

*A. K. A. Houdini:  
A Curriculum  
Guide*

*© 2004 Outagamie County Historical Society*

## *Table of Contents*

Introduction	3
Coming to America	4
The Immigrant Processing Station	5
The Immigrant's Point of View	11
Appleton in the 1870s	16
Child Labor in the 19 <sup>th</sup> Century and Today	22
Urbanization	27
The Industrial Revolution	31
What is Illusion?	34
The Science of Magic	38
The Magic of Math	41
The Psychology of Magic	44
Dime Museums and Side Shows	46
Problem Solving – Dime Museum Harry	49
Vaudeville	53
Houdini on Tour: A Lesson in Geography	55
Houdini and Advertising	58
Challenge Acts	61
The Strong Man	64
What is Spiritualism?	66
Houdini and Freedom of Religion	70
Houdini and Arthur Conan Doyle: When Friends Disagree	72
Blows Kill Houdini	74
Public Reaction to Houdini's Death	75
Houdini's Legend and Legacy	78

## *Introduction*

*A.K.A. Houdini: A Curriculum Guide* serves as a complement to the *A.K.A. Houdini* exhibit at the Outagamie County Historical Society. The curriculum is geared to students in the 4<sup>th</sup> through 8<sup>th</sup> grades. Please feel free to pick and choose the activities that are appropriate for your students. This curriculum addresses Wisconsin state standards in several subject areas and attempts to integrate subjects outside the history discipline with a study of the past. It is our hope that you can use the subject of Houdini as a “hook” to engage students in an exploration of larger issues such as scientific principles involved in magic and urbanization.

To schedule a tour of the *A.K.A. Houdini* exhibit or other exhibits at the History Museum, please contact the Curator of Education at 920-735-9370 ex. 115

Curriculum Guide Created by:  
Jane Woolsey  
Curator of Education, 2004  
Outagamie County Historical Society

## *Coming to America*

### Wisconsin State Curriculum Alignment:

English Language Arts B.4.1 – Create or produce writing to communicate with different audiences for a variety of purposes.

- Write expressive pieces in response to reading, viewing, and life experiences (narratives, reflections, and letters) employing descriptive detail and a personal voice.

For many immigrants, just the process of getting to America was an enormous undertaking. Travel was expensive, so families saved long and hard to be able to buy a ticket. Sometimes, families would come in waves, meaning that someone – the father or older children – would leave first. After settling themselves in America and finding a job, they would save as much money as they could, sending it back home so that the rest of the family could come and join them.

Immigrants usually traveled in the steerage of the ship. The steerage was located in the deepest part of the ship, where it was dark and foul-smelling because there was no fresh air. In the steerage, immigrants slept in narrow bunks stacked three high. There were no showers or even a table off which to eat. Instead, food was served from huge kettles. Each family was issued a dinner pail out of which everyone ate.

Close your eyes and imagine that you are traveling to your new home in America in the ship's steerage. Though it is the middle of the day, you are stuck in the dark hold of the ship because it is raining outside. Feel the motion of the ship as it crashes over the waves. It is dark and you cannot see to play. With all of the other immigrant passengers also stuck down there with you, there is little room to move around. Smell the stench of more than one hundred people who haven't bathed in weeks crowded around you. There is also the strong odor of the chamber pots, your "indoor bathrooms." Babies are screaming, hungry and restless. Next to you, someone coughs a rattling cough – he has become ill during the journey.

Write a journal entry describing a scene in the steerage. Use your five senses – sight, smell, taste, touch, and sound – to explain your experience of the journey. Using descriptive words, write a letter to a friend back home telling him or her what it is like to be on the ship.

## *The Immigrant Processing Station*

### Wisconsin State Curriculum Alignment:

English Language Arts A.4.1 – Use effective reading strategies to achieve their purposes in reading.

- Discern how written texts and accompanying illustrations connect to convey meaning.

English Language Arts A.4.3 – Read and discuss literary and non literary texts in order to understand human experience.

- Identify and summarize main ideas and key points from literature, informational texts, and other print and non-print sources.

English Language Arts A.4.4 – Read to acquire information

- Summarize key details of informational texts, connecting new information to prior knowledge.

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Social Studies B.4.3 – Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historic events.

Many immigrants started their life in America in New York City. There were other ports where immigrant ships docked – ports like San Francisco, California and Charleston, South Carolina, but New York City stations processed a significant number of immigrants coming to America in the 19<sup>th</sup> and early 20<sup>th</sup> centuries.

In 1855, the first central immigrant processing station in New York was established at Castle Garden. Located at the southern point of Manhattan Island, the building had once been used as a fort and later as a concert hall and tea garden. In 1890, Ellis Island replaced Castle Garden as New York’s official Immigrant entry point.

It was at Castle Garden that immigrants officially entered the United States. There, they were questioned and inspected. The government wanted to make sure that people with contagious diseases or with no money and little hope of finding a job did not enter the country. In this way, the government hoped to minimize the number of people depending on charity to survive and to prevent the spread of diseases among Americans. The government also collected information about immigrants at the processing centers. This helped the government to keep track of who entered the country, where they came from, and what their occupations were. Ehrich Weiss, later known as Houdini, entered the country at Castle Garden as a four-year old boy in 1878.



Immigrants Landing at Castle Garden in 1878. This illustration was taken from an 1880 *Harper's Weekly* Article and was drawn by A. B. Shults.

Read the following excerpts from an article that appeared in an 1870 *Harper's Weekly* Magazine. The author describes the arrival of new immigrants at Castle Garden and their processing there.

The steamer *Holland*, from Liverpool, had just arrived, and the steerage passengers were being landed. It was a *motley*, interesting *throng*. Slowly, one by one, the new-comers passed the two officers whose duty it is to register every immigrant's name, birthplace, and *destination* in large *folios* – a work that is often rather more difficult than it would first appear to be. In the first place, the officer in charge must be able to speak and understand nearly every language under the sun. This, however, can be learned and mastered; but then arises a second difficulty – the remarkable *want of intelligence* and the constantly *recurring misapprehension* shown by some of the passengers . . .

On they passed, one by one, in single file, till a few steps farther down they came to the desk of the so-called 'booker,' a clerk of the Railway Association, whose duty it is to *ascertain* the destination of each passenger, and *furnish him with a printed slip, upon which this is set forth, with the number of tickets wanted, and their cost in currency*. Having received this, the passenger is passed over to the railway counter; where, if he so desires, he purchases his ticket . . .

[He] has probably received a letter addressed to him at the Garden . . . or perhaps he desires to announce by letter his safe arrival at New York to friends far away. If so, he will find a clerk at his . . . desk, ready to write for him and forward his letter free of charge. If there is a letter for him, his name is called out loudly . . . If there is money for him, it is paid him *promptly*, or a ticket is purchased for part of it, if the sender so desires . . . If . . . he feels faint and hungry, then there is a restaurant over in the corner . . . And if he, finally, wants a *thorough ablution* before he starts for his new Western home, then there is the washroom already mentioned, where cold water, *stone troughs*, and fresh towels invite him to a bath and a change of *linen* . . .

Outside on the dock, where the passengers are landed, are the baggage-room and scales, where his boxes and '*kistes*' are weighed and checked according to his ticket . . . [At the Custom-house,] there is one lady-inspector, whose duty it is to examine the dresses of suspicious-looking female immigrants; and often she *makes a rich harvest of laces*, pieces of velvet or silk, jewelry, or the like, that is *concealed* upon the person in the most *ingenious* manner . . .

The Board of Commissioners own on Ward's Island (a little island in the East River, about five miles from the heart of New York) an immigrant refuge and hospital, both always *densely peopled*. Here, immigrants who are without *means of subsistence* are kept and taken care of at the expense of the Board, until such time as assistance may come from their friends in the shape of money or tickets, or they can be *disposed of* as laborers . . . During 1869 there were admitted on the island 11,471 sick or *destitute* immigrants, 439 children were born, and 11,356 passengers discharged during the same period. On December 31, 1869, there remained in the institution 1959 *souls*.

On entering the Ward's Island department we pass through the offices set aside for the *reception* of immigrants by their friends . . . When you find that [your friend] has arrived, you go down to Castle Garden to this office, to which there is a separate entrance from the Battery, and there you give to the clerk in charge the name of the passenger you are expecting. This will be called out inside the *rotunda*, and if she has been on board, she will be sent to you, *when there will be any quantity of questions to put and answers to make*. It certainly is interesting to witness these meetings, as I did. Here is the name of a *comely* Irish girl called out, she enters blushing, and is the next moment in the arms of her faithful sweet-heart, who left her home in Ireland three years ago, and has now sent for her to make her his bride. There is kissing and crying and squeezing, and applause from the by-standers, who for the moment forget that they themselves in a few minutes will probably do the same sort of thing . . . Father and son, sister and brother, meet here in *fond embraces*, with tears of joy, after years of

absence. What shaking of hands, and *assurances* of love, and *inquiries* for those dear to the heart, that are still thousands of miles away!

Opposite this building is located the so-called Labor Exchange . . . Not only immigrants, but whoever else wants work, can apply here and will *generally* succeed in finding *an employer*. Farm-hands and mechanics have the best chance, and there are always a number of them to be found there, mostly *raw hands*. Miners from Wales and other places are quite a specialty, and are always in demand. Weavers seem also to find *ready employment*. Next come laborers on railroads, farm-hands, and gardeners. There is but a poor chance for office clerks and other *nondescripts*. Servant girls form a great *proportion* of the work-seekers . . .

In 1869 situations were obtained for no less than 11,673 house servants, 438 cooks, laundresses, etc.; and, of the male branch, for 17,250 agricultural and unskilled laborers, and 5594 mechanics of various classes . . .

- 1) What adjectives does the author use to describe the immigrants? If he uses any words with which you are not familiar, look them up in the dictionary. Do these words paint the immigrant in a positive or negative light?
  
- 2) What is the first step immigrants must complete upon their arrival?
  
- 3) Describe in one or two sentences how language presents a difficulty for the new comers and the officials at the immigration center.
  
- 4) Who is the second official the immigrants meet?
  
- 5) After changing his money to American dollars and purchasing his railway ticket (if he plans to settle outside of New York City), what might the immigrant do next?



## Glossary

- Motley** – Varied. The group was from a wide variety of backgrounds
- Throng** – A large group of people gathered or crowded closely together
- Destination** – The place to which the immigrant is going
- Folios** – A large sheet of paper, folded once in the middle making four “pages” (two leaves front and back) of a book
- Remarkable want of intelligence** – Lack of intelligence (not smart)
- Recurring misapprehension** – Misunderstandings that happen over and over again
- Ascertain** – To find out
- Furnish him with** – Give him
- Upon which this is set forth, with the number of tickets wanted, and their cost in currency** – The slip will have the passenger’s destination, the number of train tickets wanted, and the amount they will cost printed on it.
- Promptly** – Without delay
- Thorough ablution** – Full cleansing
- Stone troughs** – Stone wash basins
- Linen** – Clothes made from linen
- “Kistes”** – Baskets
- She makes a rich harvest of . . .** – She finds a lot of lace, velvet, silk, jewelry, and other expensive materials that she confiscates because the immigrants are trying to sneak it in.
- Concealed** – Hidden
- Ingenious** – Clever
- Densely peopled** – Very crowded
- Means of subsistence** – A way to provide food and shelter for themselves
- Assistance** – Help
- Disposed of laborers** – Jobs found for them
- Destitute** – Impoverished
- Discharged** – Released, let go
- Souls** – People
- Reception** – Greeting
- Rotunda** – A large area with a high ceiling, such as a hotel lobby
- When there will be any quantity of questions to put and answers to make** – This refers to people reacquainting themselves with friends and relatives by asking and answering questions
- Comely** – Attractive
- Fond embraces** – Loving hugs
- Assurances** – Promises
- Generally** – Usually
- An employer** – In this case, a job
- Raw hands** – Workers without experience
- Ready employment** – Jobs available
- Nondescripts** – Jobs that did not require special skills
- Great proportion** – A large number

## *The Immigrant's Point of View*

### Wisconsin State Curriculum Alignment:

English Language Arts A.4.3 – Read and discuss literary and nonliterary texts in order to understand human experience

- Identify and summarize main ideas and key points from literature, informational texts, and other print and non print sources.

English Language Arts A.4.4 – Read to acquire information

- Summarize key details of informational texts, connecting new information to prior knowledge.

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Social Studies B.4.3 – Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historical events.

Social Studies B.8.4 – Explain how and why events may be interpreted differently depending upon the perspectives of participating witnesses, reporters, and historians.

Below is an excerpt from *The Rise of David Levinsky* by Abraham Cahan. Although this is a fictional novel, it is based upon Abraham Cahan's own experiences as an immigrant. Cahan was born in Russia, but came to the United States as a young man of twenty-two years in 1882. Cahan grew up in modern-day Lithuania in a town called Vilna. His father was a teacher and his grandfather a rabbi. After arriving in the United States, Cahan began writing for a Jewish-Russian weekly newspaper called *Russky Yevrey*. Fifteen years after settling in America he founded his own newspaper for Jewish immigrants, the *New York Jewish Daily Forward*. He also wrote three novels in English: *Yekl: A Tale of the New York Ghetto* (1896); *The White Terror and the Red* (1905); and *The Rise of David Levinsky* (1917). *The Rise of David Levinsky* is Cahan's best known work. In this novel, he talks about the experience of becoming an American – a social, ethnic, and linguistic change for the immigrant. Through Cahan's writing, we learn the perspective of the immigrant. Read the excerpt for yourself and answer the questions.

I *vividly* recall the feeling, for example, with which I greeted the first cat I saw on American soil. It was on the Hoboken pier, while the *steerage* passengers were being marched to the ferry. A large, black, well-fed feline stood in a corner, eying the crowd of new-comers. The sight of it gave me a thrill of joy. 'Look! There is a cat!' I said to Gitelson [his friend]. And in my heart I added, 'Just like those at home!' For the moment the little animal made America real to me . . .

We were ferried over to Castle Garden. The harsh manner of the immigration officers was a *grievous* surprise to me . . . ‘They are not a bit better than *Cossacks*,’ I remarked to Gitelson . . . These unfriendly voices flavored all America with a spirit of icy *inhospitality* that sent a chill through my very soul.

Many of the other immigrants were met by relatives, friends. There were cries of joy, tears, embraces, kisses. All of which *intensified* my sense of loneliness and dread of the New World . . . Gitelson, who like myself had no friends in New York, never left my side. He was even more timid than I. It seemed as though he were holding on to me for dear life. This had the effect of *putting me on my mettle*.

‘Cheer up, old man!’ I said, with *bravado*. ‘America is not the place to be a *ninny* in. Come, pull yourself together.’ In truth, I addressed the *exhortations* as much to myself as to him; and so far, at least, as I was concerned, my words had the desired effect.

I led the way out of the big Immigrant Station . . .

