THE YOUNG INVENTORS GUILD

Bringing History, Science, and Imagination to the Classroom
with
Eden Unger Bowditch

About the Author

Eden Unger Bowditch has been writing since she was very small. She wrote while attaining her undergraduate degree from the University of California, Berkeley, and she wrote songs as a member of the band Enormous.

Eden has been a journalist, as well as a welder, and an editor. She has written stories and plays and shopping lists and screenplays and dreams and poems—and also books about her longtime Baltimore home, like Growing Up in Baltimore and Druid Hill Park: The Historic Heart of Baltimore. She also co-wrote The Daughter-in-Law's Survival Guide: Everything You Need to Know About Relating to Your Mother-in-Law.

When her son expressed disappointment in the impossibility of the magic found in young adult novels, Eden became driven to tell a story about science—the kind of magic that's all around, and the kind people can actually do. The result, The Atomic Weight of Secrets or The Arrival of the Mysterious Men in Black, the beginning of her Young Inventors Guild trilogy, is her first young adult novel. The Ravens of Solemano or The Order of the Mysterious Men in Black, the second of the series, will be available September 24th 2013.

Eden grew up in Chicago, and later lived both in Los Angeles and in Paris. She now lives with her family (husband and three children) in Cairo, Egypt. But that's another story entirely . . .

Before your Author Visit

VISITING AUTHOR
Eden Unger Bowditch
THE YOUNG INVENTORS GUILD TRILOGY

Having a visiting author read to and engage a class can be a very rewarding event, but it takes planning to do it as well as possible. The following tips are suggested to ensure that educators are able to make the most of a visit.

Most importantly, everyone (including the kids) should know about the guest BEFORE the visit. Reading the complete book is not necessary to enjoy the activities presented, but having knowledge of the book, as well as its content and characters, will lend to a richer learning experience.

Librarians are Heroes- The school librarian is a key team member in preparation for an even. Discount books are available in advance direct from the publisher. Be sure the book is in the library (**http://bancroftpress.com/contact-us/**) and download any materials in advance. The Young Inventors Guild has a kid-friendly website (**http://younginventorsguild.com/**) with invention themed games to get young readers excited about the series and the science behind it.

Teachers are Heroes- With advance knowledge of the visit, teachers can make the most of book materials. Cross Curriculum projects that incorporate literature, history, cultural studies, and science are a great choice. The author, Eden Unger Bowditch, has done writing, research, and science projects, all in one visit! The Core Curriculum package is included in this document. Suggested activities include:
-Book Review
-Discussion of Historic Characters
-Discusion of Real Science in the book
-Incorporation of Art through Diagrams, Color and Light Studies
-Interview the Author

Parents are Heroes- It is an advantage to engage the PTA, principal, and parents along with the kids. Fundraising may help offset costs ahead of the visit and get everyone ready for the big day.

BOOK FAIR- combining the visit with a school bookfair can be an added bonus. Bancroft Press will send your school copies of the book at a special discount (40% off list) and the proceeds will go to the school. Adding costumed characters such as the Mysterious Men in Black from the book series has been great fun for kids.

And remember: THE MORE EXCITED YOU ARE, THE MORE EXCITED THE KIDS ARE. This gives the best result for everyone involved!

For the Author

Before the visit, take some time to collect information that would be helpful to the author. Beneficial information packages may include:
-A brief school's history
-Information about the student age groups
-Projects currently underway in Science, History, or Language Classes, or events in local industry
-A Map of the School
-Availabilty of Supplies and Materials (including computers, AV equipment, specific supplies for activities)

Direct communication with the author is strongly recommended! Please send directions, contact information, a letter of confirmation and agreed honorarium to: younginventorsguild@gmail.com

Contacting the author in advance and building a rapport can be instrumental in creating a memorable, educational day for everyone. The author may have others tips and suggestions, as well as new ideas to add.

On the day of the visit:

Please feed your author! It is always nice to provide lunch and/or snacks for your visiting author, even if it is cafeteria lunch or pizza. The author is likely not familiar with your area and will have a difficult time procuring meals during a full day of classroom visits and presentations.

Setting up Lunch with a few of the most motivated students, or those who know and love the author's work can be a special treat for fundraising or excellent grades.

Please help with the in-house equipment. If you have computers set out for the presentation, please have someone there who can help if there are any glitches. If carrying things around is necessary, please have some strong volunteers to help.

Have the Teacher or Librarian on hand. It is important to be able to reach the kids and if there are any issues, it is important for the teacher to take control.

Honorarium: The author will be delighted to visit your school, and it is important to show you care as well. Please be sure to provide the honorarium either before or upon arrival. Making the author hunt down the responsible party is difficult and creates an awkward situation.

Autographs: The author has been asked to sign everything from books to bookbags, shirts, hats, and shoes. Most authors don't mind and it is fun for the kids, whether they have the book or not. Please gauge interest in this ahead of time and make arrangements for this activity; crowding around could be hard on kids, teachers, and the author.

Letters from the School and Children: All authors love getting feedback from kids and appreciate notes from the schools. Authors practically *live* to support and promote the love of reading, writing, and thinking- and teachers do the same. Let's share in that love and let us know you enjoyed the visit.

