Ford Museum

- Investigating Inventions in Your Place in Time: 20th-Century America
- Investigating Advertising in Automobile in American Life
- Investigating Early Inventions in Heroes of the Sky: Early Adventures in Flight

Greenfield Village

- Investigating The Making of Inventors: Henry Ford and the Wright Brothers
- Investigating George Washington Carver

National Curriculum Standards for Social Studies Strands: I, II, III, IV, V, VIII  
Michigan Social Studies Grade Level and High School Content Expectations  
1 - H2.0.5, H2.0.6 2 - H2.0.3, H2.0.4, E1.0.3  
3 - H3.0.8 6 - H1.2.2, H1.2.5, H1.4.1, H1.4.2  
7 - H1.2.2, H1.2.6, H1.4.1, H1.4.2  
9-12 - USHG 6.1.1, 6.1.5, 7.1.1, 7.2.2, 8.3.3

classroom resources



NEW! Innovation 1‘0’1

INTERACTIVE MODULE

Innovation 1‘0’1 is a unique and dynamic online education module that uses oral history interviews and assets of *The Henry Ford’s* OnInnovation resource for active teaching and learning! It is geared toward introducing participants to the basic tenets of innovation as they explore various traits and processes used by innovators past and present. At the conclusion of the unit, participants will be inspired to apply the core principles of innovation to their own lives.



classroom resources

The 21st-Century Factory: Environmental Innovations at the Rouge

POWERPOINT SLIDE SHOW  
Learn about the technological and environmental innovations that were built into the Rouge in 2004 and how it is a workplace that protects the environment by using emerging technologies to manage water, soil and daylight.

National Science Education Standards  
*Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History and Nature of Science*  
National Curriculum Standards for Social Studies Strands VIII  
Michigan Science Grade Level and High School Content Expectations  
2 - E.FE.02.21 3 - S.RS.03.17, S.RS.03.18, E.ES.-03.43, E.ES.03.52, E.ES.03.42, E.ES.03.51  
4 - S.RS.04.18, PPM.04.53, LEC.04.21  
5 - U2 S.RS.05.17 6 - S.RS.06.17, LEC.06.41  
7 - S.RS.07.17, E.ES.07.42, E.ES.07.42, E.ES.07.81  
9-12 - Biology B3.1A, B3.4C, B3.5e  
9-12 - Earth Science E2.1B, E2.1C, E2.4B  
Michigan Social Studies Grade Level and High School Content Expectation  
2 - H2.0.4 4 - H3.0.1 9-12 USHG 6.1.5, 9.1.1

professional development

NEW! Learning Spa

**Topic:** American Innovation  
**Date:** October 23, 2010  
**Time:** 8:30am-5pm  
**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)  
**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).  
**Contact** Mary Wyatt at [marywy@thehenryford.org](mailto:marywy@thehenryford.org) to register for the Learning Spa. SPACE IS LIMITED.  
For more information on our Learning Spas, see page 12.

AN OnINNOVATION CLASSROOM CHALLENGE

OnInnovation  
Visionaries thinking out loud™

POWERED BY  
THE HENRY FORD

SPONSORED BY  
PROMETHEAN  
LIGHTING THE FLAME OF LEARNING

The Challenge

Create a curriculum or a classroom project using assets from [OnInnovation.com](http://OnInnovation.com). We’ve made it easy for you to start conversations and connect students to the real world through videos, advance search and filtering tools, interactive transcripts, photos, digitized artifacts and more.

The Reward

Everyone wins when the excitement of working with real innovators sets in, but it doesn’t stop there! Five teachers from across the nation will win an exclusive weeklong Innovation Immersion Residency at *The Henry Ford*. In addition, our five grand-prize winners and five first-prize winners will receive a set of Promethean ActivExpressions, the world’s leading learner response system allowing voting through text, numbers, scales and more.

Submit your curriculum to [OnInnovation.com/contest](http://OnInnovation.com/contest) by April 1, 2011, to be eligible to win.

\$40,000 in prizes

10 winners

No purchase necessary. A purchase will not increase your chances of winning. Legal residents of the 50 United States & D.C. (Excl. FL & NY), 18 years and older and an educator at an accredited 6th- to 12th-grade education institution, and have valid proof of teaching position at time of entry. Void in FL, NY and where prohibited. Ends 4/1/11. For official rules, prize descriptions and contest odds disclosure, visit [OnInnovation.com/contest](http://OnInnovation.com/contest). Sponsor: The Henry Ford, 20900 Oakwood Blvd., Dearborn, MI 48124.



# REALITY FIELD TRIPS: AN IMMERSION INTO WORK, FAMILY AND COMMUNITY LIFE PAST

You've heard us use the phrase again and again – we bring history to life. But what exactly does that mean? That we have presenters in historical clothing? That we are home to dozens of buildings where important historical events took place? That we have authentic Model T's and carriages and steam engines that span nearly 150 years of American history?

All true. But honestly, that's only a small part of what we mean.

“Most people, until they get onsite at The Henry Ford, do not comprehend the magnitude of our multi-site destination and the multilayered immersion experiences we offer,” says Paula Gangopadhyay, director of Education at The Henry Ford. “For school kids, it brings the curriculum to life.”

cont...



Our goal is to recreate, as accurately as possible, the daily lives that Americans lived in the past. But to be American means many different things. So we strive to recreate the lives of people who lived in different eras, in different regions, people of different socio-economic classes, different races, different ethnic backgrounds.

It is, we think, a remarkable spectrum of American life.

Through our field trips, we give your students not just an opportunity to observe those lives, but to actually step into them, to partake in life as it was lived.

“Our way of making history interesting is by empowering people to make connections in two ways,” says Gangopadhyay. “One is to make them relevant to things that are happening today. The other is by connecting history to their personal lives. If we don’t

use both of those strategies, we miss out. And so do the students.”

So we have developed programs that are both personally and historically relevant.

In one corner of *Greenfield Village* is the Daggett Farmhouse. The sturdy, charcoal-colored wood-frame house stands out from everything around it. Built in 1754 in Connecticut, it is one of the oldest structures in the Village.

But this little corner of the Village is constantly buzzing with activity. Presenters in period dress are busy gardening, cooking meals, preserving foods, spinning yarn, making clothing. For the 21st-century visitor, it offers a riveting insight into the rhythm of life for the European Americans who settled New England.

Your students can come to visit on a field trip, of course. But the activities of Daggett Farm are available online

all year. Even in the midst of winter, you can watch video as the family harvested their small gardens and the food for use throughout the cold months.

The same is true at the much-larger Firestone Farm, where a short walk down a country lane leads you into the midst of a late 19th-century farm. Birthplace of tire magnate Harvey Firestone, this working farm is a model of Midwestern agrarian life, with massive fields filled with seasonal crops and – a perennial student favorite – dozens of farm animals, from massive Percheron work horses to tiny Dark Brahma chickens.

Even more compelling is the One-Room School program. It’s one thing to read a book about how children growing up in rural America in the 19th century studied in one-room schoolhouses. It’s another to step into the shoes of those children. Modern-day students wear 19th-century clothes, play 19th-century games, eat food made from 19th-century recipes and learn lessons using McGuffey readers, slates and slate pencils.

“It’s the sort of program that gives kids a new pair of lenses through which to see, appreciate and love history,” says Gangopadhyay. “It’s the sort of lesson they’ll never forget.” ■

LEFT: Hermitage Slave Quarters in Greenfield Village.  
BELOW: One-Room School program in Greenfield Village.



on-site programs

**A Gullah Tale**  
DRAMATIC PRESENTATION  
**FREE with Village admission**  
The distinctive Gullah culture and language of the Georgia sea islands preserved many elements of African culture. Experience the inspiring lessons that Mama Nancy’s stories and the tales of little John taught to children on the plantation.

**Location:** Greenfield Village  
**Offered:** Fridays in October 2010  
**Program Length:** 20 minutes

**National Curriculum Standards for Social Studies Strands II, V, VI, X**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H2.0.5, H2.0.6 **2** - H2.0.5 **4** - G4.0.2  
**5** - U2.2.2, U2.2.3, U2.3.4 **6** - H1.2.5, H1.4.1  
**7** - H1.2.6, H1.4.1 **8** - U4.2.2, U5.1.1, U5.1.5

**Tales from Huck Finn**  
DRAMATIC PRESENTATION  
**FREE with Village admission**  
Meet Huckleberry Finn, one of Mark Twain’s most beloved characters, and hear about a few of his memorable adventures in this high-energy 15-minute one-man show.