Where were we to go? What were we to do? . . . I *mustered* courage to approach a policeman, something I should never have been bold enough to do at home . . . With his coat of blue cloth, starched linen collar, and white gloves, he reminded me of anything but the policemen of my town. I *addressed him* in Yiddish, making it as near an approach to German as I knew how, but my efforts were lost on him. He shook his head . . . he then pointed his club in the direction of Broadway and strutted off *majestically*.

At this moment a voice *hailed* us in Yiddish. Facing about, we *beheld* a middle-aged man with huge, round, perpendicular nostrils and a huge, round, deep dimple in his chin that looked like a third nostril. *Prosperity* was written all over his smooth-shaven face and broad-shouldered, stocky figure.

He was literally aglow with diamonds and *self-satisfaction*. But he was unmistakably one of our people. It was like coming across a human being in the jungle . . .

‘God Himself has sent you to us,’ I began, acting as the spokesman; but he *gave no heed* to me. His eyes were eagerly fixed on Gitelson and his tatters.

‘You’re a tailor, aren’t you?’ he questioned him.

My steerage companion nodded. 'I'm a ladies' tailor, but I have worked on men's clothing, too,' he said . . .

'A ladies' tailor?' the well-dressed stranger echoed, with *ill-concealed* delight. 'Very well; come along. I have work for you.'

As I learned *subsequently*, the man who *accosted* us on State Street was a cloak contractor, and his presence in the neighborhood of Castle Garden was anything but a matter of chance. He came there quite often, in fact, his purpose being *to angle for* cheap labor among the newly arrived immigrants.

As we *resumed* our walk up Broadway the *bejeweled* man turned to me.

'And what was your *occupation*? You have no trade, have you?'

'I read Talmud,' I said, confusedly.

'I see, but that's no business in America,' he declared. 'Any relatives here?' 'Well, don't worry. You will be all right. If a fellow isn't lazy nor a fool he has no reason to be sorry he came to America. It'll be all right . . .'

When we reached the General Post-Office . . . our guide bade us stop.

'Walk straight ahead,' he said to me, waving his hand toward Park Row. 'Just keep walking until you see a lot of Jewish people. It isn't far from here.' With which he slipped a silver quarter into my hand and made Gitelson *bid me good-by*.

The two then boarded a big red horse-car . . .

My heart sank within me. I may safely say that the half-hour that followed is one of the worst I experienced in all the thirty-odd years of my life in this country.

With twenty-nine cents in my pocket . . . I set forth in the direction of East Broadway.

- 1) The narrator of this novel is an immigrant named David Levinsky. His character is a Russian Jew who had immigrated to the United States. What is one thing that David remembers most about his first few hours in America?

- 2) Try to remember a time when you were introduced to something completely new – like your first day at kindergarten, or your first visit to an amusement park. What are the sights, sounds, feelings, etc. that you remember most about that experience?
  
- 3) From Levinsky's description of his first few hours in America can you get a sense of what challenges new arrivals faced? Name at least two challenges faced by Levinsky.
  
- 4) What do you predict will happen to Levinsky's friend Gitelson?
  
- 5) What do you think will happen to Levinsky?

### Point of View Activity

Choose a partner with whom to complete the next part of the activity. One person will take on the character of the newspaper reporter who wrote the *Harper's Weekly* story (used in the Immigrant Processing Station activity) while the other will take on the character of David Levinsky. First, one partner will ask the following questions of the other. That person will respond as if he or she is the reporter. Then, the second person will answer the same questions from the point of view of an immigrant, in this case, David Levinsky. Write down each other's answers and hand them in.

- 1) Are the officials at Castle Garden helpful and friendly?
- 2) Is there much help available for new immigrant arrivals?
- 3) Would you describe the immigrants' first few hours in America as overwhelmingly happy and hopeful or overwhelmingly frightening?

In a think-aloud discussion, talk about how the answers given from the point of view of the *Harper's Weekly* reporter differed from the answers given from the point of view of David Levinsky. Ask students to consider why the opinions of an American reporter and a newly arrived immigrant differ.

## Glossary

- Vividly** – Clearly, intensely  
**Steerage** – The section of a passenger ship near the rudder that provided the cheapest passenger accommodations  
**Grievous** – Disturbing, upsetting  
**Cossacks** – Members of the Russian military known for their brutality  
**Inhospitality** – Unfriendliness, the state of being unwelcoming  
**Intensified** – Made stronger, increased  
**Putting me on my mettle** – Preparing me to accept a challenge  
**Bravado** – A false show of courage  
**Ninny** – Fool  
**Exhortations** – Encouraging words  
**Mustered** – Pulled together, gathered  
**Addressed him** – Spoke to him  
**Majestically** – In a grand manner  
**Hailed** – Called to  
**Beheld** – Gazed at  
**Prosperity** – Financial success, wealth  
**Self-satisfaction** – A feeling of being happy with or proud of yourself  
**Gave no heed** – Paid no attention  
**Ill-concealed** – Not well hidden, obvious  
**Subsequently** – At a later time  
**Accosted** – Approached boldly  
**To angle for** – To try to get something, but not be clear about your intentions  
**Resumed** – Continued  
**Bejeweled** – Wearing a lot of jewelry  
**Occupation** -- Job  
**Bid me good-by** – Said good-bye to me

## *Appleton in the 1870s*

### Wisconsin State Curriculum Alignment:

Social Studies B.8.1 – Interpret the past using a variety of sources, such as biographies, diaries, journals, artifacts, eyewitness interviews, and other primary source materials, and evaluate the credibility of sources used.

Social Studies B.8.4 – Compare and contrast changes in contemporary life with life in the past by looking at social, economic, political roles played by individuals and groups.

Social Studies A.4.5 – Use atlases, databases, grid systems, charts, graphs, and maps to gather information about the local community, Wisconsin, the United States, and the world.

Social Studies D.4.3 – Identify local goods and services that are part of the global economy and explain their use in Wisconsin.

English Language Arts A.4.3 – Read and discuss literary and nonliterary texts in order to understand the human experience.

- Identify and summarize main ideas and key points from literature, informational texts, and other print and non-print sources

English Language Arts E.4.3 – Create products appropriate to audience and purpose

- Create simple advertising messages and graphics appropriate for familiar media.

Houdini came to Appleton, Wisconsin in 1878. He arrived with his mother and brothers to join his father, Mayer Samuel Weiss, who had already emigrated from Hungary and had found a job as rabbi of Appleton’s Jewish congregation. Houdini lived in Appleton for only four years; however, during that short time, much was happening in this little Midwestern town.

In 1856, workers completed construction of the Fox Canal. This canal allowed ships to travel the length of the Fox River from Green Bay to Lake Winnebago. Locks raised or lowered the water level so that boats could safely and easily pass over rapids or falls. The Canal increased travel and commerce (the transportation of goods to market) and opened the Fox Cities for growth.

Also in the mid 1850s, the lumbering industry became very big in Wisconsin. Lumberjacks worked tirelessly to harvest virgin lumber from Wisconsin forests. After processing at one of several new sawmills, the lumber was then transported via the Fox Canal and connecting waterways to destinations like Chicago where it was used to build homes and businesses. In fact, the loggers cut so much lumber that by 1890 all of the virgin pine in Wisconsin (except for that on the Menominee Reservation) was gone.

Finally, the 1850s and 1860s were a time when Wisconsin wheat farmers faced a crisis. Before these times, Wisconsin farmers grew a lot of wheat. However, as settlers moved farther west they discovered that the Plains states – like Nebraska, North and South Dakota – provided a better environment for growing wheat. As a result, wheat farming moved farther west and the grist mills used for grinding wheat into flour were left abandoned. With the resources of water power from the Fox River and wood from Wisconsin forests, the Fox Cities seemed the perfect place for the papermaking industry to take root. Early paper factories converted grist mills to paper mills and established the Fox Valley as an important center for papermaking.

It was during these exciting times of growth that Houdini lived in Appleton. While here, he saw the development of the city's first water and sewer systems, the hydroelectric power station, and the opera house.

Read the following excerpt from the 1874 Appleton City Directory to get a sense of what Appleton was like during Houdini's time here.

In our review of the Appleton of today, we shall speak first of all of the water-power. The Fox River is almost *unparalleled* for the amount of its water-power within so short a distance, and so perfectly available . . .

This *immense* power is nature's great gift to Appleton . . . *capable* of yielding millions of dollars of yearly income . . . The growth of the city has been steady, rapid and healthful. [The water power now runs] two large wood pulp mills, three saw mills, four flouring and *grist mills*, two *foundries* and machine shops, three hub and spoke factories, two *tanneries*, one chair and bedstead factory, one pump factory, one *sash*, door and blind factory, one paper mill, one blast furnace, and two *planing mills* . . .

Such a thing as a vacant store is *scarcely* known . . . The retail trade of the city is very large . . . Here the farmer finds ready sale for everything that his farm produces, and in return can purchase anything his heart desires . . . There are more than one hundred places of business . . .

[Lawrence University's] over 400 boys and girls yearly receive *sound* and thorough instruction . . . Next in importance stands the Appleton Collegiate Institute . . . It possesses a fine school property, and, under a very *competent* faculty of teachers, is likely to be a success. The public school system is advancing towards perfection, although so rapid is the growth of the population that it is with difficulty that school room can be provided for all the scholars. Each ward has its school-house, and the course of instruction is very thoroughly graded. What Appleton now needs, to complete this system, is a high-school . . . [I]t is *probable* that, in a few years, Appleton will possess a high-school, equal in all *respects* to those of her sister cities.



pictures to illustrate these features and create a slogan that you think will draw people to Appleton. Your brochure can also include short descriptions of the city's features you are highlighting.

- 5) Does the City Directory's description mention any negative characteristics of the city of Appleton? Why do you suppose this is? Consider the description provided. Can you imagine any negatives that could accompany any of the positive features mentioned? If so, please list. The description says that a high school will be built soon. That means that without a high school, the education of most children stopped around the seventh grade.
  
- 6) Look at the 1874 Bird's Eye View map of Appleton. Can you find any of the industries, businesses, or educational institutions mentioned in the City Directory description? Can you see any other streets or landmarks familiar to you today? Choose a block of Downtown College Ave. or another area of the city (such as your neighborhood) of which to draw a modern-day Bird's Eye View map. The 1874 map provided names of land owners or business owners, and it served as a record of the community. Can you imagine a public map showing that information today? Why or why not? Are you able to provide that information on your Bird's Eye View map drawing? If not, what does that say about our community? Is it a good or a bad thing?

## Glossary

**Unparalleled** – Unequaled

**Immense** – Huge, enormous

**Capable** – Able to

**Grist mills** – Mills that grind grains into flour

**Foundries** – Factories where metal is melted and poured into molds

**Tanneries** – Leatherworking factories

**Sash** – The frame of a door or window

**Planing mills** – A mill where lumber is made smooth and level

**Scarcely** -- Hardly

**Sound** – Complete

**Competent** -- Capable

**Probable** -- Likely

**Respects** – Ways, manners

**Settled religious habits** – In other words, the settlers were religious people. They probably attended church or synagogue regularly.

**Refinement** – Good manners and good taste

**Extended** – Added on to, lengthened

**Proposed** – Suggested

**Resume** -- Summary

**Contempt** – An attitude that someone or something is inferior or worthless

**Boastfulness** – The act of being full of pride, bragging

Next page: Bird's Eye View Map of Appleton, 1874. Outagamie County Historical Society collection.



## *Child Labor in the 19<sup>th</sup> Century and Today*

### Wisconsin State Curriculum Alignment:

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Family and Consumer Education A.1 – Identify several contributions the family makes in meeting family members’ needs for food, clothing, shelter, and economic resources; encouraging development of all family members throughout life; and taking action to improve conditions in the home, workplace, neighborhood, community, and world.

Social Studies E.4.6 – Give examples of group and institutional influences such as laws, rules, and peer pressure on people, events, and culture.

English Language Arts F.4.1 – Conduct research and inquiry on self-selected or assigned topics, issues, or problems and use an appropriate form to communicate their findings

- Propose research by formulating initial questions, narrowing the focus of a topic, identifying prior knowledge, and developing a basic plan for gathering information.
- Conduct research by identifying, locating, exploring, and effectively using multiple sources of information appropriate to the inquiry, including print, non print, and electronic sources.

Because Houdini’s family struggled to make ends meet, Houdini helped out by doing odd jobs, such as selling newspapers, shining shoes, and working in factories. Houdini worked long hours, even as a young child, which meant that he did not spend much time in school. Houdini was not alone as a child laborer. Through the 1800s and into the early 1900s, child labor was not at all uncommon, especially for immigrant children whose families were new to life in the United States and were often among the poorest city-dwellers. What kinds of jobs did child laborers have? What were the factories or “sweat shops” where they worked like? Study the picture below to get a sense of the life of a child laborer.



Teenage sweat shop workers cutting neck ties. Houdini also worked in the sweat shops as a neck tie cutter.

- 1) Study the photograph for a couple of minutes to form an overall impression of it.
  
- 2) Use the chart below to list people, objects, and activities in the photograph.

<u>People</u>	<u>Objects</u>	<u>Activities</u>

- 3) Do you think that this picture was taken in a large factory or in a small “sweat shop?” Cite evidence to support your answer.

- 4) What kind of working conditions do you note in this photo? List three things about the conditions pictured here.
  
- 5) What about the work might be difficult?
  
- 6) Do you think that these teenagers attend school? Explain.
  
- 7) In 1916, after this photo was taken, the Keating-Owen Child Labor Act placed restrictions on the employment of children. This act stated that children must be sixteen years old in order to work in a mine or quarry and fourteen years old in order to work in a mill, cannery, workshop, factory, or manufacturing establishment. It also said that children between the ages of 14 and 16 working in mills, canneries, workshops, factories, or manufacturing establishments could not work more than eight hours a day or more than six days a week. They also could not work between 7 p.m. and 6 a.m. How do you think that the Keating-Owen Child Labor Act might have changed the lives of these teenagers?

Read the WGBA-TV news story about child labor at Taco Bell reprinted below:

WGBA-TV

Updated: 10:39 p.m. ET Dec. 17, 2003

Dec. 17 – A company that operates 24 Taco Bell restaurants in 13 Wisconsin communities is accused of violating federal labor laws.

The U.S. Department of Labor accuses the Madison company, Border Patrol Wisconsin, of allowing nearly 160 14- and 15-year-old children to work as late as four a.m. Regulators say some children worked nearly eight hours on a school day, as many as ten hours on non-school day[s] and as many as 35 hours in a school week.

The labor department assessed a civil penalty of nearly 76-thousand dollars.

The 24 Taco Bell restaurants investigated are in Appleton, Ashwaubenon, Brookfield, Eau Claire, Glendale, Green Bay, LaCrosse, Manitowoc, Menasha, Milwaukee, Osseo, Richland Center and Wauwatosa.

Under the law, children that young may work three hours on a school day, 18 hours in a school week, eight hours on a non-school day and 40 hours in a non-school week.

Border Patrol president Rich Lepping says the company's appealed the fine to the Department of Labor and was cooperating with the investigation.