Spread the Word: Before the visit and after, spread the word. Let other schools, libraries, and your community know about it. Community involvement can make a huge difference!

Plan for Next Time: When the visit goes well, the author will want to come back! The Young Inventors Guild is and ongoing trilogy, but will hardly be the last work the author creates. For future releases we always look to find good audiences!

Author Eden Unger Bowditch, In the Classroom

"WOW!!!!!! Eden Unger Bowditch came to speak to our children, and she was just AMAZING with them. The kids simply loved her and could not stop talking about her even as they were boarding the buses. I myself learned a great deal about fictional writing, and I will certainly adjust my approach to certain aspects of it, based on what she did with the students today. I have already spoken very highly of her to some other teachers in my building as well as my wife and am just so excited that the children were able to have this experience. If she is ever around again, be it next year, or two years from now, or whenever, I would hope that we could have her come again."

John Babula, Fifth Grade Teacher, Thomas Jefferson School, Morristown School District, Morristown, NJ

"Eden spoke to the seventh grade Language Arts classes about her experiences as a writer. She led a group story-writing activity that illustrated the fact that 'we are all writers.' Eden shared the inspiration behind her novel The Atomic Weight of Secrets and previewed the book's website for the students. The session concluded with an open question and answer session. The students left this visit empowered and motivated. It was a rare treat for the students to spend time with a published author."

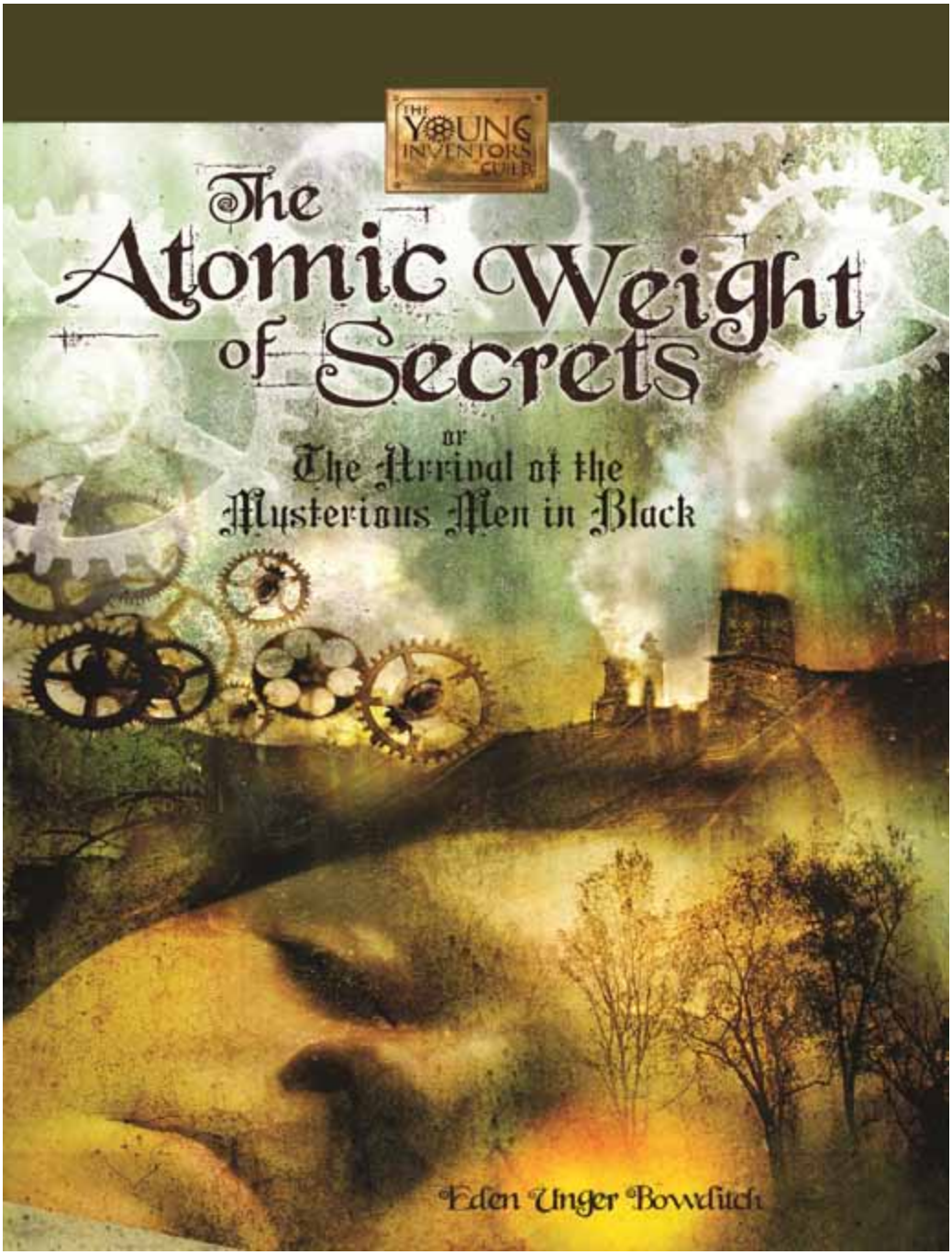
Megan Mosier, Teacher, Seventh grade Language Arts, Cairo American College

"Eden came and spoke to my second grade class. She had them all engaged in activities that writers do. Because of her visit, I have a classroom full of students who see themselves as writers and actually see writing as a great adventure. She was great at getting them all involved and excited about writing and reading. It was such a wonderful experience for students to meet an enthusiastic and passionate writer."