**Location:** Greenfield Village  
**Offered:** May 2-June 10, 2011  
**Program Length:** 15 minutes

**National Curriculum Standards for English Language Arts I, II**  
**Michigan English Language Arts Grade Level and High School Content Expectations**  
**K-1** - L.CN.00.03 **1** - L.CN.01.03 **2** - L.CN.02.03  
**3** - L.CN.03.02, L.CN.03.03 **4** - L.CN.04.02, L.CN.04.03 **5** - L.CN.05.02, L.CN.05.03  
**6** - L.CN.06.02 **7** - L.CN.07.02 **8** - L.CN.08.02  
**9-12** - CE.2.1.10, CE.2.2.1

**Tally’s Tales**  
DRAMATIC PRESENTATION  
**FREE with Village admission**  
Tally, the cook at the Susquehanna Plantation, takes a break from her work and shares uplifting songs and stories, including a fun Br’er Rabbit tale with an important message.

**Location:** Greenfield Village  
**Offered:** May 2-June 10, 2011  
**Program Length:** 15 minutes  
**National Curriculum Standards for Social Studies Strands II, V, VI, X**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H2.0.6 **2** - H2.0.5 **4** - G4.0.2 **5** - U2.2.2, U2.2.3, U2.3.4 **6** - H1.2.5, H1.4.1 **7** - H1.2.6, H1.4.1 **8** - U4.2.2, U5.1.1, U5.1.5

One-Room School Program  
SELF-GUIDED ACTIVITY

Treat students to a bit of educational time travel by stepping into the shoes of children living in the 1800s. Reserve a day in the rustic Miller or McGuffey schoolhouse. Your class will use McGuffey readers, slates and slate pencils. Teacher Guide is downloadable online at [thehenryford.org/education](http://thehenryford.org/education). It’s filled with historical background and lesson plan suggestions for what you can do before, during and after your visit.

**Location:** Greenfield Village  
**Offered:** Daily September-October 2010; Fridays November-December; Daily April 15-June 10, 2011

**Program Length:** Flexible  
**Fee:** \$9.50 includes Village admission  
**Online Resources:** Teacher Guide

**National Curriculum Standards for Social Studies Strands II, V**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**K** - H2.0.4 **1** - H2.0.1, H2.0.4, H2.0.5, H2.0.6  
**2** - H2.0.4 **3** - H3.0.1

**Great American Museum Experience: The Ultimate Sleepover**  
SELF-GUIDED AND FACILITATED PROGRAM  
The Great American Museum Experience is a two-day overnight adventure that includes admission to multiple attractions, meals – as well as accommodation in our Lovett Hall dormitories. And for after-hours fun, your students will produce their own 1940s-style radio show and get a crash course in the popular dances of the past.

**Offered:** September 2010-June 2011  
**Location:** January 1-April 14: *Henry Ford Museum, Ford Rouge Factory Tour and IMAX Theatre*. April 15-December 14: *Henry Ford Museum, Greenfield Village* and one-day ride pass.  
**Program Length:** Two days, including overnight stay, 2 meals and a snack  
**Fee:** \$86.50 per person

**National Curriculum Standards for Social Studies Strands I, II, III**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**3** - H3.0.1 **4** - H3.0.4 **6** - H1.4.1, H1.4.2  
**7** - H1.4.1, H1.4.2

field trip enhancements

**NEW! Family & Community Life**  
SELF-GUIDED ITINERARY FOR GREENFIELD VILLAGE

**Grades K-12**  
This exploration tool is designed to help students compare and contrast life in the past with life today.



**History Hunters: Community Life**

SCAVENGER HUNT  
**Location:** Henry Ford Museum

- Investigating Generations in Your Place in Time: 20th-Century America
- Investigating the Changing American Landscape in Automobile in American Life
- Location:** Greenfield Village
- Investigating 19th-Century School Life
- Investigating Historic Crafts and Trades
- Investigating Historic Kitchens

**National Curriculum Standards for Social Studies Strands I, II, III, IV, V, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H2.0.5, H2.0.6 **2** - H2.0.4, E1.0.3 **5** - U2.3.2  
**6** - H1.2.2, H1.4.1, H1.4.2 **7** - H1.2.2, H1.4.1, H1.4.2

classroom resources

**Colonial Family and Community**  
INTERACTIVE MODULE

Here’s your chance to be a history detective. Your challenge? Investigate the daily lives of the Daggetts, a colonial family living in northeastern Connecticut. In this interactive module, you’ll be able to peek into Samuel Daggett’s account book to uncover clues about his family’s life, just the way *Greenfield Village* historians did. The module contains more than a dozen video and audio clips offering vivid examples of colonial life in the 1700s.

**National Curriculum Standards for Social Studies Strands II, V, VII**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3, H2.0.4, E1.0.3, E1.0.4, E1.0.5  
**5** - U2.3.2, U2.3.3 **6** - H1.2.5, H1.4.1, H1.4.2  
**7** - H1.2.6, H1.4.1, H1.4.2

Living Under Enslavement at Hermitage Plantation

INTERACTIVE MODULE  
Step inside the cramped quarters that an enslaved carpenter called home during the years he lived at Georgia’s Hermitage Plantation. Click from page to page and explore the artifacts that reveal the ways in which the people who lived here cared for their families, used their skills, preserved African traditions and resisted enslavement.

**National Curriculum Standards for Social Studies Strands II, V, VI, X**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**4** - G4.0.2 **5** - U2.2.2, U2.2.3, U2.3.4  
**6** - H1.2.1, H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.1, H1.2.6, H1.4.1, H1.4.2 **8** - U4.2.2, U5.1.1, U5.1.5

**Toys**  
ONLINE EXHIBIT  
Toys are more than fun. They’re vital historical resources. Toys share volumes of information about how American life has changed over the decades. Our online exhibit of toys, games and dolls explores how children played in the past and what parents did – or didn’t – consider important about their children’s playthings. Classroom activities connected to social studies and English language arts are also available.

**National Curriculum Standards for Social Studies Strands II, IV**  
**National English Language Arts Standards**  
1, 3, 4, 7  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**K** - H2.0.1, H2.0.4 **1** - H2.0.5, H2.0.6  
**Michigan English Language Arts Grade Level and High School Content Expectations**  
**K** - R.NT.00.03, R.NT.00.04, R.CM.00.01, W.GN.00.01 **1** - R.NT.01.04, R.CM.01.01, W.GN.01.01 **2** - R.NT.02.03, R.CM.02.01  
**3** - R.NT.03.01, R.NT.03.03, R.CM.03.01

professional development

**NEW! Learning Spa**  
**Topic:** Family and Community Life  
**Date:** April 30, 2011  
**Time:** 8:30am-5pm  
**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)  
**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).  
**Contact Mary Wyatt at [marywy@thehenryford.org](mailto:marywy@thehenryford.org) to register for the Learning Spa. SPACE IS LIMITED.**  
For more information on our Learning Spas, see page 12.



# SCIENCE & TECHNOLOGY APPLIED TO THE REAL WORLD

"I see how information is presented in textbooks," says Susan Tate, an eighth-grade teacher and education specialist at **The Henry Ford**. "Every teacher does."

"And sometimes, it's very frustrating. I teach earth sciences. And the piece that is really missing from the textbooks is the role that businesses and industries have in this whole greening of America process."

She's not suggesting that America's industries have perfect environmental records. But the more she has learned about the modern environmental movement, the more she has come to realize that many businesses have not just leaped onto the environmental bandwagon, but are now leading the way. "I never heard the term 'responsible manufacturing' until I came to **The Henry Ford**," says Tate.

Photo: Rudy Ruzicka

get up close...  
LEARNING JUST DOESN'T GET  
ANY MORE EFFECTIVE.

LEFT: The world's first R & D lab, Menlo Park in *Greenfield Village*. THIS PAGE: See the world's largest living roof at *Ford Rouge Factory Tour*.

But after taking the *Ford Rouge Factory Tour*, the phrase was immediately clear. "When it comes to the environment, you rarely hear about companies that are doing the right thing," says Tate. "A visit like this is a really good chance for older students to debate what is going on in the world and how they can be a part of it."

It's not about selling cars or trucks. Rather, it's about observing ways that science and technology – the very lessons studied in school – are applied in real-world situations.