Associated Press

- 1) What is the date of this article?
- 2) What are the accusations against Border Patrol Wisconsin?
- 3) What is Border Patrol Wisconsin relationship to Taco Bell?
- 4) What are the provisions of the law apparently violated?
- 5) What questions does this article raise for you? Where could you look for the answers?
- 6) Are you aware of any other instances of child labor law violations? If so, describe the case.

- 7) What might happen if there was no child labor legislation? How might child labor affect a boy or girl's life – their education, family relationships, relationships with friends, etc.?

There are nations, such as India, that rely heavily on child labor. Using the internet, books, and documents such as photographs, investigate the problem of child labor in India or another country (including the United States). Describe the problem and propose possible solutions. Look into the ways that children are empowering themselves to make a change, as in the Indian children's union, Bhima Sangha, a union of, by, and for working children. (See <http://www.changemakers.net/journal/00april/bhima.cfm> and <http://www.workingchild.org>.)

## *Urbanization*

### Wisconsin State Curriculum Alignment:

Art and Design E.4.1 – Communicate basic ideas by producing studio art forms, such as drawings, paintings, prints, sculpture, jewelry, fibers, and ceramics.

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Social Studies B.4.3 – Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historical events.

Between 1820 and 1920, the number and size of cities in America grew at a tremendous rate of speed. “Urbanization,” the rapid growth of cities, was closely tied to immigration and industrialization. Industrialization meant that labor once done by hand could now be accomplished by machines. New inventions used technical advances to enable fewer people to be more productive than before. For one thing, this meant that less people were needed to work on farms. Farmers found that they could produce a higher yield by using machinery than by relying on slow hand-work. However, following the Civil War’s end in 1865, prices on farm produce dropped. This left farmers in a bad financial state and made paying for new farm machinery difficult. Many farmers were forced to sell their farms and move to the city. In 1820, over 50% of Americans were involved in food production on farms. Compare that to the year 2000 when only 2% of Americans produce food for the entire United States and for export to other countries as well. Also consider that in 1860, 20% of Americans lived in cities and towns were as today 50% of Americans dwell in cities and towns and an additional 25% live in densely populated suburbs.

Many new immigrants to America also settled in cities. They often established their own ethnic neighborhoods where immigrants from the same country gathered together and continued to share the traditions, language, and culture of their homeland. Often, new immigrants had very little money and the neighborhoods in which they could afford to settle reflected this poverty. Housing affordable to immigrants was usually what was known as tenement housing. Tenements were apartment-like buildings, usually built of brick with stone surrounding the windows. Tenements were often very narrow buildings with only very narrow passageways separating one building from the next. Tenement apartments were not usually made up of more than two rooms. In these two rooms the whole family would live and sometimes work. It was also very common for families to take in boarders to their tiny apartments in order to help pay the rent. Often, there were twelve people to each apartment. One room generally served as a kitchen and living space while the other served as a bedroom at night and maybe doubled as a “sweatshop” during the day. A “sweatshop” was an in-home factory where families worked together sewing clothes, rolling cigars, making silk flowers, or cutting times. Families were paid

by the piece for this type of work so that is why anybody with able hands – even small children -- had to help.

Often there was very little fresh air and light in the tenement building. Only a few rooms had windows to the outside and there was no way for that air and light to move to the interior apartments. Other rooms opened onto dark, dingy hallways. It was common for several families to share one outhouse; in fact often more than twenty families used the same outhouse. There was no running water, which meant it was hard to tenants to bathe and wash their clothes. The result of these unsanitary conditions was disease: cholera, typhoid, smallpox, and tuberculosis. Outside the tenement building, peddlers sold their goods in the streets. They sold food alongside piles of manure and garbage lying in the gutters. Children also played in the streets since there were no yards.

Read the following description of the tenements of the “Hebrew Quarter” – an area of the Lower East Side of New York City where many Jewish immigrants settled. This description of the overcrowded tenements comes from journalist Jacob Riis.

The homes of the Hebrew quarter are its workshops also . . . You are made fully aware of it before you have traveled the length of a single block in any of these East Side streets, by the whirl of a thousand sewing-machines, worked at high pressure from earliest dawn till mind and muscle give out together. Every member of the family, from the youngest to the oldest, *bears a hand*, shut in the *qualmy* rooms, where meals are cooked and clothing washed and dried besides, the livelong day. It is not unusual to find a dozen persons – men women, and children – at work in a single small room . . . The overflow from these tenements is enough to make a crowd anywhere. The children alone would do it. Not old enough to work and no room for play, that is their story. In the home the child’s place is *usurped* by the lodger, who . . . pays the rent. In the street the army of *hucksters* crowd him out. Typhus fever and smallpox are bred here . . . Filth diseases both, they sprout naturally among the *hordes* that bring the germs with them from across the sea, and whose first instinct is to hide their sick lest the authorities carry them off to the hospital to be slaughtered\*, as they firmly believe. The health officers are on constant and sharp lookout for hidden fever-nests . . .

Up two flights of dark stairs . . . smells of cabbage, of onions, of frying fish, on every landing, whirring sewing machines behind closed doors *betraying* what goes on within, to the door that opens to admit the bundle and the man. A *sweater*, this, in a small way. Five men and a woman, two young girls, not fifteen, and a boy who says unasked that he is fifteen, and lies in saying it, are at the machines sewing *knickerbockers*, “knee-pants” in the Ludlow Street dialect. The floor is littered ankle-deep with half-sewn *garments*. In the *alcove*, on a couch of many dozens of “pants” ready for the finisher, a bare-legged baby with pinched face is asleep. A fence of piled-up clothing keeps him from rolling off on the floor. The

faces, hands, and arms to the elbows of everyone in the room are black with the color of the cloth on which they are working . . .

Evening has worn into night as we take up our homeward journey through the streets, now no longer silent. The thousands of lighted windows in the tenements glow like dull red eyes in a huge stone wall. From every door multitudes of tired men and women pour forth for a half-hour's rest in the open air before sleep closes the eyes weary with incessant working. Crowds of half-naked children tumble in the street and on the sidewalk, or doze fretfully on the stone steps. As we stop in front of a tenement to watch one of these groups, a dirty baby in a single brief garment – yet a sweet, human little baby despite its dirt and tatters – tumbles off the lowest step, rolls over once, clutches my leg with unconscious grip, and goes to sleep on the flagstones, its curly head pillowed on my boot.

\* Some immigrants did not know what would happen when loved ones were taken to the hospital. This may be because they did not have access to such facilities in their homeland.

From Jacob Riis' *How the Other Half Lives*. New York: Charles Scribner's Sons, 1890.

Re-read Riis' description of the tenements to get a mental picture of what life in the tenements was like. Draw a picture of a tenement building or apartment that shows a scene from daily life as you imagine it would have been. Write a short description of what is going on in your picture.

## Glossary

**Bears a hand** – Lends a hand, pitches in

**Qualmy** – Rooms filled with sickness

**Usurped** – Taken over by

**Hucksters** – People who sell wares in the street

**Hordes** – Masses, crowds

**Betraying** – Giving up a secret

**Sweater** – Sweatshop

**Knickerbockers** – Pants gathered and banded just below the knee, knickers

**Garments** – Clothes

**Alcove** – A partly enclosed section of a room

## *The Industrial Revolution*

### Wisconsin State Curriculum Alignment:

Social Studies E.8.8 – Give examples to show how the media may influence the behavior and decision-making of individuals and groups.

Social Studies B.8.1 – Interpret the past using a variety of sources, such as biographies, diaries, journals, artifacts, eyewitness interviews, and other primary source materials, and evaluate the credibility of sources used.

Social Studies B.8.8 – Identify major scientific discoveries and technological innovations and describe their social and economic effects on society.

English Language Arts B.8.1 – Create or produce writing to communicate with different audiences for a variety of purposes.

- Write a persuasive piece (such as a letter to a specific person or a script promoting a particular product) that includes a clear position, a discernable tone, and a coherent argument with reliable evidence.

Houdini came to America during the height of the American Industrial Revolution. By the late 1700s Americans were already experimenting with machines to find how they could reduce human labor. In 1790, a British immigrant named Samuel Slater built America's first water-powered textile mill in Pawtucket, Rhode Island. This marked the beginning of America's Industrial Age. Only three years later, the American Eli Whitney invented the cotton gin, a machine that cleaned cotton and removed cotton seeds.

By the mid 1800s, American cities were growing as factories opened and people came from rural areas in the hopes of finding jobs. After the end of the Civil War in 1865, many freed slaves migrated North to escape white southerners' anger and to build a better life. This migration was greatly helped by trains powered with steam locomotives, invented in 1804. The steamship, telegraph, telephone, improved printing methods, and improved postal delivery were also products of the Industrial Revolution.

All of this productivity came at a price, however. New machines could do the work that skilled workers had spent years perfecting. This enabled factories to hire unskilled laborers for lower pay to run the machines. In order to increase productivity, factories also increased the length of the working day. Laborers often worked twelve hour shifts six to seven days a week. The pay was low and working conditions were poor.

However, for immigrants in the cities, factory work was one of the few options available. Many of the 25 million immigrants that entered America between 1866 and 1915 became factory workers. Several of the immigrants from this era came from Eastern and Southern Europe and also faced many prejudices.

Some photo journalists went into immigrant ghettos and factories and snapped pictures showing the difficult conditions in which immigrants worked and lived. Study the photo below and analyze it with the help of the questions provided.

Many people referred to investigative journalists of the day as muckrakers. In a 1906 speech, President Theodore Roosevelt compared investigative journalists of the early 1900s to a person whose job it was to literally rake up muck (animals' dung.) Following the speech, investigative journalists became known as muckrakers. (See [www.spartacus.schoolnet.co.uk/Jmuckraking.htm](http://www.spartacus.schoolnet.co.uk/Jmuckraking.htm)) The muckrakers investigated and wrote about injustices in society, hoping to encourage reform. They tackled subjects such as treatment of prisoners in jail, health concerns related to food processing, the abuse of child labor, the destruction of natural resources, and unacceptable working conditions in factories.



Girls at the weaving machines, Lincoln Cotton Mills, Evansville, Indiana. Library of Congress LOT 7479, v.1, no. 0220 [P&P]

- 1) What type of factory do you think this is? Cite evidence to support your answer.

- 2) This girl is working on a loom weaving cloth. What about her work might be dangerous or uncomfortable?
  
  
  
  
  
  
  
  
  
  
- 3) What kind of working conditions does the factory provide? Things to think about include: Is there adequate light? Is there fresh air provided? Are there precautions to keep the workers safe in case of an accident or fire?
  
  
  
  
  
  
  
  
  
  
- 4) Is this a factory in which you would like to work? Why or why not?
  
  
  
  
  
  
  
  
  
  
- 5) What kinds of technology are used in this factory? How do you think this technology might have changed the way this job was done? How do you think it affected the workers?

Go to the library and find books on the American Industrial Revolution and the lives of factory workers in the late 1800s and early 1900s. Read about the conditions in which many immigrants lived and worked at the time. Write your own piece of muckraking journalism and try to convince your audience that conditions need to change. What will you tell your audience to convince them that conditions are unacceptable? What improvements can you suggest? Do you think that you and other muckrakers can convince factory owners and tenement housing landlords to make those changes on their own or do you think that change needs to start with laws that protect the immigrants from unsafe conditions? Try to use your skills as a writer to convince people to take action! After writing your article about living and working conditions for immigrants of the late 1800s and early 1900s, try to think of a modern-day cause that a muckraker journalist might write about. Where is corruption occurring in today's society? Do you know of groups that suffer poor living and working conditions? Write down your ideas about subjects for a modern muckraking article.

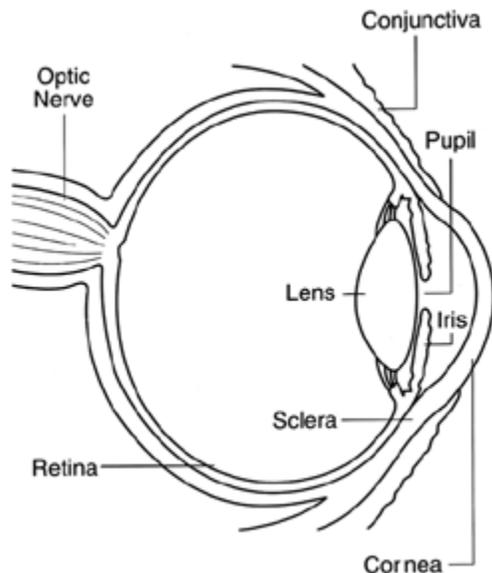
## *What is Illusion?*

### Wisconsin State Curriculum Alignment:

Health A.4.5 – Describe the basic structure and functions of the human body systems.

An illusion is an image or representation believed to be real in our mind's eye, but that is not actually real. In other words, because of the way our eyes and brain work, our eyes are tricked into seeing something that is not really there or into seeing something happen that did not really happen. Illusions can be very deceiving, and magicians use illusions to their advantage to make the audience believe that something happened by magic. Optical illusions tell a story about how our eyes and brain work together to allow us to see.

First, let us learn about how our eyes work. Look at the diagram below and locate the different parts of the eye. The outer part of your eye is called the *cornea*. The cornea is transparent and acts as a shield for your eye, keeping germs and dust away from your eyeball. It also directs light into your eye through the *iris* (the colored part of your eye) and into the *pupil* (the dark spot at the center of your eye.) When light passes through the pupil it moves on to the *lens*. The lens sits behind the cornea. As light passes through the lens, it is focused and forms an image on the eye's *retina*. The retina acts like film in a camera, capturing an image of what the eye is seeing, using cells that recognize light, color, and movement.



The image captured is not yet what we see, however. It is upside down at this point, and needs to be “interpreted” by the brain before we know what we see. Another important thing about the retina is that there is a part of it that does not have any of those special cells that capture the image. This is our “blind spot.” Any image that falls on this area will not be seen. The blind spot does contain optic nerves which transport the captured image from the eye to the brain. Sometimes the blind spot confuses the nerve impulses that transport the image to the brain, causing a misrepresentation -- an illusion.

From <http://library.thinkquest.org/J0110336>

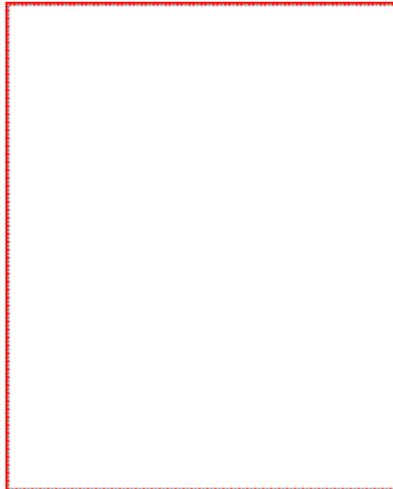
The brain receives the image through nerve impulses from the optic nerve and somehow (scientists do not yet know how) turns it right side up. The brain “interprets” what the eyes see, sometimes using past experiences to help it put together an image. That is why you can look at a familiar saying, like

A penny saved is  
is a penny earned.

and read it as “A penny saved is a penny earned” even though it actually contains an extra word (“is is”). Your mind is seeing what it expects to be there, not what is actually there.