Jennie Trumpold, Teacher, Second Grade, Cairo American College

"In my many years of teaching, I've learned to be cautious about inviting guest speakers. Often, these experts struggle to effectively communicate their knowledge to young people. Eden, in stark contrast, truly understands how to engage the minds of children. From the word 'go,' my students were focused, informed, and inspired about reading and writing. It's no surprise that she was able to create such a wonderful young adult novel--after all, she gets kids."

Michael Rucki, Teacher, Cairo American College



In 1903, five truly brilliant young inventors, the children of the world's most important scientists, are taken from their lives and their parents by the mysterious men in black. They take twelve-year-old Jasper and six-year-old Lucy Modest from London, England; nine-year-old Wallace Banneker from New York, United States; twelve-year-old Noah Canto-Sagas from Toronto, Canada; and thirteen-year-old Faye Vigyanveta from New Delhi, India, depositing them all at a strange, isolated farmhouse in Dayton, Ohio, with kindly schoolteacher Miss Brett. But what mysterious invention have all the children, unbeknownst to one another, been working on? Who are the men in black? And are the men in black trying to kidnap them—or protect them?

The Atomic Weight of Secrets
Lesson Plans

Introductory Activities

Driving Questions

1. Can inventors change the world? How?
2. What inventions from history do you think are most important?
3. Can inventions or discoveries be dangerous to society? Explain.
4. Should children know everything about their parents?

Have students write a short response to each question. Have the students share their responses.

- STANDARD: CCSS.ELA-Literacy.W.6.10, 7.10, 8.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Vocabulary

Review science terms with the students. This could be a cross-curricular opportunity with the students' science teacher.

Science Vocabulary:

Beaker (pg. 1)

Burette (pg. 2)Vial (pg. 5)

Spyglass (pg. 13)

Mortise (pg. 34)

Pestle (pg. 34)

Phosphorus (pg. 39)

Sulfuric acid (pg. 86)

Diluted (pg. 95)

General Vocabulary:

Gingerly (pg. 30)

Satchel (pg. 58)

Insurmountable (pg. 71)

Askew (pg. 80)

Volatile (pg. 85)

Vocabulary Activity #1: Define words using digital or print dictionary.

➢ STANDARD: CCSS.ELA-Literacy.L.6.4c, 7.4c, 8.4c Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

Vocabulary Activity #2: Make prediction about the story before reading based on the connotations of the vocabulary words. Have students confirm predictions as the find the words during reading.

➢ STANDARD: CCSS.ELA-Literacy.RL.8.4, 7.4, 6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.

Reading Activities

Characterization Lessons

The main characters of the story are children. They all have very unique and distinct personalities.

Reading Activity:

#1 Keep a character chart for each child in the story. Keep track of the character's dislikes and likes, hopes, dreams, fears, family, relationships, and important quotes that show the character's personality. (This is a great group activity!)

➢ STANDARD: CCSS.ELA-Literacy.RL8.1, 7.1, 6.1 Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

➢ STANDARD: CCSS.ELA-Literacy.SL.8.1, 7.1, 6.1b Follow rules for collegial discussions and decision-making, track progress toward specific goals and deadlines, and define individual roles as needed.

➢ STANDARD: CCSS.ELA-Literacy.SL.8.1c, 7.1c, 6.1c Pose questions that connect the ideas of several speakers and respond to others' questions and comments with relevant evidence, observations, and ideas.

➢ STANDARD: CCSS.ELA-Literacy.SL.8.1d, 7.1d, 6.1d Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

Writing Activities:

#1 Write about a topic as if you are the character. Example: What might Faye say if she were invited to your house for dinner?

#2Write a dialogue between 2 of the characters using correct dialogue punctuation.

- STANDARD: CCSS.ELA-Literacy.W.7.3b Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.

Plot Development:

#1 Define the 5 parts of the plot. Exposition, Rising Action, Climax, Falling Action, and Resolution. Have the students summarize each part after finishing the novel.

#2 Critique the climax of the story.

- STANDARD: CCSS.ELA-Literacy.RL.6.3, 7.3, 8.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

Quiz/Test Questions

1. Describe Miss Brett.
2. What do the "men in black" look like? Why do you think they are this way?
3. In what ways do the "men in black" try to confuse the children?
4. Who are the nannies? How do they treat the children?
5. What do the children plan to do to rescue their parents? Do you think their parents needed rescue?
6. What was unusual about the carriage rides?
7. What is the historical connection with the children's project?
8. How does Faye's aunt help the children?
9. What explanation do the parents give the children as to their whereabouts?
10. What can you predict will happen after the story ends?

➢ STANDARD: CCSS.ELA-Literacy.RL.8.10, 7.10, 6.10 By the end of the year, read and comprehend literature, including stories, dramas, and poems, at the high end of grades 6–8 text complexity band independently and proficiently.