"That's one of the cool things about the Heroes of the Sky exhibit," says Mary Wyatt, **The Henry Ford's** associate curator for Education and a former science teacher. In class, students study the theories of flight, about the importance of wing shape and how various designs force airflow over or under the wing. "But here in the Museum, they learn how to fold a paper airplane in a very specific way to optimize the airflow. They can test the plane and see how far it goes. Then, they can take the model and change the shape of the wings and see the difference it makes."

Is it fun? Absolutely. But it's educational, as well.

"What's best about this is that students remember the science. It's practical. It's hands-on. And they understand it." And that's the key to success, says Tate: framing the lesson in a context that makes it stick in a young person's mind.

Nowhere are the practical uses of science and technology championed quite so vigorously as at Thomas Edison's Menlo Park laboratory in *Greenfield Village*. It was an unprecedented facility.

"Before Edison, science was very academic," says Wyatt. "If you were a real scientist, you weren't supposed to be interested in applied science. It was all theory." But the Menlo Park lab, launched in 1876, had one primary goal – to create commercial products, making it the world's first research and development facility.

Here, as in so many other places at **The Henry Ford**, the relationship between the theoretical and practical is profound. And Edison's research is so enduring that the connection between his ideas and students' daily lives is immediately obvious. And those connections, says Wyatt, are the key to educational success.

"People's perception about **The Henry Ford** is always tied to history, and there is nothing incorrect about that assumption," says Paula Gangopadhyay. "Most people don't realize that there is a lot more than just history at **The Henry Ford**. There's science, engineering, technology and math (STEM), literally put into action through our exhibits, our sites and the stories behind the artifacts."

"We want to further capitalize on this unusual asset we have at **The Henry Ford**. We did it through our new 'Racing in America' curriculum. The Racing DigiKits are tools to teach principles of science through our artifacts," she says. "We don't have to create supporting props to teach science as in most museums. We use the artifacts to show how aerodynamics, friction, energy and other principles work to make a real race car run. From the historic Menlo Park, to some of the simple and complex machines, to the best in environmental science and technology, **The Henry Ford** has it all." ■



PHYSICAL SCIENCES

on-site programs

Heroes of the Sky

EXHIBIT

FREE with Museum admission

When your students enter *Henry Ford Museum*, the first thing they see is a sleek, silvery airplane hanging high above the Museum floor. That's our 1939 DC-3, the centerpiece of Heroes of the Sky, an exhibit that explores the wild and woolly early days of flight.

**Location:** Henry Ford Museum  
**Program Length:** Flexible  
**Online Resources:** Instructional unit/ lesson plans, self-guided exhibit exploration guide

**National Science Education Standards**  
*Science as Inquiry, Physical Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science*  
**National Curriculum Standards for Social Studies Strands II, VIII**  
**National Standards for the English Language Arts** 1, 3, 4, 7, 12

**Michigan Science Grade Level and High School Content Expectations**  
**4** - S.IP04.11, S.IP04.12, S.IP04.13, S.IP04.14, S.IP04.15, S.IP04.16, S.IA.04.11, S.IA.04.12, S.IA.04.13, S.IA.04.14, S.IA.04.15 **5** - S.IP05.11, S.IP05.12, S.IP05.13, S.IP05.15, S.IP05.16, S.IA.05.12, S.IA.05.14, PFM.05.41, PFM.05.42 **6** - S.IP06.11, S.IP06.12, S.IP06.13, S.IP06.15, S.IP06.16, S.IA.06.11, S.IA.06.12, S.IA.06.13, S.IA.06.14, S.IA.06.15, PEN.06.11 **7** - S.IP07.11, S.IP07.12, S.IP07.13, S.IP07.15, S.IP07.16, S.IA.07.11, S.IA.07.12, S.IA.07.13, S.IA.07.14, S.IA.07.15 **9-12** - Physics 1.1A, 1.2D, 1.1E, 2.1A, 2.2A, 3.1A, 3.1d, 3.3A, 4.3A, 4.3C

**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3 **6** - H1.2.2, H1.2.5 **7** - H1.2.2, H1.2.6 **9-12** - WHG 7.1.4 **9-12** - USHG 6.1.1

**Michigan ELA Grade Level and High School Content Expectations**  
**4** - R.CM.04.04, S.CN.04.03, L.CN.04.02 **5** - R.CM.05.04, S.CN.05.03, S.CN.05.02, L.CN.05.02 **6** - R.CM.06.04, S.DS.06.04, L.CN.06.02 **7** - R.CM.07.04, S.CN.07.01, S.DS.07.04, L.CN.07.02 **8** - R.CM.08.04, S.CN.08.01, S.CN.08.02, S.DS.08.04, L.CN.08.02 **9-12** - CE1.3.1, CE1.3.9, CE1.4.3, CE1.5.2

Test Drive Smart Tools

SELF-GUIDED ACTIVITY

FREE with Ford Rouge Factory Tour admission

Handle a “smart tool” that workers use on the factory floor and simulate steering wheel installation on a Ford F-150 pickup truck. Discover the connections between advanced tooling (process), skilled workers (people) and the end quality of the vehicle (product).

**Location:** Ford Rouge Factory Tour  
**Offered:** Daily  
**Program Length:** Variable, self-directed

**National Science Education Standards**  
*Science as Inquiry, Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History and Nature of Science*  
**National Curriculum Standards for Social Studies Strands VII, VIII**  
**Michigan Science Grade Level and High School Content Expectations**  
**K-7** - S.IPE.1, PFM.E.3 **9-12** - Physics P3.1, P3.1x, P4.1, P4.1x, P4.3  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**1** - H2.0.6 **2** - H2.0.4 **3** - G4.0.1 **4** - H3.0.1, H3.0.5, E1.0.5 **9-12** - USHG 9.1.1 **9-12** - Economics 1.1.1, 1.2.3

field trip enhancements

Heroes of the Sky

SELF-GUIDED ACTIVITY

Downloadable lesson plans and student “Pilot Logs” help you meet science, social studies and English language arts content expectations.

classroom resources

NEW! Science, Life Skills and Innovation in American Auto Racing

EDUCATOR DIGIKIT

Grades 3-8

Explore how American auto racing uses scientific concepts such as force, change in motion, speed and energy to make technological improvements. Learn about scientific innovations, teamwork and the risks of racing through oral histories from race car drivers, engineers, mechanics and owners.

**National Science Education Standards**  
*Science as Inquiry, Physical Science, Science and Technology, History and Nature of Science*  
**Michigan Science Grade Level Content Expectations** **2** - S.RS.E.1 **3** - S.RS.E.1, PFM.E.3, PFM.E.4, PEN.E.1, PEN.E.3 **4** - S.RS.E.1, PEN.E.1, PEN.E.4, PEN.E.5, PCM.E.1 **5** - S.RS.M.1, PFM.M.2, PFM.M.3, PFM.M.4 **6** - S.RS.M.1, PEN.M.1, PEN.M.4 **7** - S.RS.M.1

classroom resources

NEW! Physics, Technology and Engineering in American Auto Racing

EDUCATOR DIGIKIT

Grades 9-12

Explore how the principles of physics — net force, acceleration, momentum — are an integral part of American auto racing. Examine how racing innovators achieve major technological advancements and learn about scientific innovations, teamwork and the risks of racing through oral histories from race-car drivers, engineers, mechanics and owners.

**National Standards for Science Education**  
*Science as Inquiry, Physical Science, Science and Technology, History and Nature of Science*  
**Michigan Science Grade Level Content Expectations** **9-12** - P2.1, P2.2, P3.1, P3.2, P3.3, P3.4, P3.5x, P3.8x, P4.1, P4.1x, P4.3, P4.3x

ENVIRONMENTAL SCIENCE

on-site programs

NEW! George Washington Carver EXHIBIT

FREE with Museum admission

What makes a man a legend? In George Washington Carver's case it was his experiments with plants. Born into slavery, Carver became a trail-blazing scientist whose experiments laid the groundwork for today's research into plant- based fuels, medicines and everyday products.

A curriculum-aligned Educator Guide provides ideas for activities before and after your visit.