There are several different kinds of optical illusions. Scientists do not understand how all of them work. Some illusions distort an image’s size, shape, or length. Some use shadow and light or an image’s surroundings to work. In all cases we are tricked into seeing something that is not really there, or into seeing only part of what is there.

One type of optical illusion is the after image. An afterimage occurs when we stare at a picture or object for a while and then look away, but still see the image even though it is no longer in front of us. After images happen because of the level of contrast (the amount of difference between light and dark, for example a dark image against a white background) and brightness of the image. Try this: look at this picture of a woman for about one minute, then look at the empty box on the right. You just might see an image of the woman in the box, even though you know it is empty.



From <http://library.thinkquest.org/J0110336>

Another type of illusion is the ambiguous illusion. This is when your brain can interpret a single image to be more than one thing. Depending on how you look at an image – the angle of the image, shading from light to dark, and the way the image is related to your past experiences – you may see something entirely different than what your neighbor sees. Here are some examples:

Here is a picture of a man, but what else is he?



From <http://library.thinkquest.org/J0110336>

Do you see a duck or a bunny in this picture?



From <http://library.thinkquest.org/J0110336>

Some illusions cause us to see an object or scene that could not logically exist. This is accomplished through the use of shading, which can cause something to appear to be farther away, and lines, which appear to give depth or dimension. Look at the “impossible triangle” illusion. At first glance, it just looks like a normal triangle, but take a closer look. Where does it end?

The illusions described above are just a few of the thousands of illusions that exist. Let us try to make our own optical illusion now. This illusion is called “watch the colors disappear” and it is taken from *Science Magic: Scientific Experiments for Young Children* by Alison Alexander and Susie Bower.

Follow the directions below:

You will need: Crayons, scissors, cardboard, ruler, jam jar lid, large-eyed needle (a wool needle is ideal), length of string about 3 ft.

- 1) Use the jam jar lid as a pattern to draw a circle on the piece of cardboard. Cut out the cardboard circle.
- 2) Find the exact center of the cardboard circle by cutting a circle of the same size out of paper and folding it into quarters. Open it up; the point where the lines cross is the center. Using this paper as a guide, mark the center of the cardboard circle.
- 3) Now, divide the cardboard circle into six equal parts. Color each section differently using colors of the rainbow – red, orange, yellow, green, blue, and purple. Repeat on the disc's opposite side matching the colors on the back to those on the front.
- 4) With the needle or the point of the scissors, *carefully* make two small holes on either side of the circle's center point, half an inch apart.
- 5) Thread the string through the holes and knot the ends together to form a loop.
- 6) Put one finger in each loop and twist up the string by spinning your hands around. By moving your hands together and apart again, you can make the disc spin. What happens?
- 7) All of the colors will seem to disappear as the disc spins and the disc will look as though it is white.
- 8) When the disc is spinning, all of the colors go around very fast. Because you see them all at the same time, your eyes can't separate the colors out. Instead, your brain thinks the disc has no color at all and that it is white.
- 9) By the same token, you can see colors in a black and white disc as it spins. Use the same disc pattern and locate the center of the cardboard disc. This time, divide the disc into eight equal sections. Using India ink (careful – this stains!) or a black permanent marker (the black sections must be very black), color every other section. Again, repeat this on the other side, matching the black sections with those on the front. Using the needle or tip of the scissors, make a small hole on each side of the center point, one-half inch apart. Thread the string through the holes, tying it into a loop. Spin the disc and see if you can see colors. In this instance, scientists believe that when the retina receives repeated flashes of white light for a short time, the optic nerves fire in patterns that your brain interprets as color. You can see color when no color exists.

Try these optical illusions out on your friends and family! Do they see what's really there or does their brain cause them to see something else?

## *The Science of Magic*

### Wisconsin State Curriculum Alignment:

Science C.4.2 – Use the science content being learned to ask questions, plan investigations, make observations, make predictions, and offer explanations.

Science C.4.6 – Communicate the results of their investigations in ways their audiences will understand by using charts, graphs, drawings, written descriptions, and various other means, to display their answers.

The success of a magic trick or illusion often has a lot to do with the science behind it. In other words, many magic tricks and illusions are based on relatively simple scientific principles combined with sleight of hand or misdirection, and it is because of science that magic works. Let us take a look at a couple of magic tricks made possible by science.

The first is called the “Hydrostatic Glass.” It is a trick done by a magician named Friedhoffer, “The Madman of Magic,” and explained in his book *Magic Tricks, Science Facts*.

Effect: Water miraculously stays in a glass that is turned upside-down.

Routine: The audience will watch you fill a clear glass to its rim with water. You will then cover the mouth of the glass with an index card.

Holding the card in place, turn the glass upside down and “order” the water to stay in place. Take your hand off the card. Amazingly, the water and card stay put! After a moment “command” the water and card to fall – just make sure you’re standing over a bucket or sink. The water and card obey.

Props: A clear plastic drinking glass

An index card larger than the mouth of the glass – a 4” x 6” card should work well

A bucket of water

Method:

- 1) Drill a small (about 1/16”) hole into the side of the glass near the bottom (see the illustration.)
- 2) Pick up the glass with one hand, covering the hole with your thumb. You need to completely cover the hole with your thumb so that when you pour water into the glass, the water won’t run out.
- 3) Fill the glass by dipping it into the bucket.
- 4) Using your other hand, cover the mouth of the glass with the index card. Place your hand lightly on the index card keeping the card over the mouth of the glass, slowly turn it upside down. Make sure that your thumb stays over the hole at the bottom of the glass.

- 5) Remove your hand from the index card. If you have done the trick correctly, the water will stay in the glass covered by the card.
- 6) After a short while, “command” the water to fall by moving your thumb slightly away from the hole. Make sure you are holding the glass over the sink or bucket when you do this.

Why it works:

Air pressure caused by air pushing up on the card forces the water to stay inside of the glass. As soon as you move your thumb away from the hole, air moves into the glass creating air pressure inside the glass that equals the air pressure outside the glass. Now, gravity can work properly – combined with the air pressure inside the glass, it is not the stronger force – and the index card and water will fall.

To learn more about air pressure, check out the *Household Science for Kids* website at <http://www.flatlion.com/science/airpressure.html>.

Another trick that works because of the principles of science is called “Quick Money.” It is found in a book called *Magic . . . Naturally* by Vicki Cobb.

Effect: You offer a dollar bill as a prize to anyone who can catch it as you let it fall. Yet time after time, it eludes their grasping fingers. It appears that no one can hang onto the money except you.

The Routine: Announce to your audience that anyone who catches the bill when you let it drop can keep it. Hold the bill vertically by one end. Have a friend put his or her fingers around the bill. Tell the audience that this will allow your friend to be “as ready as possible” to catch the money as it drops. However, your friend should not touch the bill until you let go. As long as you follow these instructions, no one else should be able to catch the bill. But you should be able to drop the bill yourself and always be able to catch it (as will anyone who both drops and catches.)

Props: All you need for this trick is a fairly new, unwrinkled dollar bill.

How it works:

The short amount of time it takes us to move our muscles in reaction to something we see is called *reaction time*. The reaction time needed to respond to the sight of the dollar bill falling through our fingers is very short – less than  $\frac{1}{4}$  of a second for most people. But, this very short period of time still isn’t fast enough, for by then the bill has already fallen past the grasping fingers.

However, when you drop and catch the bill yourself, you are not using the sight of the falling bill as a signal to grasp it. Instead, you are reacting to the internal feeling you get when you let go. Your body can coordinate the grasping motion with this internal muscle signal quickly enough to catch the bill.

To learn more about reaction time, try the Reaction Time activity on the Science Net Links website (<http://www.sciencenetlinks.com/lesions.cfm?DOCID=68>.) This activity will give you ideas about how to test your reaction time and strategies for improving your reaction time. After completing the activity, make a prediction regarding the “Quick Money” trick. What do you think would happen if the catcher practiced catching the bill ten times? Would his or her reaction time improve? Would he or she be able to catch the bill? Create a chart to log reaction time using a stopwatch. Is the catcher able to improve his or her reaction time? Is he or she ever able to catch the bill?

## *The Magic of Math*

### Wisconsin State Curriculum Alignment:

Math A.4.3 – Connect mathematical learning with other subjects, personal experiences, current events, and personal interests

- See relationships between various kinds of problems and actual events
- Use mathematics as a way to understand other areas of the curriculum

Math B.4.5 – In problem-solving situations involving whole numbers, select and efficiently use appropriate computational procedures such as

- Recalling the basic facts of addition, subtraction, multiplication, and division
- Using mental math

Just as scientific principles are instrumental in making magic tricks successful, so are the concepts of mathematics. Especially in the field of “mental magic,” math is an important factor in the success of many illusions. Mental magic is a type of magic performance that usually requires no props and uses the thought processes of the audience to be successful.

Magic squares are a type of mental magic. The Chinese invented magic squares many centuries ago. An example of a magic square appears below.

4	9	2
3	5	7
8	1	6

In a magic square, whether you add up, down, or across, you will always come up with the same sum. This number is called the magic total. In this case, you will always arrive at the number 15.

$$\begin{aligned}4+9+2&=15 \\3+5+7&=15 \\8+1+6&=15 \\4+3+8&=15 \\9+5+1&=15 \\2+7+6&=15 \\4+5+6&=15 \\2+5+8&=15\end{aligned}$$

This example is an order three square since it has three rows and three columns. You can make other order three squares by adding the same number to each number in the square or by multiplying each number in the square by the same number. Here is an example:

4	9	2
3	5	7
8	1	6

+2 to each number in the square =

6	11	4
5	7	9
10	3	8

To make an order four magic square, enter the numbers 1-16 (or any other 16 consecutive numbers) onto a 4x4 grid as shown. I'll start with the number 5 for the sake of this example.

5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

Now: Switch the corners along the diagonals like this:

20			17
8			5

Also, switch the four center numbers along the diagonals:

20			17
	15	14	
	11	10	
8			5

Add the remaining numbers back into the square in their original positions.

20	6	7	17
9	15	14	12
13	11	10	16
8	18	19	5

Add all of the rows, columns, and diagonals and you will get the same number.

$$20+6+7+17=50$$

$$9+15+14+12=50$$

$$13+11+10+16=50$$

$$8+18+19+5=50$$

$$20+9+13+8=50$$

$$6+15+11+18=50$$

$$7+14+10+19=50$$

$$20+15+10+5=50$$

$$8+11+14+17=50$$

Also, the numbers in the center add up to 50:  $15+14+11+10=50$

Use the directions above to create your own 3x3 or 4x4 magic square. Check the square by adding each row, column, and diagonal to make sure they add up to the same sum.

Here is another mathematical magic trick that will astonish and amaze your friends and family! This trick is found in a book called *Math-a-Magic: Number Tricks for Magicians* by Laurence B. White, Jr. and Ray Broekel. It is called "No Questions Asked."

Effect: You are able miraculously to guess the number of which a friend is thinking.

Routine: Tell your friend to think of any even number and to remember that number. Now ask her to double the number she chose (in her head, not aloud.) Now, have her add 12 to the total (again in her head.) Next, have her divide this total by 4 and remember the new total. Finally, have her divide the original number by half and subtract this number from the last total.

You will now read your volunteer's mind. Ask him or her to concentrate on her final number. Pretend to struggle figuring it out. Pretend as though you are really a mind reader. It will be easy to play the part, though, because your volunteer will always be thinking of the number 3.

Method: Do the trick as instructed and it will always work for you. But, be warned since the answer is always three, you probably will not want to repeat the trick using the same volunteer or he or she will catch on quickly.

How it works: Remember that you start by asking your volunteer for an even number. Since later in the trick, you ask him or her to subtract half of that number it is easiest to think of the number your friend chooses as two halves of a whole. For example, let us start with the number 4.

4= the magic number; which is the same as  $2 \times \frac{1}{2}$  the magic number, or  $2 \times 2$

When you double it, you get  $2 \times 2 \times \frac{1}{2}$  the magic number, or  $2 \times 2 \times 2$

This is the same as  $4 \times \frac{1}{2}$  the magic number or  $4 \times 2$ , which is 8.

Now, add 12 to this number.  $4 \times \frac{1}{2}$  the magic number + 12 = 8 + 12

Now, divide by four.  $\frac{4 \times \frac{1}{2} \text{ the magic number} + 12}{4} = \frac{8}{4} + \frac{12}{4}$

You get  $\frac{1}{2}$  the magic number + 3.

Now, subtract the  $\frac{1}{2}$  of the magic number.  $\frac{1}{2}$  the magic number + 3 -  $\frac{1}{2}$  the magic number = 2 + 3 - 2 = 3.

Wow! Isn't that cool? You can appear to have magical powers even though you are just using the power of math! Try these awesome math-a-magic puzzles on your friends and family.

## *The Psychology of Magic*

### Wisconsin State Curriculum Alignment:

Theater Arts E.4.6 – Rehearse and perform a scene or play for peers and invited guests

Health F.4.1 – Distinguish between and demonstrate verbal and nonverbal communication

In order to be successful, magicians also rely on psychology. Psychology is the science that deals with the way our brains work and how we behave as a result. Magicians rely on their knowledge of psychology and specifically memory, perception (how we recognize and interpret things we see, hear, taste, touch, or smell according to information stored in our brains,) and deception (the act of misleading someone into believing something that is false) in order to practice their art. Using psychology, they create an “effect” (what the audience sees or perceives). The way that they do this is called the method. Author Simon Singh describes the method as “the magician’s secret way of achieving the effect.” Often, psychology is used to disguise the method and separate it from the effect. The audience will then see the effect, but not the method.

Physical misdirection is one way magicians use psychology to disguise their method. Through physical misdirection, the magician can direct the audience’s attention to something, and while they are focused on that, the magician can perform the trickery elsewhere, totally unnoticed. Misdirection works because of psychological principles, like the tendency of the human mind to be easily distracted by movement or the introduction of something new, and the tendency to look where others are looking. A simple example follows: A magician shows an empty hat, then turns to introduce his assistant. As he looks toward her, so does the audience. The assistant trips coming onto the stage and while the audience’s attention is on her, the magician sneaks a rabbit into the empty hat.

In mental misdirection, a magician misdirects the audience’s suspicion rather than their attention. The magician, in other words, uses a “false method,” doing the trick in such a way that the audience thinks they know how it works, but in the end are still left baffled. As the audience focuses on the false method, they miss the real one, and their attempts to figure out how the trick is done fail.

Here is a trick that uses physical misdirection to fool the audience. Practice it and try it on your friends and family. It is called the “Balancing Grape” and it is taken from the *Usborne Book of Magic Tricks*.

- 1) Start with your first finger pointing upwards, secretly holding a cocktail stick or toothpick behind it with your thumb. Keep the point just below the tip of your finger.
- 2) Tell the audience that you will balance a grape on your finger. Push the grape onto the cocktail stick, pretending to position it on the end of your finger.