Suggested Non-Fiction Texts and Activities:

Suggested Non-Fiction Titles:

The Wright Brothers: How They Invented the Airplane by Russell Freedman

The Wright Brothers by Pamela Duncan Edwards

Suggested Article:

"*Ten Inventions that Changed the World*"

http://intransit.blogs.nytimes.com/2009/06/24/on-display-10-inventions-that-changed-the-world/

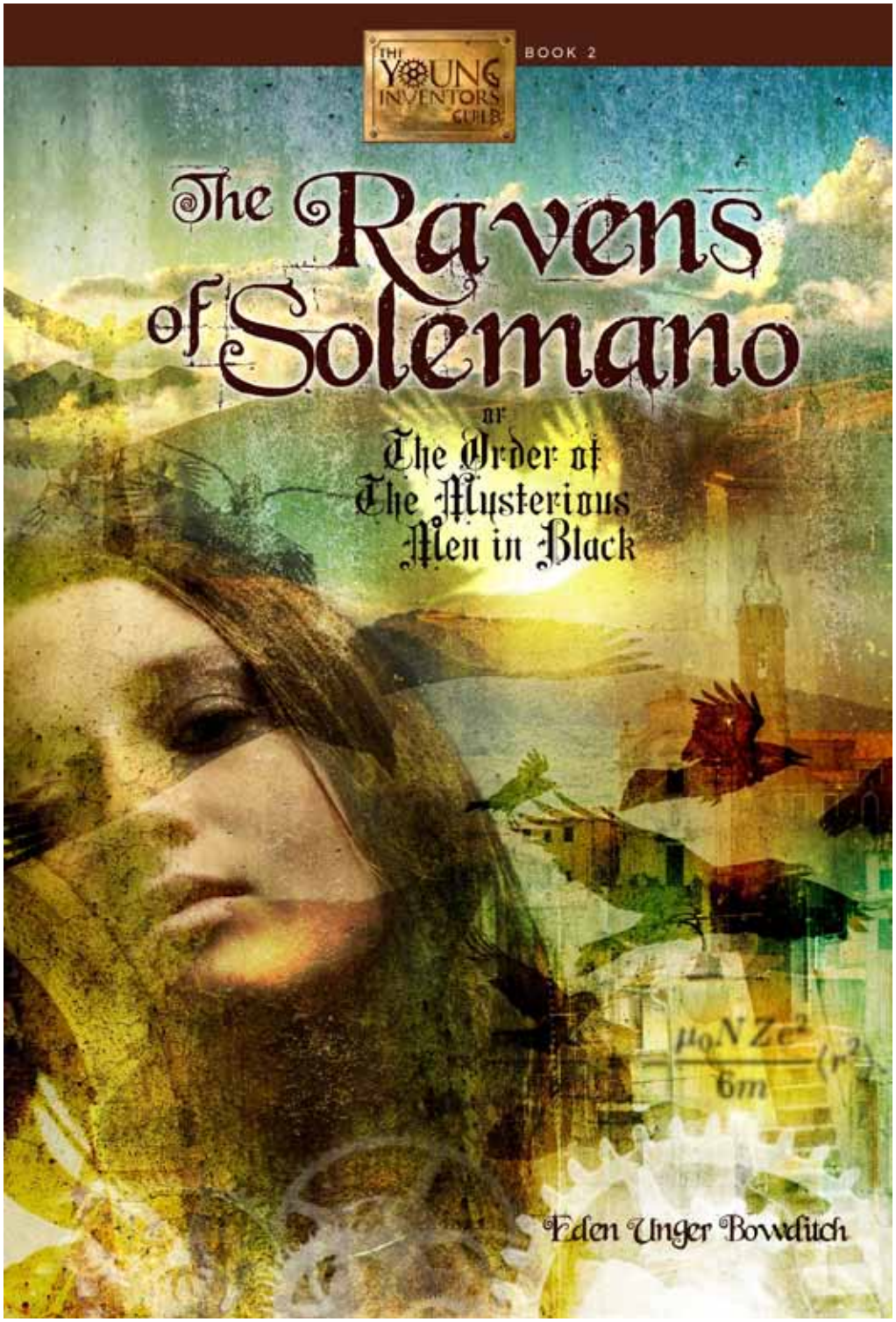
➢ STANDARD: CCSS.ELA-Literacy.RI.6.10, 7.10, 8.10 By the end of the year, read and comprehend literary nonfiction in the grades 6–8 text complexity band proficiently, with scaffolding as needed at the high end of the range.

➢ STANDARD: CCSS.ELA-Literacy.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Non- Fiction Activities:

1. Compare the building of the plane in the book to the real building of the plane by the Wright Brothers.

2. Use the article about inventions as a starter discussion before reading the book.



The group of five bright youngsters from The Atomic Weight of Secrets returns in a grand new adventure.

After narrowly escaping from the villainous Komar Romak, a shadowy figure with unknown intentions, the Young Inventors Guild and their kindly schoolteacher Miss Brett travel by train, carriage, and marvelous submersible boat, all the while dodging attack and creating new gadgets to aid in their journey. Arriving in a quiet Italian mountain village with their mysterious guardians, The Men in Black, the children have to think fast and act faster to stay ahead of the dangerous plot unfolding around them, and invent new tools to aid them on their journey.