*The exhibition was created by The Field Museum, Chicago, in collaboration with Tuskegee University and the National Park Service.*

**Location:** Henry Ford Museum Gallery  
**Offered:** Nov. 6, 2010-Feb. 27, 2011

**National Curriculum Standards for Social Studies Strands II, VIII**  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3 **4** - H3.07 **6** - H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG 6.1.1

on-site programs

Outdoor Living Lab

GUIDED ACTIVITY

FREE with Ford Rouge Factory Tour admission

**Location:** Ford Rouge Factory Tour  
**Offered:** Mid-April to mid-October, weather permitting  
**Program Length:** 15 minutes

**National Standards for Science Education**  
*Science as Inquiry, Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History and Nature of Science*  
**Michigan Science Grade Level and High School Content Expectations** **1** - E.E.S.E.1 **2** - E.FE.E.2 **3** - E.E.S.E.4, E.E.S.E.5, E.S.E.E.3 **4** - L.EC.E.2 **5** - L.EV.M.1 **6** - L.EC.M.1, L.EC.M.4 **7** - E.E.S.M.1, E.E.S.M.4, E.E.S.M.8 **9-12** - Biology L3.p3, L3.p4, B3.4, B3.4x, B3.5x **9-12** - Earth Science E2.4, E4.p1, E4.1

field trip enhancements



History Hunters

SCAVENGER HUNT

**Location:** Ford Rouge Factory Tour

- Investigating Environmental Innovations
- Investigating Manufacturing

**National Science Education Standards**  
*Science as Inquiry, Life Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science*  
**National Curriculum Standards for Social Studies Strands II, III, VII, VIII**  
**Michigan Science Grade Level and High School Content Expectations**  
**2** - E.FE.02.21 **3** - S. RS.03.17, S.RS.03.18, E.E.S.03.43 **4** - S.RS.04.18, PPM.04.53, L.EC.04.21 **5** - S.RS.05.17 **6** - S.RS.06.17, L.EC.06.41 **7** - S.RS.07.17, E.E.S.07.41, E.E.S.07.42, E.E.S.07.81 **9-12** - Biology L3.p4A, B3.4C, B3.5e **9-12** - Earth Science E2.1B, E2.1C, E2.4B  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.3, H2.0.4, E1.0.3 **3** - H3.0.8 **4** - H3.0.1 **6** - H1.2.2, H1.2.5, H1.4.1, H1.4.2 **7** - H1.2.2, H1.2.6, H1.4.1, H1.4.2 **9-12** - USHG 6.1.1, 6.1.5

NEW! The Rouge: They Said it Could Not Be Done

SELF GUIDED ITINERARY FOR FORD ROUGE FACTORY TOUR

Grade 6

This self guided exploration tool is designed to help students discover the science and history of the Rouge.

classroom resources

NEW! Sustainability: Environmental Management and Responsible Manufacturing at the Ford Rouge

TEACHER PACKET

High School

Environmental sustainability is affected by personal and business decisions.

**National Standards for Science Education:**  
*Earth and Space Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science.*  
**Michigan Science High School Content Expectations:** B3.4C, B3.4x, E2.4A, E2.4B, E4.1C

NEW! Human Impact on Ecosystems

TEACHER PACKET

Middle School

Citizens, industry and government all play a role in ecosystem restoration.

**National Standards for Science Education:**  
*Life Science, Earth and Space Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science.*  
**Michigan Science Grade Level Content Expectations:** L.LOL.06.51, L.LOL.06.52, L.EC.06.11, L.EC.06.21, L.EC.06.23, L.EC.06.31, L.EC.06.32, L.EC.06.41, E.E.S.07.41, E.E.S.07.42, E.E.S.07.81, E.E.S.07.82

NEW! Life Requirements

TEACHER PACKET

Elementary School

The needs of plants and animals in an ecosystem can be impacted by humans.

**National Standards for Science Education:**  
*Life Science, Science and Technology, Science in Personal and Social Perspectives, History and Nature of Science.*  
**Michigan Science Grade Level Content Expectations:** L.LOL.02.14, L.LOL.03.41, E.E.S.03.52, L.LOL.04.15, L.LOL.04.16, L.EC.04.11, L.EC.04.21, L.EV.05.12

classroom resources

The 21st Century Factory: Environmental Innovations at the Rouge

POWERPOINT SLIDE SHOW

Learn about the technological and environmental innovations that were built into the Rouge and how it protects the environment by using emerging technologies to manage water, soil and daylight.

**National Science Education Standards**  
*Science in Personal and Social Perspectives, Science and Technology, Life Sciences, History and Nature of Science*  
**National Curriculum Standards for Social Studies Strands VIII**  
**Michigan Science Grade Level and High School Content Expectations** **2** - E.FE.02.21 **3** - S.RS.03.17, S.RS.03.18, E.E.S.03.43, E.E.S.03.52, E.E.S.03.42, E.E.S.03.51 **4** - S.RS.04.18, PPM.04.53, L.EC.04.21 **5** - U2 S.RS.05.17 **6** - S.RS.06.17, L.EC.06.41 **7** - S.RS.07.17, E.E.S.07.41, E.E.S.07.42, E.E.S.07.81 **9-12** - Biology B3.1A, B3.4C, B3.5e **9-12** - Earth Science E2.1B, E2.1C, E2.4B  
**Michigan Social Studies Grade Level and High School Content Expectations**  
**2** - H2.0.4 **4** - H3.0.1 **9-12** - USHG 6.1.5, 9.1.1

professional development

NEW! Learning Spa

**Topic:** Science & Technology  
**Date:** March 12, 2011  
**Time:** 8:30am-5pm  
**Fee:** \$80 per person (Includes materials, coffee, lunch and admission to the related site.)  
**CEUs:** Offered through Wayne RESA pending approval (Fee \$10).

**Contact Mary Wyatt at marywy@thehenryford.org to register for the Learning Spa. SPACE IS LIMITED.**

For more information on our Learning Spas, see page 12.



Present new content in exciting and engaging ways, inspire lively discussion and explore a variety of topics that motivate students to be more inquisitive. Access accompanying educator guides and tool kits to enrich and extend your IMAX® experience. And now, The Henry Ford is aligning the IMAX® educational films to Michigan GLCEs and HSCEs so they offer even stronger ties to your science and technology curriculum.

Visit [thehenryford.org/imax](http://thehenryford.org/imax) for showtimes and curriculum connection guides.

now showing



Under The Sea 3D

(Through December 31, 2010)

Explore the biologically diverse waters of the Pacific and Indian oceans, including some of their most significant coral reefs, especially the Coral Triangle, home to 3,000 species of fish.



HUBBLE 3D

(Through March 18, 2011 )

“Hubble 3D” will chronicle the amazing saga of the greatest success in space since the moon landing. Featuring stunning on-orbit coverage of the telescope's final repair and jaw-dropping IMAX 3D flights through distant galaxies.



Ultimate Wave Tahiti 3D

(Through February 11, 2011 )

Featuring nine-time world surfing champion Kelly Slater, “The Ultimate Wave Tahiti” follows a quest to find the perfect wave-riding experience. The film’s action focuses on Tahiti and the volcanic islands of French Polynesia, home to some of the world’s most challenging surfing and to astounding coral reef ecosystems.



NEW! Legends of Flight 3D

(Opening October 8, 2010 )

“Legends of Flight 3D” is an inspiring and visually captivating documentary featuring milestone 20th-century aircraft that are influencing the design and construction of the next generation of revolutionary aircraft.



> education programs at a glance

HFM = Henry Ford Museum    GV = Greenfield Village    FRFT = Ford Rouge Factory Tour