- 3) Move your hand as if it is difficult to keep the grape balanced, and pretend to concentrate hard. Keep your palm towards you to hide the cocktail stick.
- 4) To finish, take the grape off the cocktail stick and give it to someone in the audience to try the trick. While no-one is watching, put the stick in your pocket.

The next trick uses mental misdirection to fool the audience. Practice it and try it on your friends and family. It is called "Gambler's Bluff" and again comes from the *Usborne Book of Magic Tricks*.

- 1) A good gambler's voice will not give away his cards. Here you pretend to recognize a chosen card from the tone of a volunteer's voice. To prepare, put the four aces aside and secretly put six hearts on top of the pack and six on the bottom.
- 2) Ask a volunteer to deal the 48 cards into six piles, take a card from the middle of a pile and memorize it.
- 3) Then ask her to put her card on top of any pile, and put the other piles on top and underneath.
- 4) Let her cut the pack a few times, then ask her to deal the cards face-up, naming them as she deals them.
- 5) Stop her when you hear a card between two hearts. It is her card. Pretend you knew from her voice.
- 6) If you miss it, ask her to deal again. It could be the first card in the pack if the second is a single heart.

Practice these tricks and perform them for your friends and family. Observe their reactions to see if your attempts at misdirection are working.

## *Dime Museums and Side Shows*

### Wisconsin State Curriculum Alignment:

Health F.4.3 – Describe and demonstrate ways to communicate care, consideration, and respect for themselves and others

Health F.4.4 – Describe and demonstrate attentive-listening skills to build and maintain healthy relationships

Social Studies E.4.9 – Explain how people learn about others who are different from themselves.

Before Houdini became famous, he performed his magic act for the “lowest rung” of the entertainment industry: circuses, medicine and burlesque shows, and dime museums. These were not seen as respectable forms of entertainment by the middle and upper classes, so they catered to the working classes. This meant that admission prices were fairly low, and in some cases so was the quality of the act.

Houdini spent a lot of time performing in dime museums. These were theater-museums that charged 10¢ admission. Early dime museums exhibited works of art and natural wonders, but by the 1880s, dime museums also relied on live shows to entertain the audiences. They created a circus-like atmosphere with what amounted to “side shows.” In other words, professional showmen like P.T. Barnum (of the Barnum and Bailey Circus) put people who had unusual talents or physical features on exhibit and charged admission for the public to see what they called “freaks and geeks.” Now, the term “freaks” is not seen as a kind or appropriate word to use, but in Houdini’s day, many people used this word when talking about a person that had a physical disability or abnormality. For example, a person born without arms, who used his or her feet to do the things others would usually do with hands, might be termed a “freak.” “Geeks,” another term seen as offensive today, described performers who did not have a physical disability but had an unusual talent – like a snake charmer. Today we know that it is offensive to single people with disabilities or unusual characteristics out as “human curiosities.” Just because someone is different from you does not make gawking at him or her right, and it certainly doesn’t mean that he or she is any less intelligent, sensitive, or talented than you may be.

We would say that to single someone out as a “freak” or “geek” and to put him or her on display is wrong, but there were some advantages for side show performers of Houdini’s era. First of all, side show performers (“freaks”) were often well-paid, better than the “geeks” or other dime museum variety performers like magicians, or singers and dancers. Working in a side show provided a job opportunity for people with disabilities at a time when there weren’t many jobs open for them. The pay helped them to support their families and even made some famous side show performers rich. One example is Tom Thumb, a man who had a medical condition known as dwarfism that prevented him from growing more than 25” tall. With P.T. Barnum promoting him, Tom Thumb became an international star, rich and famous.

Houdini performed alongside side show performers in dime museums. He became close friends with many of them and came to appreciate the differing abilities that we all have. According to one author, “[Houdini] did enjoy knowing the freaks. They were the museum stars, capable of drawing large crowds and matching salaries. Harry worked with and befriended Count Orloff, the atrophied “Human Window Pane” (“You Can See His Heart Beat! You Can See His Blood Circulate!), who gave him a picture and autograph -- “To my friend Houdinis [sic].” He also got to know Unthan, the armless wonder who could play the violin with his toes, and Thardo, a beautiful woman who submitted herself to repeated rattlesnake bites . . . He corresponded and kept in touch and developed long term friendships with them.” (Silverman, p.11)

Since the time Houdini performed alongside side-show performers, people have learned a lot about being sensitive to people with disabilities or those who are different from themselves. With your class, hold a think-aloud discussion about what it means to be sensitive to other people and how we can be sensitive to people with disabilities or differences and treat them with respect. You may want to record your class’ responses on the board or overhead projector using a bubble diagram. When you have completed your brainstorming, look over the suggestions on “disability etiquette” given by the Eastern Paralyzed Veterans Association. These suggestions can help us all to be better friends.

- 1) Say “person with a disability” rather than “disabled person.” In this way you put the person first. If you know the specific disability, such as cerebral palsy, you can say “person with cerebral palsy.” If you’re not sure what words to use, just ask. Try not to use words that are outdated, like “handicapped” or “crippled.”
- 2) Ask Before You Help – Don’t assume that a person with a disability always needs help. Often times people with disabilities can get around just fine and they appreciate being treated like independent people. If it seems like someone needs help, ask him or her before helping. If he or she says yes, ask how you can help before acting.
- 3) Think Before You Speak – Always speak directly to a person with a disability. Don’t try to communicate with him or her through someone else, like a companion, aide, or sign language interpreter. Just talk to people with disabilities as you would with anybody else.
- 4) Don’t Make Assumptions – People with disabilities know best what they can and cannot do. Don’t make decisions for them about participating in activities. In other words, don’t automatically exclude a friend with a disability just because you think that he or she can’t participate in an activity due to his or her limitations. Let your friend judge for himself what he can and can’t do.
- 5) Wheelchair users are people, not equipment. Don’t lean over someone in a wheelchair to interact with someone else. Also, don’t ask a wheelchair user to hold your coat. He or she is not a coat rack. Finally, don’t push or touch a person’s wheelchair. It is part of his or her personal space. When speaking to a wheelchair user, grab your own chair and sit at his or her level.
- 6) When you approach someone who is blind, identify yourself before making physical contact. Tell him or her your name and role (like “Hi, it’s Joe, your

- classmate) if appropriate. You may help a person who is blind by offering to read written information to him or her.
- 7) People who are blind use their arms for balance, so offer your arm – don't grab the arm of a person who is blind – if he or she needs guidance. If the person has a guide dog, walk on the side opposite the dog. As you are walking, describe the setting, noting any obstacles, such as stairs, or a big crack in the sidewalk. Also, don't touch the person's cane or guide dog. The dog is working and needs to concentrate, and, like a wheelchair, the cane is a part of the individual's personal space.
  - 8) Before speaking to a person who is deaf or hard of hearing, make sure that you have his or her attention and that he or she can clearly see your mouth. This will help him or her to read your lips if necessary. Rephrase, rather than repeat, sentences that the person doesn't understand. Speak clearly and avoid chewing gum.
  - 9) When talking to a person with mental retardation, speak in clear sentences using simple words. Help him or her to understand a complicated idea by breaking it down into smaller parts. Take your cue from him or her to gauge the pace, complexity, and vocabulary of the speech you use. Be patient when waiting for a person with mental retardation to answer your question. It can be difficult for them to make quick decisions.
  - 10) Remember – people with disabilities are individuals with families, jobs, hobbies, likes and dislikes, and problems and joys, just like you!

## *Problem Solving – Dime Museum Harry*

### Wisconsin State Curriculum Alignment:

Marketing E.4.1 – Give examples that show how the problem-solving process works.

Marketing E.4.2 – Explain when problem-solving could or should be used

Marketing E.4.3 – Identify a specific problem or concern and evaluate it.

Marketing E.8.2 – Apply problem-solving skills to a current issue or concern

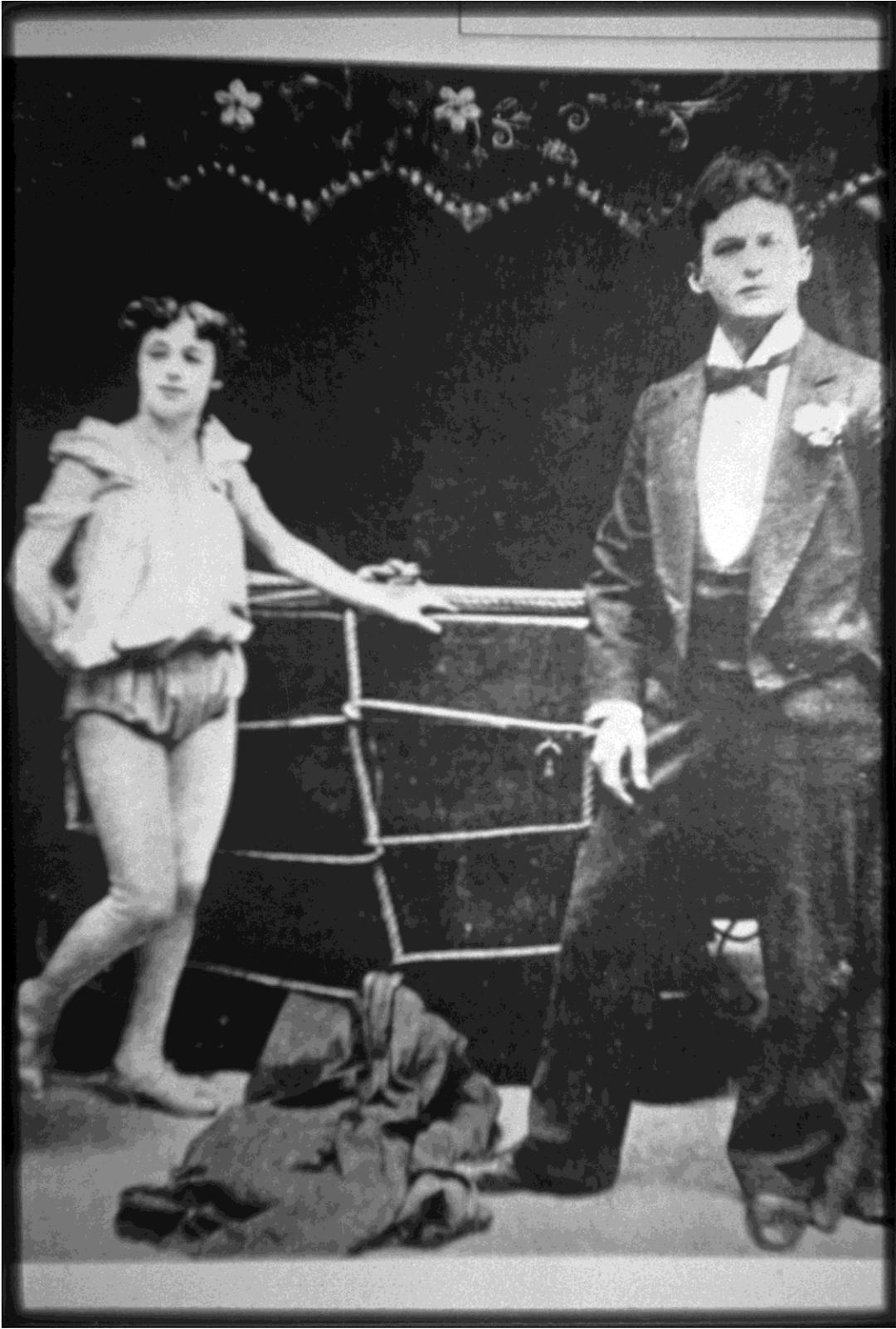
- Gather and interpret information about the concern
- Form sound conclusions about what should be done in the situation
- Give reasons to support conclusions
- Evaluate the evidence and reasons used in forming conclusions

Marketing G.4.3 – Use adult role models and other resources to learn about problem-solving as it relates to work in each of the four broad types of work (human, enterprise, technology, invention)

When Houdini was 17 years old, he and his younger brother Theo performed at the Wonderland Theater, a dime museum in Milwaukee, Wisconsin. It was November 7, 1892 when Houdini and Theo took the stage at the Wonderland. They performed their Mystery Box trick for the anxious audience. Larry Wilden writes in his article, “Milwaukee’s Dime Museums,”

In the illusion performed at Wonderland, [Houdini’s] hands were tied behind his back and he was placed in a sack with its mouth securely tied shut. The sack was then placed in a large box which was fastened, locked, and tied with more ropes. The brothers worked a new twist into this old trick that was more than just the expected escape. A curtain was placed over the box with [Houdini] inside. Three seconds later, when it was removed, [Houdini] was standing next to the box. When that was unlocked, Theo was inside the sack with his hands tied behind his back.

Try to imagine what it might have been like to be in the audience on November 7, 1892 and watch Houdini and his brother Theo perform the Mystery Box illusion, later called the Metamorphosis. Imagine also that you are Houdini preparing to perform the trick for the audience. You are about to have your hands tied behind your back. Your brother will place you in a sack which will be tied shut. Then, he will place you in a trunk that is fastened, locked, and tied with more ropes. It seems as if you are stuck, but in just three seconds time, you will have switched places with your brother, and he will have his hands tied behind his back, and he will be tied in the sack and locked in the trunk.



Houdini and his wife Bess perform the Metamorphosis. Collection of the Outagamie County Historical Society.

Then, he will place you in a trunk that is fastened, locked, and tied with more ropes. It seems as if you are stuck, but in just three seconds time, you will have switched places with your brother, and he will have his hands tied behind his back, and he will be tied in the sack and locked in the trunk.

How is this possible? Houdini was a great problem solver. He found ways to do that which seemed impossible to the audience. The Mystery Box (Metamorphosis) trick presented a problem to Houdini – He had to figure out how to quickly release himself from the restraints of the rope, sack, and trunk, while at the same time his brother had to be restrained and shut in the trunk. Let's go through some of the steps of problem solving to see if you can help Houdini find a solution to his problem. First, it is important to **Understand the Problem**.

- 1) How would you describe the problem? State the problem in your own words.
- 2) What are you trying to find or do? In other words, what does the solution of the problem look like?
- 3) What information does the description of the trick/problem give you? What information is missing or unknown?

Secondly, **Create a Plan of Action**

- 1) Look at related problems, and determine if the same technique can be used to solve this problem.
- 2) Make a diagram.
- 3) Guess at the solution and check your ideas to see if they are workable.
- 4) Identify sub goals (such as escape from rope around wrists and escape from sack.)

Thirdly, **Carry out the Plan**

- 1) Implement your plans from step 2.
- 2) Check each step as you proceed. (Illustrate how your ideas will work.)
- 3) Keep an accurate record of your work. Don't just keep your ideas about solutions in your head; write them down.