The Ravens of Solemano
Lesson Plans

Introductory Activities

Suggested Pre-reading

The Atomic Weight of Secrets (Book #1 of Series)

Driving Questions

1. Have you heard of Thomas Edison? How about Nikola Tesla? Did they know each other? Were they friends or something else, indeed?
2. What inventions from history do you think are most important? How did they change the world?
3. Can inventions or discoveries be dangerous to society? Explain.
4. Have you travelled a far distance by train? By boat? What was it like?

Have students write a short response to each question. Have the students share their responses.

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Vocabulary

Pinafores (pg. 6)

Bloomers (pg. 6)

Corridor (pg. 20)

Balaclava (pg. 23)

Derby (pg. 30)

Poise (pg. 52)

Sextant (pg. 102)

Alloy (pg. 105)

Vocabulary Activity #1: Define words using digital or print dictionary.

- STANDARD: CCSS.ELA-Literacy.L.6.4c, 7.4c, 8.4c Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation of a word or determine or clarify its precise meaning or its part of speech.

Vocabulary Activity #2: Many of the words talk about the clothes of the early 1900s. Explore the fashions with the students and talk about the different looks of the men in black.

- STANDARD: CCSS.ELA-Literacy.RL.8.4, 7.4, 6.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of a specific word choice on meaning and tone.

Reading Activities

Characterization Lessons

The main characters of the story are children. They all have very unique and distinct personalities.

Activity #1 Keep a character chart for each child in the story. Keep track of the character's dislikes and likes, hopes, dreams, fears, family, relationships, and important quotes that show the character's personality. (This is a great group activity.)

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- STANDARD: CCSS.ELA-Literacy.SL.8.1d, 7.1d, 6.1d Acknowledge new information expressed by others, and, when warranted, qualify or justify their own views in light of the evidence presented.

Writing Activities:

1. Write about a topic as if you are the character. Example: What might Faye say if she were invited to your house for dinner?
2. Write a dialogue between 2 of the characters using correct dialogue punctuation.
3. Create a scene where someone is talking to a mysterious man in black. Does he make any sense?

➢ STANDARD: CCSS.ELA-Literacy.W.7.3b Use narrative techniques, such as dialogue, pacing, and description, to develop experiences, events, and/or characters.

Plot Development

1. Define the 5 parts of the plot. Exposition, Rising Action, Climax, Falling Action, and Resolution. Have the students summarize each part after finishing the novel.
2. Critique the climax of the story.

➢ STANDARD: CCSS.ELA-Literacy.RL.6.3, 7.3, 8.3 Describe how a particular story's or drama's plot unfolds in a series of episodes as well as how the characters respond or change as the plot moves toward a resolution.

Quiz/Test Questions

1. What do the "mysterious men in black" look like? Why do you think they are this way? What other things might they be wearing?
2. Describe the communication between the men in black and the children and Miss Brett. Why do you think they act this way?
3. What do you think has happened to the parents?
4. What was unusual about train? The boat?
5. Describe the town of Solemano.
6. Describe when the children are reunited with their parents. What do they learn?
7. What can you predict will happen after the story ends?

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Suggested Non-Fiction Texts and Activities:

Suggested Non-Fiction Titles:

An Interactive Biography of Thomas Edison and Nikola Tesla for Kids

Nikola Tesla: A Spark of Genius (Lerner Biographies) Hardcover by Carol Dommermuth-Costa

The Disappearing Spoon by Sam Kean

Periodic Tales: A Cultural History of the Elements, from Arsenic to Zinc by Hugh Aldersey-Williams

Suggested Articles:

"*Tesla, An Inventive Namesake*"

http://www.nytimes.com/2010/02/07/automobiles/07NIKOLA.html

"*Ten Inventions that Changed the World*"

http://intransit.blogs.nytimes.com/2009/06/24/on-display-10-inventions-that-changed-the-world/

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- STANDARD: CCSS.ELA-Literacy.RI.6.1 Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

Non- Fiction Activity:

Compare the facts about Tesla to the character in the novel. Cite evidence from each text. Explore the difference between Tesla and Edison.

Getting in Character

Costumes are a fun way to add a personal touch and a little theatricality to any event!
Quirky Mysterious Men in Black costumes are readily found in the backs of closets and local thrift stores.

Who doesn't love an excuse to dress up?

Class Projects

Hydraulic Powered Robot

For a class of 20 students

Materials:
200 popsicle sticks/tongue depressors
40 syringes (non-needle, plastic tip with rubber luer to prevent leaking)
60 wooden beads (approx. 1cm to 1inch)
40 wire or plastic closures
Water
Masking tape
Glue gun (s)
(Extras of these items are recommended)

IF POSSIBLE- replace PLASTIC CLOSURES and TAPE with WIRE. This will help make the experiment more authentic to the era.

The author will instruct the students in the creation of a Hydraulic Powered Robot, a simple machine using liquid water in a pressurized system to transmit mechanical energy.

This lesson can be expanded to include Hydraulics, Hydraulic Machinery, or Hydropower.