EDUCATION PROGRAMS	LOCATION	OFFERED	ONSITE/ONLINE RESOURCE	SUBJECT	Michigan GLCEs/HSCEs for Grades	PAGE #
AMERICAN DEMOCRACY AND CIVIL RIGHTS						
With Liberty & Justice For All	HFM & Online	Year-round	Exhibit & Unit Plan Student Exploration Guide & Online Exhibit	English Language Arts, Social Studies	4-12	19
Celebrate Black History! Minds on Freedom	Henry Ford Museum	February	Dramatic Presentation	Social Studies	1, 2, 6-12	19
Votes for All	Greenfield Village	Spring	Dramatic Presentation	Social Studies	2, 4, 6-12	19
With Liberty and Justice for All Symposium	Henry Ford Museum	MLK Day	Annual Symposium	Social Studies		19
“C” is for Citizenship	Greenfield Village	Spring	Dramatic Presentation	Social Studies	1-4, 6-12	19
History Hunters: Citizenship	Henry Ford Museum	Year-round	Scavenger Hunt	Social Studies	4-6	19
Lincoln’s Legacy: Race, Freedom, and Equality of Opportunity	Online	Year-round	Video	Social Studies		19
TRANSPORTATION IN AMERICA						
Henry’s Assembly Line	Henry Ford Museum	Year-round	Guided Activity	Social Studies	1, 2, 4, 9-12	24
Build a Model T	Henry Ford Museum	Year-round	Guided Activity	Social Studies	1, 2, 4, 9-12	24
Model T Road Trip	Online	Year-round	Interactive Module	Social Studies	1, 2, 4, 6, 7, 9-12	24
Explore the Model T in HFM & GV	HFM & GV	Fall & Spring	Self-Guided Itinerary	Social Studies	2, 3, 4, 6, 7, 9-12	24
History Hunters: Investigating the Model T	HFM & GV	Fall & Spring	Scavenger Hunt	Social Studies	1, 2, 4, 6, 7, 9-12	24
Transportation Systems	Online	Year-round	Unit Plan	English Language Arts, Social Studies	8-12	25
Early 20th Century Migration	Online	Year-round	Unit Plan	English Language Arts, Social Studies	3-5	25
Moving to Michigan: Immigration, Migration & Transportation	Online	Year-round	Unit Plan	English Language Arts, Social Studies	9-12	25
You Can Be an Innovator...Like Henry Ford!	Online	Year-round	Unit Plan	English Language Arts, Social Studies	3-5	24
Impact of the Model T – Then & Now	Online	Year-round	Unit Plan	English Language Arts, Social Studies	9-12	24
Reading Inspiration	Offsite	Contact Education Department	Literacy Enhancement Program	English Language Arts	2-3, 4-5	25
Henry’s Alphabet Cars	Henry Ford Museum	Contact Education Department	Preschool Literacy Enhancement Program	English Language Arts	K-1	25
ExhibitBuilder	Online	Year-round	Interactive	English Language Arts, Social Studies, Math, Social Studies	3-12	24
Transportation Podcasts	Online	Year-round	Audio	Social Studies		25
The Rouge: An Overview	Online	Year-round	PowerPoint Slide Show	Social Studies	1-4, 6-12	
Organizing the United Auto Workers at the Rouge	Online	Year-round	PowerPoint Slide Show	Social Studies	2-4, 6-12	
AMERICA’S INDUSTRIAL REVOLUTION						
Test Drive Smart Tools	FRFT	Year-round	Self-Guided Activity	Science, Social Studies	1-4, 9-12	29
Flexing for the Future	FRFT	Year-round	Self-Guided Activity	Science, Social Studies	1, 2, 4, 9-12	29
Industrial Revolution: Impact of Technology and Innovations	HFM & GV	Fall & Spring	Self-Guided Field Trip, Teacher and Student Guide, Lesson Plan	Science, Social Studies	4-6, 7-12	29
Industrial Revolution: Past, Present & Future	GV & FRFT	Fall & Spring	Self-Guided Field Trip, Teacher and Student Guide, Lesson Plan	Social Studies	4-6, 7-12	29
The Ford Rouge Complex: A Case Study in Industrialization	FRFT	Year-round	Self-Guided Field Trip, Teacher Guide	Social Studies	2-4, 6-12	29
AMERICAN INNOVATION						
OnInnovation 1’O’1	OnInnovation.com	Year-round	Online Module	Science, Social Studies	6-12	33
Edison’s Light Fantastic	Greenfield Village	Fall & Spring	Dramatic Presentation	Social Studies	2, 6, 7, 9-12	33
Home from Kitty Hawk	Greenfield Village	Fall & Spring	Dramatic Presentation	Social Studies	2, 6, 7, 9-12	33
Elijah: The Real McCoy	Greenfield Village	Spring	Dramatic Presentation	Social Studies Math,	2, 4, 6, 7, 9-12	33
If I Had a Hammer	HFM & Online	Sept-June	Facilitated Program, Teacher Guide	English Language Arts, Careers	4-6	33
History Hunters: Innovation	HFM & GV	Year-round	Scavenger Hunt	Social Studies	2-8	33
Henry Ford’s Innovations at the Rouge	Online	Year-round	PowerPoint Slide Show	Social Studies	2, 6-12	33

EDUCATION PROGRAMS	LOCATION	OFFERED	ONSITE/ONLINE RESOURCE	SUBJECT	Michigan GLCEs/HSCEs for Grades	PAGE #
FAMILY AND COMMUNITY LIFE						
One-Room School Program	GV & Online	Fall & Spring	Self-Guided Activity, Teacher Guide	Social Studies	K-3	37
A Gullah Tale	Greenfield Village	Fall	Dramatic Presentation	Social Studies	1, 2, 4-8	37
Tally’s Tales	Greenfield Village	Spring	Dramatic Presentation	English, Language Arts	1, 2, 4-8	37
Tales from Huck Finn	Greenfield Village	Spring	Dramatic Presentation	Social Studies	K-12	37
Great American Museum Experience: The Ultimate Sleepover	HFM & GV	Fall & Spring	Self-Guided and Facilitated Program	Social Studies	3, 4, 6, 7	37
History Hunters: Community Life	HFM & GV	Year-round	Scavenger Hunt	Social Studies	1, 2, 6, 7	37
Colonial Family and Community	Online	Year-round	Interactive	Social Studies	2, 5-7	37
Living Under Enslavement at Hermitage Plantation	Online	Year-round	Interactive	Social Studies	4-8	37
Toys	Online	Year-round	Interactive	English Language Arts, Social Studies	K-3	37
SCIENCE AND TECHNOLOGY						
Heroes of the Sky	HFM & Online	Year-round	Exhibit, Lesson Plan, Student Pilot Logs, Online Exhibit	Science, English Language Arts, Social Studies	2, 4-12	40
Outdoor Living Lab	FRFT	Mid Apr–Mid Oct	Guided Activity	Science	1-12	40
Test Drive Smart Tools	FRFT	Year-round	Self-Guided Activity	Science, Social Studies	1-12	40
History Hunters: Science and Technology	FRFT	Year-round	Scavenger Hunt	Science, Social Studies	2-12	40
The 21st Century Factory: Environmental Innovations at the Rouge	Online	Year-round	PowerPoint Slide Show	Science, Social Studies	2-12	40
Science, Life Skills and Innovation in American Auto Racing	Online	Year-round	Unit Plan	Science	3-8	41
Physics, Technology and Engineering in Auto Racing	Online	Year-round	Unit Plan	Science	9-12	41
Sustainability: Environmental Management and Responsible Manufacturing at the Ford Rouge	Online	Year-round	Unit Plan	Science	9-12	41
Human Impact on Ecosystems	Online	Year-round	Unit Plan	Science	6-8	41
Life Requirements	Online	Year-round	Unit Plan	Science	2-5	41

> contact the ed staff



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Local and National Education Conferences



# plan your field trip



## Reservations

To book a field trip to The Henry Ford, contact our Call Center to speak with trained professionals who will answer questions and help schedule your visit. **313.982.6001, press 1**, 9am-5pm daily.

## School Group Rate/Pricing

Educators with groups of 15 or more receive a discounted school group rate of \$8 for each venue and \$8 unlimited Ride Pass for Greenfield Village. Special programs vary in pricing. Some require advance payments, contracts and deposits; ask your Call Center representative for details. *Teachers must purchase tickets for group leaders in order for them to receive a group rate. Group leaders purchasing tickets separately will pay general admission rates. All prices and programs subject to change.*

## Home Schoolers

Home School groups receive the same discounted student rate with groups of 10 or more with a reservation. In addition, we extend free admission and parking to accompanying adults at a ratio of one free adult for every five students. Additional adults pay the discounted rate. *Advance reservations are required.*

## Scholarships

A limited number of scholarships are available to help defray the cost of admission to Henry Ford Museum and Greenfield Village and the cost of transportation to Henry Ford Museum, Greenfield Village, IMAX® Theatre and Ford Rouge Factory Tour. For more information, visit [thehenryford.org/education](http://thehenryford.org/education).

*The Henry Ford school field trip scholarship program has been made possible in part through the generosity of the MASCO Corporation Foundation.*



## 2010 Hours of Operation\*

### Henry Ford Museum

open 7 days a week,  
9:30am-5pm

### Greenfield Village

January 1-April 14, closed

April 15-October 31,

open 7 days a week, 9:30am-5pm

November 1-30,

open Friday-Sunday only, 9:30am-5pm

December 1-31, open select evenings only

### The Henry Ford IMAX® Theatre

open daily with extended hours

### Ford Rouge Factory Tour

open Monday-Saturday, 9:30am-5pm

Call for bus times and seasonal hours.