Step 4: **Looking Back**

- 1) Check your results (It may not be reasonable with Houdini's kinds of problems to try the solution yourself, but research about Houdini's magic can help you to know how Houdini solved the problems behind his illusions, escapes, and tricks.)
- 2) Interpret your solutions in terms of the original problem. In other words, does the answer make sense? Is it reasonable?
- 3) Think about other possible ways of solving the problem. Are there other answers that also work?
- 4) If possible, find similar problems for which your techniques will work as well.

Some information that may help as you attempt to solve the problem of the Mystery Box (Metamorphosis) Illusion:

- 1) Houdini used different methods of escaping from restraints. Sometimes, Houdini hid keys, lock picks, or tools on (or in) his body. He put lock picks and keys in his hair and could swallow and regurgitate tools. He might also hide keys, tools, or lock picks in his clothing. Sometimes, Houdini could wiggle his way out of restraints such as handcuffs, ropes, or straight jackets, or he used cuffs that were rigged to open easily. Houdini also might wear a metal plate on his leg to break open locks with a sharp knock.
- 2) Houdini was a creative problem solver. He could often see that there was more than one solution to a problem. He played upon the audience's assumptions about the way things worked, and their desire to be fooled, in order to be successful in his escapes and illusions. For example, because the audience saw how Houdini stepped into the sack and was tied up in it and how he entered the trunk and was locked inside, they probably assumed that in order to come out, all of these actions needed to be "undone." They most likely thought that the sack had to be untied and the trunk unlocked and opened in the same way, in order for Houdini to get out and Theo to get in. But Houdini knew that there was more than one way of doing things – he was a master at devising unlikely ways out of restraints like sacks or boxes.
- 3) Remember that the Mystery Box (Metamorphosis) was performed behind a curtain. The curtain would be opened while Houdini presented the trick and was tied up, restrained in the sack, and locked in the trunk. Then, Theo would close the curtain and count to three before Houdini opened the curtain to reveal the switch. The audience could not see what went on behind the curtain.

Come up with a possible solution for the Mystery Box (Metamorphosis) trick. As a class, you can check your work by visiting the Outagamie County Historical Society's *A.K.A. Houdini* exhibit (and trying the trick yourselves in a safe environment), visiting our virtual exhibit at [www.foxvalleyhistory.org](http://www.foxvalleyhistory.org), or researching Houdini's magic. *Who Was Harry Houdini?* By Tui T. Sutherland (Scholastic Books, 2003) provides an explanation of the trick and gives a biography of the Master Mystifier.

## *Vaudeville*

### Wisconsin State Curriculum Alignment:

Theater E.4.4 – Create publicity for a dramatic presentation

Theater E.4.6 – Rehearse and perform a scene or play for peers and invited guests.

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Social Studies B.4.7 – Identify and describe important events and famous people in Wisconsin and United States History.

While playing at the Palmgarden Beer Hall in St. Paul, Minnesota, Houdini and his wife were discovered by a man named Martin Beck. Mr. Beck was the owner of several Vaudeville theaters. Vaudeville was a popular form of entertainment in the mid 1800s through the 1920s. Vaudeville shows were aimed at a family audience. Although it seems really strange to us today, dime museums and some other theaters allowed customers to smoke and drink during the show. Vaudeville theaters did not permit such behavior. They tried to be respectable. They also did not allow the use of vulgarity – swearing, or distasteful material, in the performers’ acts. Like dime museums, vaudeville shows were made up of a variety of acts (kind of like a talent show). In fact, a normal vaudeville show included eight to ten acts and lasted for three hours! The 10-30 minute acts might include singers, dancers, comedians, female impersonators, strong men, actors, musicians, and magicians.

Teachers may wish to check out some vaudeville acts online. You may choose which, if any, to share with your class. Please be sure to preview the video and sound clips before your class sees or hears them. Some vaudevillians used racial and ethnic “jokes” in their routines and you will want to determine which acts are appropriate for your class. Two sites to check out are: [xroads.virginia.edu/~ma02/easton/vaudeville/vaudeville.html](http://xroads.virginia.edu/~ma02/easton/vaudeville/vaudeville.html) – put together by Rick Easton of the University of Virginia History Department – and [bestwebs.com/vaudeville/](http://bestwebs.com/vaudeville/) -- put together by a company that sells vintage recordings.

Help your students to organize a talent show for another classroom or for the rest of the school to demonstrate the nature of a vaudeville variety show. Students who feel comfortable can demonstrate a variety of talents – singing (or lip-syncing), dancing, comedy, doing impressions, playing an instrument, etc. Have students examine the vaudeville playbill provided and use it as an example to individually create playbills for their own talent show.

- 1) Collect the names of students participating in the talent show. Ask them to share with the class what their talent will be. As a class, come up with slogans for the performers as shown above (e.g. “Masters of the Xylophone” or “The Smartest Simians . . . Not ‘Among the Best’ but Actually ‘The Very Best’.”)

- 2) After coming up with these slogans together, have each student use them to create a playbill for their variety show. On our playbill, Houdini appears as the “headliner,” meaning he got “top billing” (his name was the biggest on the playbill.) Students can use the name of their own act as the headliner or choose to headline a classmate’s act if they are not entered in the talent show.
- 3) Students should observe the same rules as were observed in vaudeville theaters – performers should make sure that their acts are in “good taste” – in other words, student comedians should not make jokes about their classmates, and songs should not include any swearing, etc. The time for each act should be limited by the teacher (in vaudeville acts lasted 10-30 minutes). The teacher may want to limit performances to 5 minutes or so.

## *Houdini on Tour – A Lesson in Geography*

### Wisconsin State Curriculum Alignment:

Social Studies A.4.2 – Locate on a map or globe physical features such as continents, oceans, mountain ranges, and land forms; natural features such as resources, flora, and fauna; and human features such as cities, states, and national borders.

Social Studies A.8.2 – Construct mental maps of selected locales, regions, states, and countries and draw maps from memory, representing relative location, direction, size, and shape.

English Language Arts B.4.1 – Create or produce writing to communicate with different audiences for a variety of purposes

- Write nonfiction and technical pieces (summaries, messages, informational essays, directions, instructions, simple reports) that convey essential details and facts and provide accurate representations of events and sequences.

Houdini had only been touring American vaudeville theaters for a year when he left to perform on the vaudeville stages of Europe. Houdini still wasn't really famous at this point in his career. He was just one performer among many on the playbills. Houdini was yet to be a "headliner." This was the main reason that Houdini went to Europe – to make a name for himself so that when he returned to the United States he could be the star of the show. Between 1900 and 1905, Houdini performed in England, Holland, France, Germany, and Russia. He challenged police officers or guards to chain him in such a way that he could not free himself . . . but he always did. When Houdini returned to the United States in 1905, he was an international star. He began a tour of the United States determined to become a famous star in America too. Soon he was the top headliner in vaudeville! While he played American stages, he also traveled overseas to entertain audiences in Australia, Europe, and Canada.

Read the descriptions of the following five cities where Houdini played. Find the cities on a world map. In what country is each city located?

1) Moscow, Russia

Dates performed: May 4 – July 4, 1903, at Establishment Yar (the name of the restaurant where he performed)

Houdini entered Russia under police surveillance. Officers under Czar Nicholas II had to approve Houdini's and all other performances in the country. Houdini told Moscow police that he was Catholic in order to perform at the Yar restaurant. Jewish people were not allowed to live or work in Moscow. He later impressed the secret police with an escape from a "Siberian Transport Cell," a safe-on-wheels used to take prisoners to Siberia. News of the 45-minute escape crossed the country.

2) Melbourne, Australia

Dates performed: February 7 – March 19, 1910, at the Opera House

Houdini performed straight jacket, packing crate, and milk can escapes for Melbourne audiences. Twenty thousand people packed the Queen Bridge to watch his *manacled* jump into the Yarra River. Between shows, Houdini got his biplane ready to fly at Diggers Rest, 20 miles away. He set an Australian record for the first flight on the continent on March 18, 1910. He flew his plane at an altitude of about 100 feet for 3 ½ minutes.

3) Appleton, Wisconsin, USA

Dates Performed: March 29 – April 3, 1897, at the Opera House

Houdini moved with his family to Appleton when he was a four year-old boy in 1878 after his father became the city's rabbi. The Jewish community fired Houdini's father Rabbi Weiss, after five years of service. The Weiss family moved to Milwaukee and then New York City in search of work.

Houdini returned to Appleton as a small time magician with the Rogers' Orpheum Stars in 1897. He challenged the local chief of police to lock him in handcuffs. Houdini freed himself from three pairs of cuffs within 5 minutes. Houdini hoped the stunt would encourage locals to buy tickets to see his act at the Opera House. Houdini returned to Appleton several times to visit childhood landmarks. He enjoyed bringing news of the city to his mother who lived with him in New York City. On such a visit in 1904, Edna Ferber interviewed him for the local newspaper. Ferber went on to become a noted novelist and play writer.

4) New York City, New York

Dates performed: Too numerous to list (almost each year throughout his 35 year career)

Houdini moved with his family to New York City when he was 13 years-old in 1887. He helped support his father's income by taking jobs at a messenger company, tool and die shop, and necktie factory. Houdini became a full-time magician with several different partners at the age of 18. He and his partners performed as the Houdini Brothers for area theaters. Houdini met singer and dancer Beatrice Rahner while performing at an amusement park called Coney Island in 1894. Bess became Houdini's wife and replaced his previous partners as his magic assistant.

Houdini performed in New York City every year throughout his career and featured all of his famous escapes. He played the longest run of his career at the New York Hippodrome in 1918. For 19 weeks, Houdini performed escape magic and an illusion called the Vanishing Elephant in a show called *Cheer Up*, a patriotic extravaganza during World War I. Houdini introduced a séance act to his Hippodrome show in 1925. He played the role of "Zanetti," a medium (a

person who claimed to be able to communicate with the souls of people who had passed away). Houdini showed the audience a medium could trick their audiences to make them think that he or she had special powers.

The magician lived in a brownstone at 278 West 113<sup>th</sup> Street in the Jewish neighborhood of Harlem. He shared the home with his wife and several members of his family. He purchased a family plot in Machpelah Cemetery in Queens. Houdini was buried there in 1927.

- 5) Canada – Montreal, Quebec  
Dates performed: September 4-9, 1911 (Orpheum Theatre); February 1-6, 1915 (Orpheum Theatre); April 20-May 2, 1925 (Imperial Theatre); October 18-23, 1926 (Princess Theatre)

Houdini introduced himself to an Orpheum Theatre audience with a packing case escape on September 8, 1911. He came back to the city with a full two and a half-hour show of magic tricks, escapes, and a spirit exposé in 1926. Between shows, Houdini lectured to students at McGill University about séance fraud. He invited several of the students to his dressing room at the Princess Theatre to talk about spiritualism (the belief that spirits of dead people could communicate with the living through a medium [like an interpreter] during a séance). One of the students asked Houdini if he could punch him in the stomach to test his strength. Houdini agreed, but the punches severely hurt the magician, who likely already suffered from appendicitis. Houdini finished his final show in Montreal in pain and left for another engagement in Detroit. He died of peritonitis in Detroit on October 31, 1926.

If you were a famous performer going on tour, in what cities would you most like to perform? Choose one of the cities on your list and research it. Find out about the city – what is the climate and landscape like? For what industries or agricultural products is the city best known? Are there famous attractions in the city you would like to visit? Write a paragraph about the city explaining why you chose it as a destination and answering the questions above.

## *Houdini and Advertising*

### Wisconsin State Curriculum Alignment:

Marketing D.8.5 – Give examples to show how media may influence the behavior and decision-making of individuals and groups.

Social Studies E.4.10 – Give examples and explain how the media may influence opinions, choices, and decisions.

English Language Arts B.4.1 – Create or produce writing to communicate with different audiences for a variety of purposes.

- Write nonfiction and technical pieces (summaries, messages, informational essays, basic directions, instructions, simple reports) that convey essential details and facts and provide accurate representations of events and sequences.

Art E.4.3 – Communicate basic ideas by producing popular images and objects, such as folk art, traditional arts and crafts, popular arts, mass media, and consumer products.

Art F.4.2 – Know that art techniques are used in mass media.

Art F.8.3 – Interpret visual messages in advertisements, news and entertainment programs.

Houdini was a genius at self-promotion, meaning he knew how to get people to notice him, getting publicity for his shows and making a name for himself with the public. Early on in his career, Houdini would advertise his upcoming performances at a local theater by challenging local police officials to lock him up in their most secure handcuffs and jail cells. Houdini always escaped within minutes. This surprised, and sometimes embarrassed the police officials, but it also made a good story for the newspaper to report. In this way, Houdini got free advertising. The jail break stunt almost always made the local news and resulted in big ticket sales for Houdini's performances.

Later, Houdini used his straight jacket (a garment that was used in the late 1800s and early 1900s to restrain people considered to be “criminally” insane, a danger to themselves and others) escape to promote his shows. He took the escape outside and attracted crowds as large as 80,000 people. The crowds packed the streets, blocking traffic, and watched from windows in the vicinity as Houdini's assistants hoisted him up to the top of a skyscraper or newspaper building. Dangling upside down above the thousands watching, Houdini would escape from his straight jacket. The struggle always made the evening newspaper.

Houdini also advertised his shows by putting posters and flyers up all around town and calling the press to previews. Houdini would promise to escape from a packing crate secured with locks and chains. But that was not all, the crate would be dropped into the local river, and Houdini had to escape before drowning. As with his upside-down

straight jacket escapes, thousands of people would gather to watch this free performance. The newspaper covered the story, and Houdini promised more impressive tricks at his shows at the local theater. People wondering what other “miracles” Houdini could perform would buy a ticket to see for themselves.



Houdini performs his upside-down straight jacket escape above a street full of onlookers. Radner Collection at Outagamie County Historical Society.

Click this link to watch a video of Houdini performing his upside-down straight jacket escape above a crowded street. Students can serve as newspaper reporters writing an article for the *Our Town Newspaper*. What would they report about Houdini and his “publicity stunt”? Would their report mention Houdini’s upcoming performance at the local theater? Would the article encourage the public to buy tickets to that show? Why or why not. Each student will write a short article (approximately 1 page) that addresses the above issues.

Remember, a good newspaper reporter answers the following questions in his or her stories:

- Who?
- What?
- When?
- Where?
- Why?
- How?

As an exercise to get started, have the class go through these questions as a group. Write down the answers on a chalkboard or overhead projector and leave them up while students are writing their articles or have students copy the answers down to refer to later when writing.

Students may also create an advertising poster for Houdini. Have them look at the example poster and answer the following questions.

### **Houdini Poster Analysis**

- 1) What are the main colors used in the poster? What feelings do the colors make you have? Are they exciting, fun, drab, dreary, sad, upsetting, interesting, etc.?
- 2) Are any symbols (pictures that represent an idea) used in the poster? If yes, name the symbols used.
- 3) If a symbol is used, is it clear (easy to understand)? Easy to remember? Powerful?
- 4) Does the poster present its message mostly with pictures, mostly in words, or with both?
- 5) Who was the audience for the poster? (Who would see it?)
- 6) What do you think Houdini hoped the poster would do?
- 7) Do you think the poster was effective? Did it do the job it was intended to do? What made it a good poster or what made it an ineffective poster?