Hydraulics is a topic in applied science and engineering dealing with the mechanical properties of liquids. At a very basic level hydraulics is the liquid version of pneumatics. Fluid mechanics provides the theoretical foundation for hydraulics, which focuses on the engineering uses of fluid properties. In fluid power, hydraulics is used for the generation, control, and transmission of power by the use of pressurized liquids.

Hydraulic machines are machinery and tools that use liquid fluid power to do simple work. Heavy equipment is a common example. In this type of machine, hydraulic fluid is transmitted throughout the machine to various hydraulic motors and hydraulic cylinders and which becomes pressurised according to the resistance present. The fluid is controlled directly or automatically by control valves and distributed through hoses and tubes.

Hydropower or water power is power derived from the energy of falling water and running water, which may be harnessed for useful purposes. Since ancient times, hydropower has been used for irrigation and the operation of various mechanical devices, such as watermills, sawmills, textile mills, dock cranes, domestic lifts, power houses and paint making.

Class Projects

Whirling Heart

Taken from *The Ravens of Solemano*
For a class of 20 students

Materials:
20 AA batteries
20 neodymium (rare earth metal) magnets, 12mm discs to fit beneath batteries
Rolls of thin copper wire (enough for each student to have 10cm)
(if wire is thick, needlenose pliers are needed)

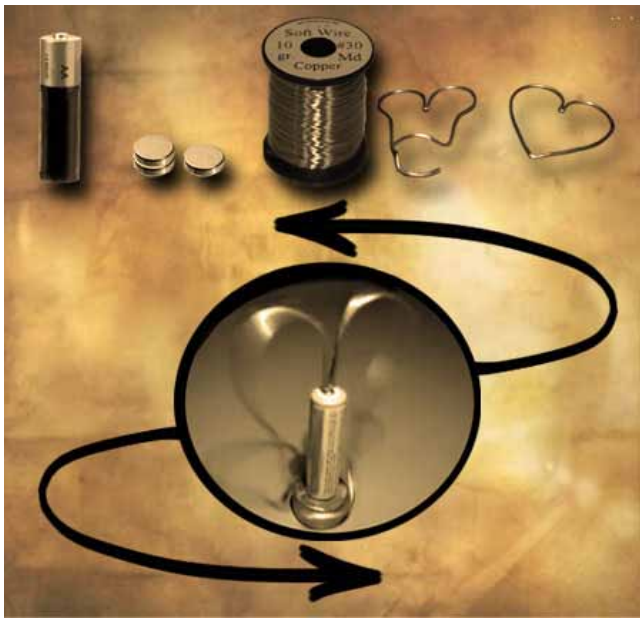
These are exact numbers- it is best to have extra

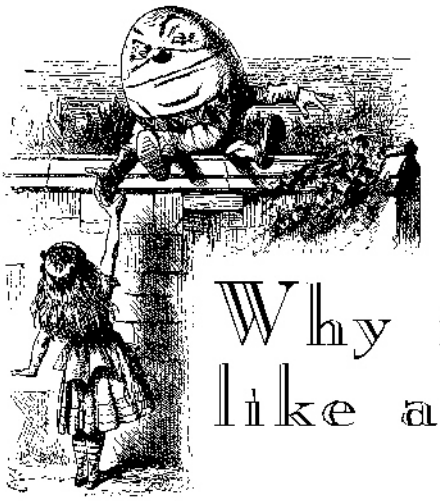
The author will instruct the students in the use of magentic fields to create attraction, repulsion, and motion. This lesson can be expanded to include information on magnet types and use in modern electrical and information technology.

A neodymium magnet (also known as NdFeB, NIB or Neo magnet), the most widely used[1] type of rare-earth magnet, is a permanent magnet made from an alloy of neodymium, iron and boron to form the Nd2Fe14B tetragonal crystalline structure.

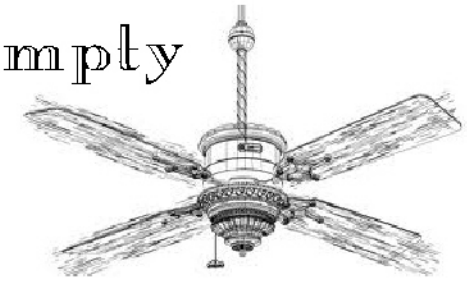
Neodymium was discovered by Baron Carl Auer von Welsbach, an Austrian chemist, in Vienna in 1885. He separated neodymium, as well as the element praseodymium, from a material known as didymium by means of fractional crystallization of the double ammonium nitrate tetrahydrates from nitric acid, while following the separation by spectroscopic analysis; however, it was not isolated in relatively pure form until 1925. The name neodymium is derived from the Greek words neos (νέος), new, and didymos (διδύμος), twin.

Due to the exceptionally strong magnetic force of neodymium magnets, their brittle physical structure and their potential as an ingestion hazard, **this project is not recomended for children under 12 years. Parent or Teacher supervision is required.**





Why is Humpty Dumpty like a ceiling fan?



Does this sound like a bizarre question or a riddle with a punch line? It seems ridiculous, but it isn't.

Invention is magic. Science and nature are, too – not the magic of flying broomsticks or magic wands, but of real magic that we can see and touch and create. A tree pops out of a tiny seed. We can defy gravity and fly six miles above the ground in a contraption created by humans.