### Benson Ford Research Center

Reading Room

open Tuesday-Friday, 9:30am-5pm

**All attractions are closed Thanksgiving Day and Christmas Day.**

*\*Subject to change. Check website for 2011 updates.*

## Ticketing

When you prepay for your visit in full, your tickets will be waiting upon arrival and you will receive express check-in. To expedite your entry, we can mail your tickets in advance for a **\$5 shipping and handling fee**. In order to ship tickets, payment must be received two weeks prior to your scheduled arrival date.

## Payment Options

We offer three easy ways to pay for your field trip.

### Check

Make checks payable to **The Henry Ford** and mail to:

**Call Center - The Henry Ford**

**20900 Oakwood Boulevard**

**P.O. Box 1970**

**Dearborn, Michigan 48121-1970**

### Charge

MasterCard, Visa, American Express and Discover

### Cash

Large bills only

## Refunds

The Henry Ford Call Center will provide self-addressed envelopes to return unused tickets for a full refund. *IMAX® Theatre tickets are not refundable.* For groups traveling on their own buses to the *Ford Rouge Factory Tour*, tickets are exchangeable and refundable. For groups traveling on Ford Rouge buses, due to the limited bus seating, tickets are not refundable or exchangeable.

## Directions to The Henry Ford

### From I-94

Exit northbound Southfield (M-39), drive 1.8 miles to Oakwood Boulevard (Exit 4). Turn left on Oakwood and drive 1.8 miles.

### From I-75

Exit northbound Southfield (M-39), drive 4.1 miles to Oakwood Boulevard (Exit 4). Turn left on Oakwood and drive 1.8 miles.

### From I-96

Exit southbound Southfield (M-39), drive 4.5 miles to Michigan Avenue (Exit 6). Stay to left on service drive, then turn right at entrance on Village Road.

# plan your field trip

## Group Guidelines

One adult group leader is required for every 10 students. Group leaders must be adults. Please respect the artifacts and help us preserve history. Touch things only if you have been invited to do so. Student groups, grades K through 12, and group leaders must stay together at all times.

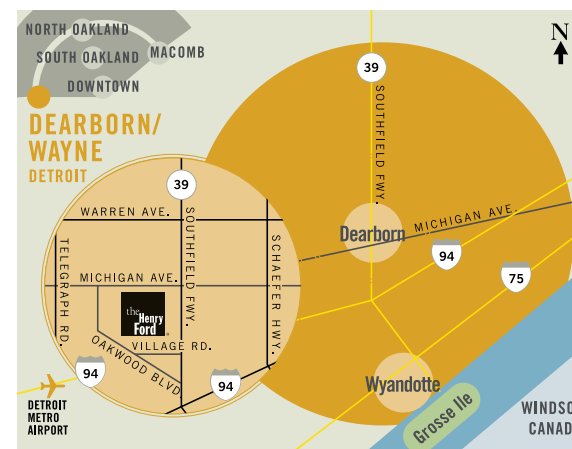
## Accessibility

Wheelchairs are available in both *Henry Ford Museum* and *Greenfield Village* for a nominal fee. The Museum is completely handicapped accessible. Due to the historic nature of the Village, some buildings cannot accommodate wheelchairs and strollers.

Wheelchairs are available for **FREE** use during your visit to the *Ford Rouge Factory Tour*. Up to four wheelchairs can be accommodated at each theater showing. Wheelchairs can be transported on Factory Tour buses as can most motorized wheelchairs (some weight limits apply). The facility is completely handicapped accessible.

## field trip tips

- 1 Download our Field Trip Planning form at [thehenryford.org/education](http://thehenryford.org/education).
- 2 To book a trip, call **313.982.6001**, press 1.
- 3 Read your confirmation and pre-visit materials — share this information with all group leaders!
- 4 Prepay for your visit to receive express check-in.
- 5 To avoid getting separated from the group, provide a specific location for all group members to meet before entering a venue.



Visit [www.michigan.gov/mdot](http://www.michigan.gov/mdot) for updated road closures, construction details and detours.



plan your field trip



Shopping

A large selection of educational toys, books, souvenirs and resources is available in the Museum, Village and Ford Rouge Factory Tour stores. Teachers and students may wish to bring along a little extra spending money. If you run out of time, shop online at [thehenryford.org/shop](http://thehenryford.org/shop).

Dining

BRING YOUR OWN LUNCH

School and youth groups are invited to bring their own lunches. Beverage vending machines are provided for your convenience at the Museum and Ford Rouge Factory Tour. Glass containers are not permitted in our venues. No food, drinks or smoking are permitted in the Museum exhibit areas, Village historic buildings, on rides or outside designated areas at Ford Rouge Factory Tour.

Under Michigan law, smoking is only permitted in designated areas.

STUDENT DINING ROOM

Reserve a space for your group to eat in our Student Dining Room located across from the Michigan Café™ in Henry Ford Museum or on the Mezzanine at the Ford Rouge Factory Tour. This space is open to groups that are bringing their own lunches. But please note that this requires advance reservations through the Call Center. Space is limited.

DINING IN THE MUSEUM AND VILLAGE\*

At The Henry Ford, we have 11 dining venues featuring locally grown products to satisfy every taste and every appetite. Students will love a hot dog from our Wienermobile™ Café or rock candy from Sir John Bennett Sweet Shop. From sweets and snacks to beverages and lunch, we've got a dining option just for you! \*Seasonal hours.

Historic Rides in Greenfield Village

Travel through time and explore historic modes of transportation in Greenfield Village. Village rides and Ride Pass reservations must be reserved 24 hours prior to your visit date. Group discounts on rides do not apply upon arrival unless tickets are reserved in advance.

SEE PAGE 11 FOR MORE DETAILS



FIELD TRIP SOUVENIR BAG

As you plan your field trip, get ahead of the game and pre-order\* and pre-pay for your group's souvenir bags, then simply pick up your order in the store the day of your visit. Download the order form @ [thehenryford.org/education](http://thehenryford.org/education).

\*All pre-orders must be received one week prior to your visit.

> getting in, out and around THE HENRY FORD



1. WHERE DOES THE BUS DROP US OFF AND PICK US UP?
  - Greenfield Village: in front of the Greenfield Village Ticket Building. D
  - Henry Ford Museum, IMAX Theatre or Ford Rouge Factory Tour: in front of the Clocktower Entrance. C
  - Take our buses, which include a brief introduction to the Ford Rouge Factory Tour, or drive your own school or tour bus directly to the Visitor Center. A limited number of school buses can be accommodated at the Visitor Center daily; advance reservations and parking permits are required. Contact the Call Center for reservations.
2. WHERE DO WE PARK?
  - Cars: For Greenfield Village visits, public parking is available in lots along Village Road. For Henry Ford Museum, IMAX Theatre or Ford Rouge Factory Tour visits, parking is available next to the IMAX Theatre at Oakwood Boulevard.
  - Buses: A designated bus parking lot is located along Village Road across from Greenfield Village.
3. WHERE DO WE PICK UP OUR TICKETS?
  - Greenfield Village: at the Greenfield Village Ticket Building. D
  - Henry Ford Museum, IMAX Theatre or Ford Rouge Factory Tour: at the Clocktower Entrance. C
  - Tickets purchased in advance can be mailed directly to you for a small fee. Contact the Call Center for more information.



HENRY FORD MUSEUM



**TIPS**  
for your visit to  
**HENRY FORD MUSEUM**

1. WHERE DO WE START?

- Unpaid reservations can be finalized at the Group Check-In counter at the Clocktower Entrance.
- If you already have your tickets, you may go directly to the Ticket Attendant to enter the Museum.

2. WHERE ARE THE RESTROOMS?

- **Inside Museum:** along the front wall of the Museum and down the Jewelry and Silver & Pewter aisles.
- **IMAX Theatre and Ford Rouge Factory Tour guests:** Use the IMAX lobby and Michigan Café restrooms.