Students can draw their own advertising posters for Houdini. They should use colors they believe will attract and interest people and may wish to use symbols such as broken chains or open locks to demonstrate Houdini’s talent as an escape artist. Remember, the purpose of the poster would be to get people to buy tickets to Houdini’s shows.

## *Challenge Acts*

### Wisconsin State Curriculum Alignment:

Marketing E.4.3 – Identify a specific problem or concern and evaluate it.

Art B.4.1 – Understand that artists and cultures throughout history have used art to communicate ideas and to develop functions, structures, and designs.

Marketing E.4.3 – Identify a specific problem or concern and evaluate it.

Marketing E.8.2 – Apply problem-solving skills to a current issue or concern

- Gather and interpret information about the concern
- Form sound conclusions about what should be done in the situation
- Give reasons to support conclusions
- Evaluate the evidence and reasons used in forming conclusions

Even after Houdini had achieved fame, he changed his act, adding new escapes to keep it interesting. Houdini also kept the audience interested by letting them challenge him with restraints they invented. Local manufacturers created all sorts of devices they thought could hold Houdini – crates, mail bags, a giant football, auto wheel chains, a glass box, and a boiler, just to name a few. Houdini would accept a challenge one day, advertise the performance in flyers and newspapers, and then perform it another day when thousands of spectators filled the theater after reading about the challenge. Houdini always inspected the challenge device to make sure it had not been tampered with (the lock jammed, for example.) Only once was Houdini beat, and that was when the challenger jammed the lock of the handcuffs, so that they did not work correctly. Houdini escaped every other device that his challengers invented.



Members of the British Women Suffragettes wrap Houdini in a bed of sheets and bandages and strap him in as a challenge, 1908. Radner Collection at Outagamie County Historical Society.

**OXFORD**

**SUFFRAGETTES'**

CHALLENGE TO

**HOUDINI**

Mr. HARRY HOUDINI.

1908

Dear Sir,

We, the undersigned, Members of the Women Suffragettes, having heard that it is impossible for you to be secured, and so far, only men have tried to fasten you, we wish you would allow us to secure you to a Mattress with Sheets and Bandages; and think that we will be able to fasten you so that you will not be able to effect your escape.

We challenge you to allow us to come on the stage of the OXFORD Music Hall, any night during your engagement, and allow us to put our theory into practice.

(Signed),

PEGGY WHEATLEY,  
53, Camberwell Road.

MABEL STACEY,  
16, Old Kent Road,  
Peckham.

ETHEL GIBSON,  
26, Stafford Road,  
Roman Road, Bow.

M. GUY-BROWNE,  
Clarence Gate.

R. CECIL,  
Clapham Park.

MAUD FERNE,  
23, Holmes Road,  
Kentish Town, N.W.

THE TEST WILL TAKE PLACE AT THE

**OXFORD**

**Friday, Nov. 27th.**

The Suffragettes' challenge to Houdini. Radner Collection at Outagamie County Historical Society.

Do you think you could stump Houdini? Use the process of invention to design a device that might have held Houdini. Inventors use the following steps when tackling a new invention. Use the steps to walk yourself through the process of invention.

- 1) State the problem. What problem are you trying to solve? In this case, the problem is to keep Houdini from escaping. The solution to the problem will become your new invention.
- 2) Interview your parents, friends, and/or your teacher to get ideas. What materials might be strong enough to hold Houdini? Are there any ways to improve upon the devices of other challengers to make them harder to escape? For example, could you make the crate out of glass rather than from wood? Would it be harder for Houdini to escape when people could look in and see what he was doing? How could you make it harder for Houdini to escape?
- 3) Now that you have an idea for what kind of device to invent, start to think about the material you would need if you were to build it. Make a list of these materials.
- 4) What does your invention look like? Draw a picture of your invention. Write a description of how the device works. The picture and description will communicate the structure, design, and function of your device to your classmates.

Post the student inventors' ideas around the classroom and give students time to read about others' inventions. The students can discuss which one they think will work the best, giving reasons for their answers.

(Invention process modified from [www.girltech.com/Invention/IN\\_invention\\_intro.html](http://www.girltech.com/Invention/IN_invention_intro.html).)

## *The Strong Man*

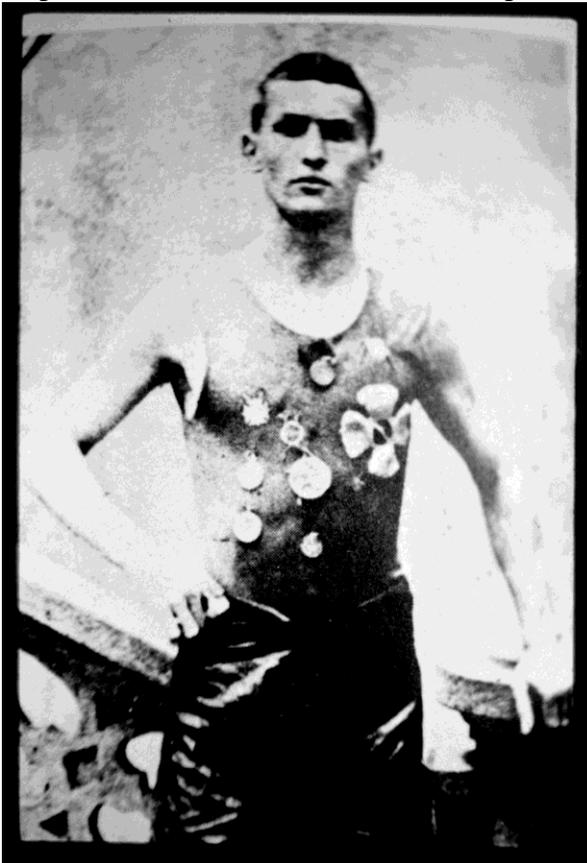
### Wisconsin State Curriculum Alignment:

Health C.4.4 – Set a personal health goal and track progress toward achievement.

Health B.4.4 – Demonstrate strategies to improve or maintain personal health.

Health A.4.3 – Identify ways to be healthy during childhood.

Houdini was able to perform many of his escapes because of his physical strength. Houdini spent a lot of time training his body to withstand the trials of escaping handcuffs, straight jackets, and underwater traps. As a teenager, Ehrich Weiss (also known as Houdini) was a natural athlete. He spent much of his free time running, diving, and swimming at a boys' club near his home. He also boxed against other boys in the club. He even won some first place medals in athletic competitions. Houdini even exercised his hands to keep them flexible and fast for tricks like vanishing coins or picking locks. He practiced holding his breath underwater for tricks like the water torture cell and the milk can escape. He would go underwater in his bathtub and see how long he could stay underwater. Bess would stand by to time him. Sometimes, he would make the water icy cold just to see how long he could stand it. This conditioning would help Houdini when he jumped into cold river water while handcuffed or locked in a packing crate, or when he performed his water torture cell escape.



One writer said of Houdini, “. . . strength and endurance were his most precious assets.” And knowing that, Houdini took care of his body. In addition to working out by swimming, running, and boxing, Houdini never drank alcohol or smoked because he knew such things were bad for his body. You can also take care of your body by exercising, eating well, and practicing healthy habits.

Teachers can check out the government publication, “10 Tips to Healthy Eating and Physical Activity for You” at <http://fitness.gov/kidstips.pdf>. This publication offers suggestions to help kids eat healthier and be more active. Go over the “Kids’ Activity Pyramid” with your students. Using the attached worksheet, have the students personalize the activity pyramid to their own lives.

Houdini as a young athlete in New York City. Outagamie County Historical Society Research Collection.

For a week, have students track time spent on their activities. Do they spend more time being active or inactive (sitting, playing video games, watching TV, computer work, etc.)? Help the class to categorize their activities according to the pyramid guide – as everyday activities, aerobic exercises, recreation activities, leisure and play activities, strength and flexibility activities, and watching TV and videos. Have them fill in the pyramid with the base being activities (or inactivity) on which they spent most of their time, the next layer being things they did 3-5 times that week, the third layer being activities they did 2-3 times over the week, and finally the layer on which they spent the least time.

After mapping out their real activity pyramid, ask them to make a list of activities they could do more of to improve their health. Are they spending a lot of time watching TV, playing video games, playing on the computer, etc.? How could they reduce their times of inactivity? Are there TV shows they would be willing to give up? Perhaps they can make a time limit for playing video games. Ask them to make these changes and to track their activities for another week. Did they improve the level of activity? Check in with the class to see what changes have been made.

## *What is Spiritualism?*

### Wisconsin State Curriculum Alignment:

Social Studies B.8.1 – Interpret the past using a variety of sources such as biographies, diaries, journals, artifacts, eyewitness interviews, and other primary source materials, and evaluate the credibility of sources used.

Social Studies E.4.8 – Describe and distinguish among the values and beliefs of different groups and institutions.

Spiritualism is a religion that was popular in the 1850s and again in the 1920s. Spiritualists believed that people could communicate with the spirits of the dead. They believed that people called mediums had special powers to send and receive messages to and from the spirits of the dead. Spiritualism was born when two sisters, Margaret and Kate Fox of Hydesville, New York, claimed to have communicated with the spirit of a peddler who said he was murdered and buried in their basement. They said that the spirit spoke to them through rapping noises that seemed to come from the floor, walls, and other areas of the room. Their story quickly spread and suddenly other people claimed to be mediums who could talk to spirits.

But, why was Spiritualism so popular? There were a lot of reform movements going on at the time. In the late 1800s, immigration, urbanization, and industrialization caused Americans to experience excitement and optimism as well as anxiety and fear about the future. There were so many new possibilities, but also so many changes in the ways people thought, worked, and lived. During this time, people began calling for more rights for workers (like better working conditions, better pay, and less hours) and women (like the right to vote). Many also fought against the abuse of alcohol. Some fought to prevent the society from changing – like the Klu Klux Klan in the South, which fought against new rights for African-Americans. Spiritualism was a religion that offered some reforms of Christianity. More people became interested in Spiritualism after World War I (1914-18) and the Spanish Flu Epidemic in 1917-18. These events killed over 750,000 Americans. As their loved ones grieved they were encouraged by the promise that they could somehow communicate with the spirit of those who had passed away. Families looked to Spiritualism hoping to reach the souls of lost husbands, fathers, and sons killed in the War and of the men, women, and children who fell victim to the Spanish Flu.

What does Spiritualism have to do with Houdini? When Houdini was a struggling, young magician, he actually performed séances in front of audiences as a part of his show. Houdini would stroll through town before his performance, gathering information and gossip about local people. He also read the newspaper and visited graveyards to learn about recent deaths. When he did a séance show, he could then reveal this personal information, making him appear to have a special talent or supernatural knowledge. He supposedly passed messages from the spirits to the living and vice versa. While handcuffed, he also levitated tables, made objects float around, and answered sealed questions about the past, present, and future. Of course, Houdini could easily escape the cuffs and use his hands to help him make objects move in the dark. However, Houdini

felt guilty about deceiving people who were grieving and really thought he could contact their deceased loved ones. Houdini gave up doing séance shows but kept the handcuff escapes in his act. Houdini's focus on handcuff escapes caused people to think of him as an escape artist.

Years later, when Spiritualism became popular again, Houdini began a campaign to expose fake mediums; that is, those who used trickery to convince the public of their special powers to contact the dead. Houdini thought it was wrong that fake mediums charged grieving people money for séances that were just a series of tricks. He showed how fake mediums escaped from restraints and used sleight of hand to trick their audiences into believing that tables, instruments, and other objects had moved on their own. Houdini's crusade against mediums that cheated their audience made him even more popular with the public. Houdini gave lectures showing and describing the methods mediums used to make people believe in a spirit's presence. He also dedicated a part of his show to exposing these methods. Sometimes, Houdini even disguised himself and attended séances he knew were frauds so that he could jump up and prove how the medium was cheating the audience.

Spiritualism was something that many people talked and thought about a lot during its times of greatest popularity – in the mid to late 1800s and after World War I (1918 to the mid-1920s.) It showed up as the subject of songs, books, art, etc. Check out the following examples.

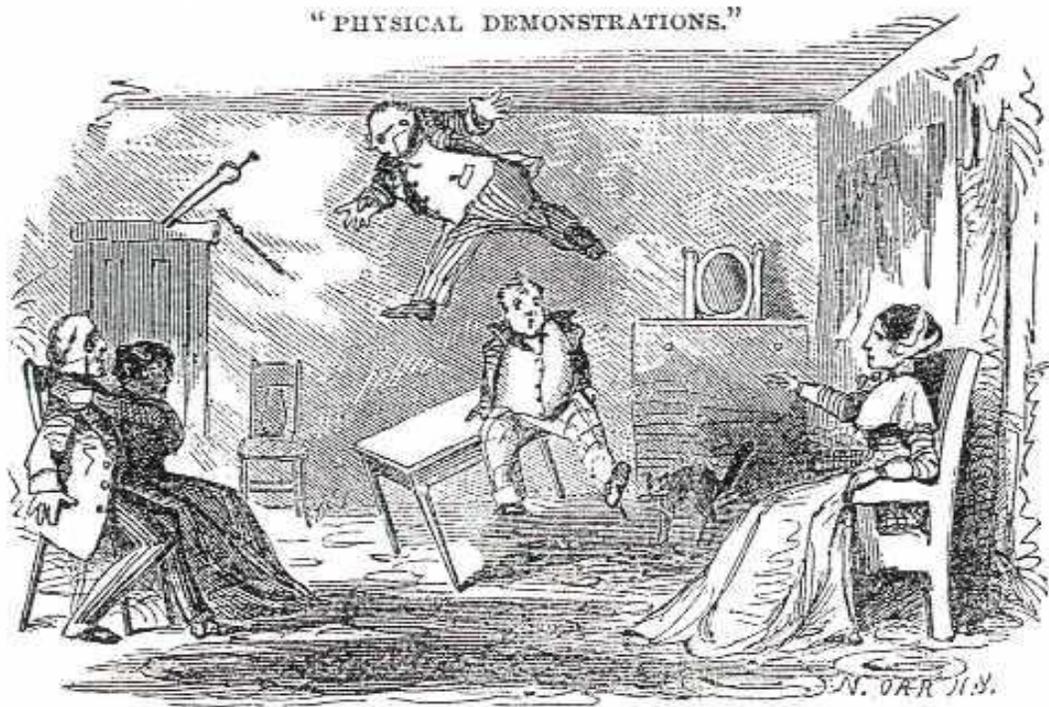
A CIRCLE OF SPIRIT-RAPPERS IN SESSION.



From Hiram Mattison's book, *Spirit Rapping Unveiled! An exposé of the origin, history, theology and philosophy of certain alleged communications from the spirit world, by means of "spirit rapping," "medium writing," "physical demonstrations," etc.* New York: Mason Brothers, 1853.

Study the drawing “A Circle of Spirit Rappers in Session” for a couple of minutes.