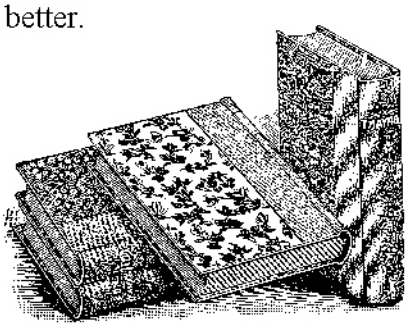
Existing pieces are combined to create something new, but an invention does not make sense until it finds a place in the world. If you had never used a showerhead or a boomerang or a saxophone, you might not have any idea what each was meant to do. When described and explained, however, a jumble of panels becomes a ceiling fan. Suddenly, we see this jumble differently. It has a place. It is something we understand. It becomes a piece of the everyday world around us.

Stories are like that. The wildest ideas can seem utterly meaningless until they find a place in the world. Bizarre ideas that make no sense can come together in a story. Suppose I say there is a lampshade that lives in a rain cloud next door to a fingernail. That's ridiculous, right? But if we give these things personalities and problems, we suddenly have characters with a place in a created world. Suddenly, it makes sense. The dish, after all, ran away with the spoon.

Stories can surprise us by defying our expectations but once familiar, like the ceiling fan, they become part of our world. We all know about an egg named Humpty Dumpty. We know who Harry Potter is. Each came from imagination. Each was invented and each now has a place in our world.

We all possess the power of magic and invention. Stories and inventions grow into a world around us. Every one of us has the power to create something and change the world for the better.

And that is why Humpty Dumpty is like a ceiling fan.



Questions With Kids:
The Ravens of Solemano

Here are some thought-jogging questions to spark discussion during and after reading.

1) Do you have a favorite inventor or scientist? If so who?
Here are some really famous ones: Nikola Tesla, Thomas Edison, Eli Whitney, the Wright Brothers, Marie Curie, Mary Walton (1881 Elevated Railway), Margaret Knight (1904 Rotary Engine)

2) Do you know many explorers or pioneers?
How about Amelia Earhart, Juan Ponce de Leon, Amerigo Vespucci, or Magellan?

3) Why do we study and remember the important moments in time? Why is history important to us?

4) When looking back at history, is it easy to see how a person's ideas made a difference in the world? Do you think anyone of that day knew how important their idea would become?

5) Do you think it might be hard to convince the people around you that your idea is good? If you wanted to
create something new, Where would you start, who would you talk to?

6) Have you ever had an idea for an invention or a machine? Maybe something that would make your work easier?

7) How many (kids) here have their own phone or their own computer?
Do you need these items? Can you imagine a time when they wouldn't have existed, when your "text message" to your friend would have to be hand written, or maybe tapped out on a typewriter and then carried in a horse drawn carriage, train, or maybe even a pigeon?

8) What do you think is the most important scientific idea for your day to day life?
Perhaps combustion that powers the vehicle that carries you to school, or electricity you use all the time?
Perhaps the study of wavelengths of energy that lets us understand light, color, sound, and lets us communicate over vast distances?

9) Could you imagine yourself as a scientist or inventor as a career?

10) Are there any scientists in your family?

11) Do you know how many fields of study there are in science? How many can you name?
(Geology, chemistry, medical science, physics, oceanography, astronomy, etc.)

12) Have you been to the Science Museum or (The Smithsonian) Museum of Natural History? What did you think was the most interesting exhibit there?

13) Leonardo di Vinci is a really well known inventor, but also a well known artist. How do you think studying art helped him with math and science?

14) Arthur C Clarke said "Any sufficiently advanced technology is indistinguishable from magic." What do you think he meant? Do you think he was right?

15) Have you ever wondered how something you use every day works? How does a light switch tell a light to turn on? How do glasses (corrective lens) help us see?

16) If you had a question about how something works, where would you go to find the answers?

17) Since we have the Internet and Digital Archives, do you think we need Libraries and Museums still? Do you prefer to see and experience things in person or online?

18) What idea or invention would you like to see become real in the future? Hovercars perhaps? Robot pizza delivery? Smell-o-vision?

19) If you had the chance to explore a whole new world, like the Moon or Mars, would you want to go?

20) We think of computers as small electronics, but the first attempts were large machines with punch cards designed to work like a Jaquard Loom. What other technology do we use today that was once much larger in scale?