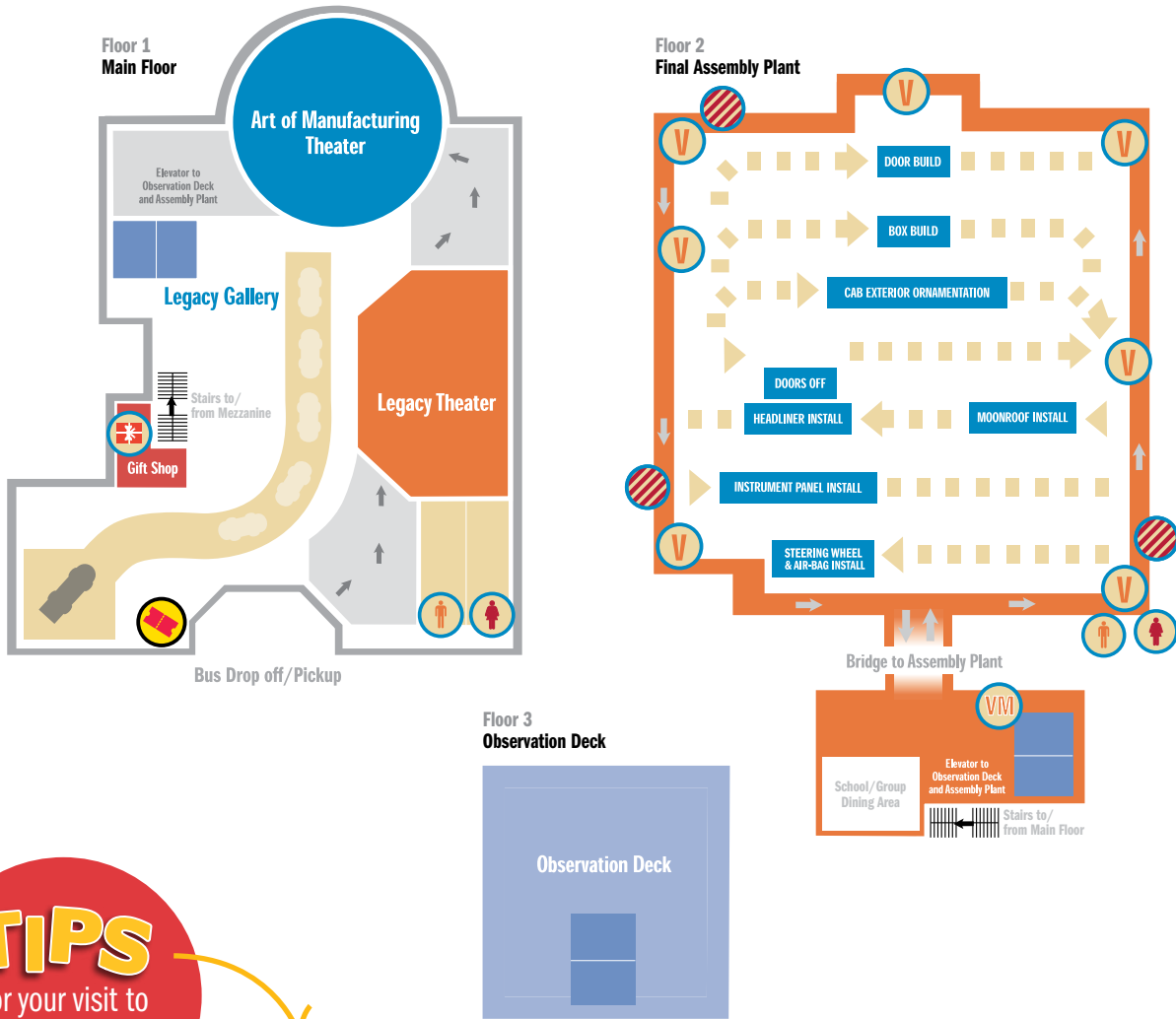
3. WHERE DO WE EAT?

- **Restaurant:** For Museum guests, grab a snack or lunch at the Wiernmobile Café.
- **Bringing your lunch?** Student Dining Room is available for groups that bring their lunches, reserve a space for your group to eat. (*Advance reservation required*)

4. WHERE CAN WE PICK UP SOUVENIRS?

- **Henry Ford Museum Store and Genius at Play Store:** a wide variety of educational toys, books, souvenirs and resources.
- **Mold-A-Rama Souvenirs** make great mementos.

FORD ROUGE FACTORY TOUR



**TIPS**  
for your visit to  
**FORD ROUGE FACTORY TOUR**

1. HOW DO WE GET TO THE FACTORY TOUR?

Groups with their own buses may arrange to drive directly to the *Ford Rouge Factory Tour*. Groups traveling in private cars park at *Henry Ford Museum* and ride the *Ford Rouge Factory Tour* buses.

2. WHERE DO WE PICK UP OUR TICKETS?

Groups traveling on their own buses pick up their tickets in the Legacy Gallery at the Rouge Visitor Center. Groups traveling on *Ford Rouge Factory Tour* buses pick up their tickets at the Clocktower Entrance at *Henry Ford Museum*.

3. IN WHAT ORDER SHOULD WE SEE THE TOUR?

The *Ford Rouge Factory Tour* is a self-guided experience composed of five main stations plus hands-on interactives and a seasonal outdoor station. You can experience the tour in any order. Theater shows run every 20 minutes until 4pm (limit 75/show).

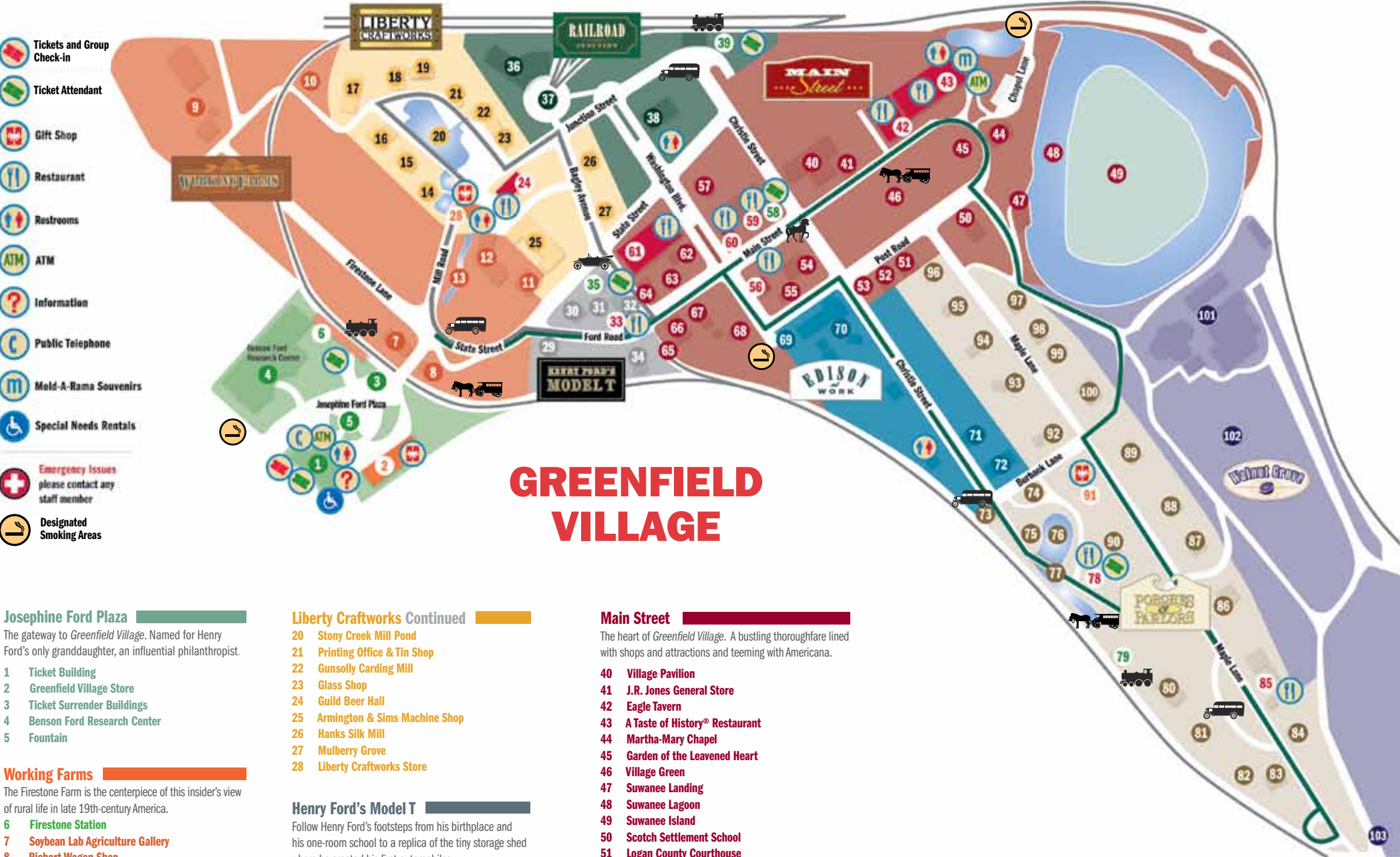
4. ARE THERE SPECIAL RULES TO VISIT THE TRUCK PLANT?