- 1) List two activities that are taking place in the drawing.
- 2) Using only the information provided in the picture, list three words or phrases to describe the people shown in the drawing.
- 3) Given what you know about Spiritualism, what do you think the people sitting around the table are trying to do?
- 4) Do you think they will be successful? Why or why not?



From Hiram Mattison's book, *Spirit Rapping Unveiled! An exposé of the origin, history, theology and philosophy of certain alleged communications from the spirit world, by means of "spirit rapping," "medium writing," "physical demonstrations," etc.* New York: Mason Brothers, 1853.

Now, study the drawing “Physical Demonstrations.”

- 1) Describe two activities that are taking place in the drawing.
- 2) Is there anything unusual about these activities? If so, what?
- 3) What emotion do most of the figures in the drawing room seem to be expressing? Why do you think this is?
- 4) Is there anyone in the drawing who does not appear to feel the same way? If so, who? What role do you think this person is playing?
- 5) Do you think this scene would supposedly come before or after the scene in the 1<sup>st</sup> drawing studied – “A Circle of Spirit Rappers in Session”?
- 6) Do you believe that the events in this drawing actually occurred? Why or why not?

Now, read the lyrics to the popular song “Angel Friends,” composed by Joseph E. Winner.

“Floating on the breath of evening,  
Breathing in the morning prayer,  
Hear I oft the tender voices,  
That once made my world so fair.

“I forget while listening to them,  
All the sorrows I have known,  
And upon the troubles present,  
Faith’s pure shining light is thrown.  
And upon the troubles present,  
Faith’s pure shining light is thrown.

“Soothing with their magic whispers,  
Calming all my wildest fears,  
Thus they bring me sweet submission,  
Peace for sorrow, smiles for tears.

“Bless you Angel friends, oh never  
Leave me lonely on the way,  
For your gentle teachings ever  
Meekly may I watch and pray,  
For your gentle teachings ever  
Meekly may I watch and pray.”

- 1) In the first stanza, what is “Floating on the breath of evening” and “Breathing in the morning prayer?”
- 2) From whom or where are the voices coming? Cite evidence throughout the song for your answer.
- 3) What effect do the voices have on the listener?
- 4) Based upon what you have learned about Spiritualism, what do you think the term “magic whispers” means?
- 5) What hope does the listener express in the last stanza?

## *Houdini and Freedom of Religion*

### Wisconsin State Curriculum Alignment:

Social Studies C.4.2 – Identify the documents, such as the Declaration of Independence, the Constitution, and the Bill of Rights, in which the rights of the citizens of our country are guaranteed.

Social Studies B.4.1 – Identify and examine various sources of information that are used for constructing an understanding of the past, such as artifacts, documents, letters, diaries, maps, textbooks, photos, paintings, architecture, oral presentations, graphs, and charts.

Social Studies E.8.12 – Explain how beliefs and practices, such as ownership of property or status at birth may lead to conflict among people of different regions in cultures and give examples of such conflicts that have and have not been resolved.

The First Amendment to the Constitution of the United States of America guarantees Americans the freedom of religion:

Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances.

What does this mean? According to the First Amendment, there can be no “official religion” of the United States. Americans are not required to practice a government-approved religion and can follow their own religious beliefs. Also, the government cannot stop people from practicing their religion – each person can choose what faith or beliefs to follow. Therefore, even religions with which we disagree or don’t understand are protected under the Constitution of the United States. This includes a religion like Spiritualism which many people find strange today.

In early 1926, Houdini supported an anti-fortune telling bill that came before Congress. The bill made it illegal to charge money for telling fortunes – that is to tell people what their future will hold – in the District of Columbia. This was something that Spiritualist mediums regularly did during séances. According to Houdini, mediums in the District of Columbia could purchase a license for \$25.00 that would allow them to hold séances and tell fortunes. He noted that many mediums were frauds, charging money to the sitters at a séance and then using sleight of hand and trickery to make the sitter believe that the spirit of a loved one had been contacted. Mediums that were frauds also provided sitters with information about the future. The sitters gave up their money to the mediums, believing in their ability to contact spirits and tell fortunes, when it was really just a hoax. Houdini saw these mediums as con-men and women. He did not see the bill as limiting religious activity but as preventing crime.

What do you think?

### **Houdini's Comments**

“Washington is the only place where you can buy a license for \$25 with which to blackmail and rob the public. You are protecting those fortune tellers who under different *guises* and titles pretend to see things in the future.”

“This is positively no attack upon a religion . . . I respect every genuine believer in Spiritualism or any other religion as long as it does not conflict with the laws of the country or the laws of humanity.”

### **What the Spiritualists and the Bill's Opponents Said**

“*Prophecy*, spiritual guidance, and advice are the very foundation of our religion, and to deny a spiritual minister the right to advise his followers is to *curtail* their privileges as ministers of their religion.” – Mrs. Jane Be Coates, a Spiritualist, Washington D.C.

“This bill strikes at the most vital part of our religion, for if it becomes law it will *muzzle* our mediums, who are the *exponents* of our religion, and without whom our religion cannot exist. The work of our mediums in giving private interviews, in which they exercise the gifts of *prophecy* . . . and the *discerning* of spirits is as vital as part of our religion as that of the religious exercises of the representatives of any other religion, for which money is paid directly or indirectly.” – Alfred H. Terry, Pastor of the First Spiritualist Church of Washington D.C.

- 1) If you had been in the House of Representatives in 1926, would you have voted for or against this bill?
- 2) Do you think the bill is Constitutional? Cite evidence to support your answer.
- 3) What is your opinion on fortune telling? Explain.

## *Houdini and Arthur Conan Doyle: When Friends Disagree*

### Wisconsin State Curriculum Alignment:

Social Studies E.8.12 – Explain how beliefs and practices such as ownership of property or status at birth, may lead to conflict among people of different regions or cultures and give examples of such conflicts that have and have not been resolved.

Social Studies E.8.13 – Describe conflict resolution and peer mediation strategies used in resolving differences and disputes.

Sir Arthur Conan Doyle was a famous writer in Houdini's day. He wrote the Sherlock Holmes mysteries that have been read by millions of people. Houdini met Sir Arthur Conan Doyle when he was performing at the Brighton Hippodrome in Brighton, England. At first, Houdini and Sir Arthur got along wonderfully. Sir Arthur was amazed by Houdini's tricks and Houdini respected Sir Arthur as an intelligent man who was devoted to his family. Houdini had this to say about his friendship with Sir Arthur: "Honest friendship is one of life's most precious treasures and I pride myself in thinking that we have held that treasure sacred in every respect." (P. 139, *A Magician Among the Spirits*)

But, despite their friendship, there was one thing about which Houdini and Sir Arthur disagreed. That was Spiritualism. Sir Arthur was a believer in Spiritualism. Houdini said, "I know that [Sir Arthur] treats Spiritualism as a religion. He believes that it is possible and that he can communicate with the dead. According to his marvelous analytical brain he has had proof positive of this. There is no doubt that Sir Arthur is sincere in his belief and it is this sincerity which has been one of the fundamentals of our friendship." (p. 140) Houdini, on the other hand, did not believe in Spiritualism and stated that any medium he had ever witnessed was a fraud. Simply stated, Houdini said, "So far I have never on any occasion, in all the séances I have attended, seen anything which would lead me to *credit a mediumistic performance with supernatural aid*, nor have I ever seen anything which has convinced me that it is possible to communicate with those who have passed out of this life. Therefore I do not agree with Sir Arthur." (p. 165)

Sir Arthur and Houdini's disagreement over Spiritualism ended up causing a huge rift between them. Sir Arthur and his wife invited Houdini to participate in a séance given by Lady Doyle, Sir Arthur's wife. Houdini agreed. During the séance Lady Doyle went into a "trance" and wrote down a message she supposedly received from Houdini's dead mother's spirit. Houdini did not believe that it was really his mother who sent the message because Lady Doyle wrote in English and Houdini's mother never learned to speak English. She spoke only German. Also, Lady Doyle began the message by making the Christian symbol of a cross at the top of the page. However, Houdini's mother was Jewish and Houdini believed she would not have used a Christian symbol. In an article in the *New York Sun*, Houdini said in public that he thought Lady Doyle's message from his mother was fake. This made Sir Arthur angry and the two ended up having a big argument that was covered in the press.

There will come a time when you and a friend will disagree about a subject. Does that mean that you cannot be friends anymore? Of course not. Here are some strategies for staying friends from the PBS kids' website:

Follow the link <http://pbskids.org/itsmylife/friends/friendsfight> and read the articles on the following topics:

When Friends Fight: Think About It

When Friends Fight: Talk About It

When Friends Fight: The Importance of "I'm Sorry"

When Friends Fight: Make Up and Move On

- 1) Think about a time when you fought with a friend. Could you have used any of these strategies to work through the situation?
  
  
  
  
  
  
  
  
  
  
- 2) How did your fight end? Do you think the ending might have been different if you knew about these suggestions at the time?
  
  
  
  
  
  
  
  
  
  
- 3) After reading this information from PBS, do you think Houdini and Sir Arthur made any mistakes in the way they handled their disagreement? If so, what were those mistakes?
  
  
  
  
  
  
  
  
  
  
- 4) How do you think Houdini and Sir Arthur could have used these steps to work through their fight?

## *Blows Kill Houdini*

### Wisconsin State Curriculum Alignment:

English Language Arts B.4.1 – Create or produce writing to communicate with different audiences for a variety of purposes.

- Write expressive pieces in response to reading, viewing, and life experiences (narratives, reflections, and letter) employing descriptive detail and a personal voice.

Houdini died on Halloween of 1926. His death, like his life, is an interesting story. Houdini was performing in Montreal, Quebec, Canada. A few days before the performance, Houdini spoke to students at the McGill University and warned them about fraudulent mediums. After his speech, he invited some of these students to his dressing room the night of the performance to chat. One student was an artist and came with pencil and paper to sketch Houdini. The night that the students visited Houdini in his dressing room, Houdini was not feeling very well. He had a pain in his abdomen and was lying on a couch. Houdini was probably sick with appendicitis. Appendicitis is a swelling of the appendix. The appendix is a small finger-shaped extension of your large intestine. It is located in the lower right part of your abdomen or belly. Sometimes the swelling is caused by an infection; other times, it is caused by something blocking the appendix, such as partially digested food that is trapped in there. When a person has appendicitis, he or she will probably have stomach cramps or indigestion. The area around the belly button usually begins to hurt first. The person may vomit. Shortly, the pain moves down to the lower right side of the belly and it becomes very sharp. This is probably how Houdini was feeling when the McGill students came to visit him.

While the students were talking with Houdini, one of them asked if Houdini, who was very physically fit and strong, could withstand a punch to his abdomen. No one knows for sure why the student asked this. Houdini always found it hard to resist a challenge. He said that he could withstand a blow to his belly. However, before Houdini could stand up and brace himself, the student landed several hard punches on Houdini's stomach. These punches may well have caused Houdini's appendix to burst, leading to an infection.

Even though Houdini was very sick by now, he went on to perform that night. After the performance, Houdini continued his tour by traveling to Detroit. There, after performing on October 24, Houdini collapsed. He died a week later from peritonitis, an infection in the surfaces of the abdominal organs. Now, doctors can give people medicine (antibiotics) should their appendix burst. But, in Houdini's day, such medicine did not exist.

Write a journal entry about a time when you or someone you know was sick enough to go to the hospital. What was that like? Was it frightening? Were you worried? If you do not know of anyone who has had to go to the hospital, imagine how such a situation would cause you to feel.

## *Public Reaction to Houdini's Death*

### Wisconsin State Curriculum Alignment:

Social Studies B.8.1 – Interpret the past using a variety of sources, such as biographies, diaries, journals, artifacts, eyewitness interviews, and other primary source materials, and evaluate the credibility of sources used.

English Language Arts B.4.1 – Create or produce writing to communicate with different audiences for a variety of purposes.

- Write nonfiction and technical pieces (summaries, messages, informational essays, basic directions, instructions, simple reports) that convey essential details and facts and provide accurate representations of events and sequences.

Social Studies B.4.7 – Identify and describe important events and famous people in Wisconsin and United States History.

Social Studies B.4.3 – Examine biographies, stories, narratives, and folk tales to understand the lives of ordinary and extraordinary people, place them in time and context, and explain their relationship to important historical events.

When Houdini passed away in 1926, he was a legend in his own time. Houdini was a household name. When people thought of Harry Houdini, they immediately thought about escape. In Houdini's day there were a lot of things from which Americans wanted to escape. Some Americans were trying to free themselves from old ideas or practices. In the 1800s, people began challenging practices like child labor and fighting to get women the right to vote. Reformers also fought for better working conditions and pay for all workers. They worked for laws to improve living conditions in crowded city neighborhoods. Reformers also started new religious societies where people shared property and lived simply. Houdini was a symbol of freedom for many people because he made people believe that there was always a way out of difficult situations. It is for this reason that Houdini was so well-loved as an entertainer.

Look at the picture of Houdini's funeral procession on Thursday, November 4, 1926. Study the photo for a few minutes to form a general impression of it.



Houdini's funeral procession, Thursday, November 4, 1926. Photo courtesy of Corbis.

- 1) From this picture, would you say that Houdini was a popular person? Why or why not?
  
- 2) The photo shows policemen standing in the middle of the street. What do you think the policemen's role at the funeral was?
  
- 3) Imagine that you are a child standing in the crowd watching the pallbearers carry Houdini's casket past you. What do you think you might have been feeling?
  
- 4) What is the mood of the people photographed? Name three details of the photo that caused you to give this answer.
  
- 5) Have you ever seen a similar funeral procession – on T.V. or in a movie perhaps? If yes, what do you think Houdini may have had in common with the person or persons honored in those funerals?

Obituaries are short biographies written in honor of a person who has passed away. They tell about a person's accomplishments, interests, and family. Pretend that you are a journalist writing Houdini's obituary. Use what you have learned during this unit to give people a brief biography of this famous escape artist.

## *Houdini's Legend and Legacy*

### Wisconsin State Curriculum Alignment:

English Language Arts C.8.1 – Orally communicate information, opinions, and ideas effectively to different audiences for a variety of purposes.

- Prepare and conduct interviews.

Since Houdini's death in 1926, people have continued to look at Houdini as the world's most famous escape artist. During his life, Houdini worked tirelessly to become famous and to make sure that he would long be remembered for everything he did. He wanted "Houdini" to be a household name, and it still is.

Interview five people of different ages (other kids in your school, your parents, older or younger siblings, grandparents, etc.) and ask them the following questions.

- 1) Can you name a famous magician?
- 2) When I say the name Houdini, what words come to your mind?
- 3) Can you tell me when Harry Houdini lived [Note: you might find that Houdini became so famous, some people might think he is still alive, even though he died almost 80 years ago.]
- 4) Can you name anyone today who you think will become a legend like Houdini did? What will make this person famous even years after his or her death?

Bring your interviewees' answers back to the class to share.