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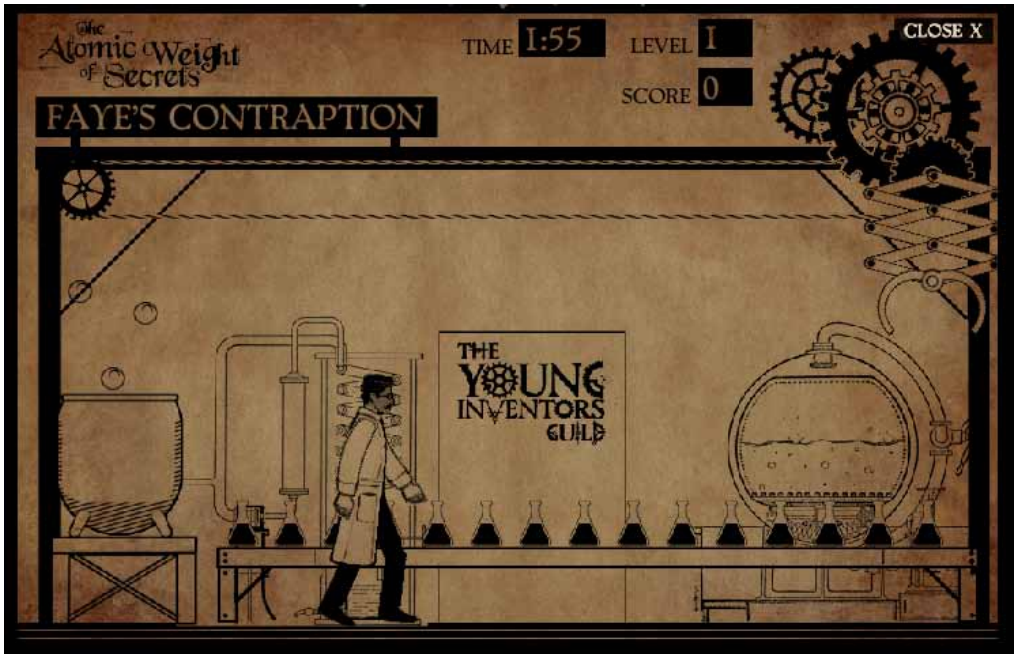

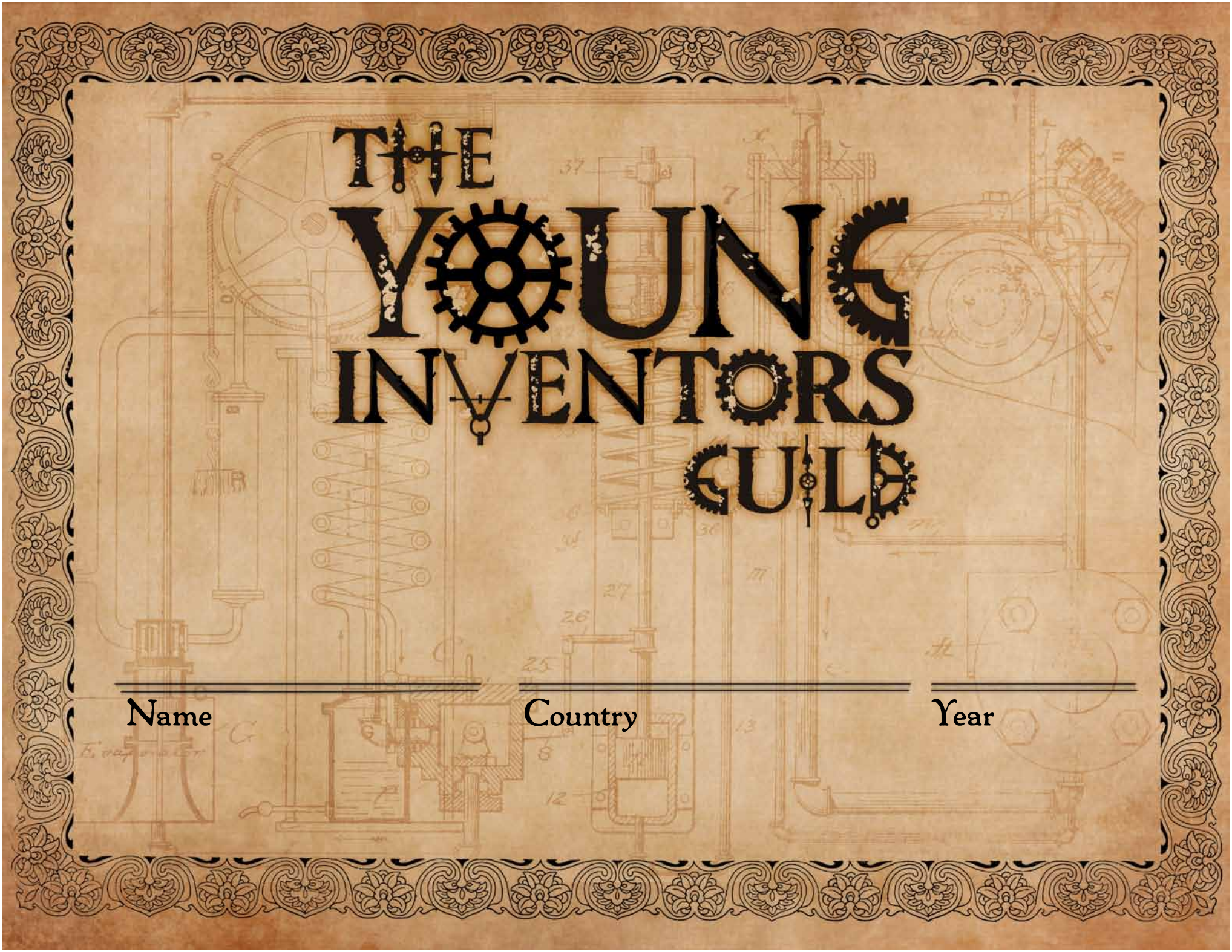
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