This is a working truck plant, so it is critical that chaperones actively supervise students. No shouting, waving or other distractions are allowed in the plant. Photography, cell phone use, food and beverages are also prohibited inside the plant. Thank you for your cooperation. These rules help ensure the plant employees can focus on building quality vehicles.

*Daily vehicle production is based on actual vehicle sales orders, so you may be touring when vehicles are not being built.*



plan your field trip



**Josephine Ford Plaza**  
The gateway to Greenfield Village. Named for Henry Ford's only granddaughter, an influential philanthropist.

- 1 Ticket Building
- 2 Greenfield Village Store
- 3 Ticket Surrender Buildings
- 4 Benson Ford Research Center
- 5 Fountain

**Working Farms**  
The Firestone Farm is the centerpiece of this insider's view of rural life in late 19th-century America.

- 6 Firestone Station
- 7 Soybean Lab Agriculture Gallery
- 8 Richart Wagon Shop
- 9 Firestone Farm
- 10 Cider Mill
- 11 William Ford Barn
- 12 Carriage Barn
- 13 Stony Creek

**Liberty Craftworks**  
A village within a village: eight workshops filled with skilled artisans practicing authentic period crafts. Glassblowers, potters, tinsmiths and others demonstrate and explain the secrets of techniques that are, in some cases, centuries old.

- 14 Loranger Gristmill
- 15 Weaving Shop
- 16 Pottery Shop
- 17 Stony Creek Sawmill
- 18 Tripp Sawmill
- 19 Spofford Sawmill

**Liberty Craftworks Continued**

- 20 Stony Creek Mill Pond
- 21 Printing Office & Tin Shop
- 22 Gunsolly Carding Mill
- 23 Glass Shop
- 24 Guild Beer Hall
- 25 Armington & Sims Machine Shop
- 26 Hanks Silk Mill
- 27 Mulberry Grove
- 28 Liberty Craftworks Store

**Henry Ford's Model T**  
Follow Henry Ford's footsteps from his birthplace and his one-room school to a replica of the tiny storage shed where he created his first automobiles.

- 29 Ford Home
- 30 Henry Ford Theater
- 31 Bagley Avenue Workshop
- 32 Ford Motor Company
- 33 Owl Night Lunch Wagon
- 34 Miller School
- 35 Model T Loading Dock

**Railroad Junction**  
Explore the railroading culture that shaped American growth in the 19th century.

- 36 Detroit, Toledo & Milwaukee Roundhouse
- 37 Railroad Turntable
- 38 Edison Illuminating Company's Station A
- 39 Smiths Creek Depot

**Main Street**  
The heart of Greenfield Village. A bustling thoroughfare lined with shops and attractions and teeming with Americana.

- 40 Village Pavilion
- 41 J.R. Jones General Store
- 42 Eagle Tavern
- 43 A Taste of History® Restaurant
- 44 Martha-Mary Chapel
- 45 Garden of the Leavened Heart
- 46 Village Green
- 47 Suwanee Landing
- 48 Suwanee Lagoon
- 49 Suwanee Island
- 50 Scotch Settlement School
- 51 Logan County Courthouse
- 52 Dr. Howard's Office
- 53 Dr. Howard's Garden
- 54 Town Hall
- 55 Phoenixville Post Office
- 56 Frozen Custard
- 57 Activities Building
- 58 Carousel
- 59 Carousel Confections
- 60 Sir John Bennett Sweet Shop
- 61 State Street Lunch Stand
- 62 Grimm Jewelry Store
- 63 Heinz House
- 64 Cohen Millinery
- 65 Hearse Shed
- 66 Wright Cycle Shop
- 67 Wright Home
- 68 Greenfield Village Tintype Studio

**Edison at Work**  
Surrounded by beakers and books and thousands of formulas, this is where Thomas Edison transformed the world by creating the first practical incandescent light bulb.

- 69 Thomas Alva Edison Statue
- 70 Thomas Edison's Menlo Park Complex
- 71 Sarah Jordan Boarding House
- 72 Thomas Edison's Fort Myers Laboratory

**Porches & Parlors**  
See American homes as varied as the families who lived inside them. There are homes of the privileged, the humble, the practical and even the enslaved.

- 73 Rocks Village Toll House
- 74 Luther Burbank Garden Office
- 75 Bandstand
- 76 Ackley Pond
- 77 Ackley Covered Bridge
- 78 Mrs. Fisher's Southern Cooking
- 79 Susquehanna Station
- 80 Susquehanna Plantation
- 81 Plympton Family Home
- 82 Farris Windmill
- 83 Daggett Farmhouse
- 84 Cotswold Forge

- 85 Cotswold Cottage & Tea at Cotswold
- 86 Giddings Family Home
- 87 Noah Webster Home
- 88 Robert Frost Home
- 89 Swiss Chalet
- 90 Edison Homestead
- 91 Garden House Store
- 92 Hermitage Slave Quarters
- 93 Mattox Family Home
- 94 William Holmes McGuffey School
- 95 William Holmes McGuffey Birthplace
- 96 George Washington Carver Cabin
- 97 Chapman Family Home
- 98 Adams Family Home
- 99 Charles Steinmetz Cabin
- 100 Sounds of America Gallery

**Walnut Grove**  
Home to Greenfield Village's historic baseball, Discovery Camps, events connected with the Old Car Festival and our spectacular Salute to America concerts.

- 101 Henry Ford Academy Village Campus
- 102 Walnut Grove Field
- 103 Hawthorn Glade



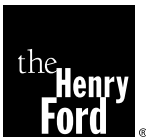
TIPS for your visit to GREENFIELD VILLAGE

- 1. WHERE DO WE START?**
  - Unpaid reservations can be finalized at the Greenfield Village ticket building.
  - If you already have your tickets, you may go directly to the ticket attendant.
- 2. WHERE ARE THE RESTROOMS?**
  - Inside Village:** Liberty Craftworks, Railroad Junction, A Taste of History™ restaurant and Edison at Work districts.
  - Outside Village:** in back of Greenfield Village Ticket Building in the Josephine Ford Plaza.
- 3. WHERE DO WE EAT?**
  - Restaurants:** Grab snacks or lunch in Main Street District at State Street Lunch Stand, Sir John Bennett Sweet Shop, A Taste of History or Frozen Custard. (Times vary seasonally.)
  - Bringing your lunch?** While you may picnic anywhere in Greenfield Village, State Street Lunch Stand has ample sheltered seating.
  - A limited number of lunch wagons are available on a first-come, first-served basis. Groups are encouraged to bring backpacks to carry lunches.
- 4. WHERE CAN WE PICK UP SOUVENIRS?**
  - Greenfield Village Store** in the Josephine Ford Plaza.
  - Mold-A-Rama Souvenirs** are available at A Taste of History restaurant in Main Street District.

TRANSPORTATION

- Weiser Railroad Train Station
- Bus Stops
- Model T Ride
- Carousel
- Omnibus Shuttle Stops





20900 Oakwood Boulevard  
Dearborn, Michigan 48124-5029

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## CLUB ED 100 DAY GIVEAWAY

Over 100 prizes in 100 days,  
including two grand prize getaways to  
Crystal Mountain Resort & Spa.

Enter to Win @ [thehenryford.org/teachercontest](http://thehenryford.org/teachercontest)

NO PURCHASE NECESSARY. A PURCHASE WILL NOT INCREASE YOUR CHANCES OF WINNING. LEGAL RESIDENTS OF THE 50 UNITED STATES (EXCL. DC AND EXCL. FL AND WA) 18 YEARS AND OLDER, WHO LIVE IN IL, MI AND WHOSE PRESENTED PRIZES ARE 12/31/15. For Official Rules, prize descriptions and odds disclosure, visit <http://thehenryford.org/teachercontest>. If you would like your name removed from sponsor's mailing list, send a piece of paper with your name, address and the phrase "direct mail opt out" with proper postage to: The Henry Ford, 20900 Oakwood Blvd., Dearborn, MI 48124, and your name will be removed within 60 days of the request. Sponsor: The Henry Ford, 20900 Oakwood Blvd., Dearborn, MI 48124.