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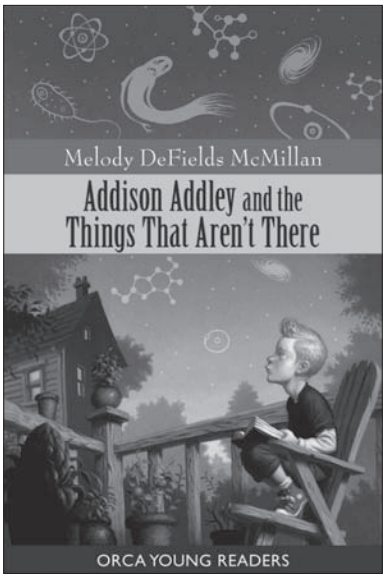

Addison Addley

and the Things That Aren't There

Melody DeFields McMillan

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Consider the following question as you read *Addison Addley and the Things That Aren't There*: How can something invisible help you?

Story

Addison Addley hates math. He hates public speaking too. Actually, he hates anything that involves work, but he only has a couple of weeks to write and memorize his grade five speech. The problem is, he can't think of a single topic. Between trying to help his mom get elected to the board of the local astronomy club and dealing with an extremely annoying classmate, he barely has time to go fishing. When he finally comes up with an excellent idea for a speech, it almost writes itself, but it's his poor math skills that make speech day unforgettable.

Author

Melody DeFields McMillan grew up in the countryside in Southwestern Ontario, and now lives in Simcoe, not far from where she grew up. As well as being a writer, she is a teacher and the mother of a daughter and a son.

Curricular Integration

Language Arts

- Addison struggles with presenting in front of a group. Have students write a list of ways to make an oral presentation great.
- Brainstorm a list of "things that aren't there" and select five to research. Some examples are: electricity, heat, atoms, radiation or thunder. Present the information as a PowerPoint or Keynote presentation or in poster format.
- Place a variety of objects in a paper or cloth bag. Have students shut their eyes and feel the objects from either inside or outside the bag. Get them to write a description of what is in the bag in as much detail as they can. Once they have finished, show them the objects and discuss the similarities and differences between their writing and the actual objects.
- Addison miscalculates the measurements in the recipe for his mother's punch with disastrous results. Discuss with the class where he went wrong and have them write short paragraphs which contain misinformation, such as a rainbow where the fifth color is brown or Mt. Everest is 880 meters (2886 feet) instead of 8848 meters (29,029 feet).
- At the end of his presentation Addison says, "Black holes, wormholes, atoms and ghosts/With an open, mind you can see the most." In small groups, have students discuss what this means to them. As a class, share the ideas and write a paragraph or poem describing "An Open Mind."
- Addison says, "The world always needs new ideas." Challenge your students to think of a new innovation or invention that would benefit the world. Have them describe their new idea, innovation or invention in detail.

Art

- Have students draw in detail their new idea, innovation or invention described above in Language Arts.
- Optical illusions are amazing pictures that make you think! Show students several examples and have them create their own by hand or computer.
- Using a magnifying glass or microscope, observe some common objects around the classroom. Paper, fingerprints or fabric would be good choices for this activity. Have students draw the magnified version as well as the original object.
- Look at pictures of eyes of various species, including humans, to observe their similarities and differences. Draw a pair of eyes from two different species on the same piece of paper to highlight this.

Science

- Invisible pictures that appear before your eyes can be created by using baking soda and lemon juice or vinegar. Mix baking soda with water and write a message on paper using a brush. Once it's dry, brush on vinegar or lemon juice to reveal the message. Have students research the science behind this process.
- Magnetism is an invisible force that works between two magnetic objects. Have students explore selected objects to see which attract and which do not, and document their observations and hypotheses.
- Atoms are the basic building blocks of matter. They contain a center, or nucleus, and are made up of protons, electrons and neutrons. Draw a large model on the board or screen, and label the parts. Have students find out the composition of common forms of matter.
- Build atom models using toothpicks and modeling clay for such things as water, oxygen and hydrogen. Use different colors to represent the makeup of each model.
- Addison refers to Thomas Edison as the inventor of the lightbulb. Edison invented many things that we use today, including the motion picture camera, the telescribe, cement and the electric generator. Research more about Edison and his contributions to our world.

Drama

- Introduce "air writing and drawing" using words, simple drawings or designs as a method of interacting with others without the use of speech or visible cues. Divide students into groups of two to four and have them practice with each other. Have them share with the larger group the best of their "invisible" work.
- In small groups, have students create short skits which involve sleight of hand, facial gestures or some other form of misdirection. Challenge the groups to fool their classmates with their presentations.

Selected Resources

Fiction

Asch, Frank. *Star Jumper: Journal of a Cardboard Genius*
Banyai, Istvan. *Zoom; Rezoom; Tthe Other Side*
Brown, Jeff. *Invisible Stanley*
Estes, Eleanor. *Rufus M*
Fox, Mem. *Possum Magic*
Jocelyn, Marthe. *The Invisible Day*
Karst, Patrice. *The Invisible String*
Lindbergh, Anne. *The Prisoner of Pineapple Place*; *The People in Pineapple Place*
Perry, Sarah. *If…*
Nimmo, Jenny. *Charlie Bone and the Invisible Boy*
Walters. Eric. *The Hydrofoil Mystery*
Shannon, George. *White is for Blueberry; Tomorrow's Alphabet*
Whybrow, Ian. *The Unvisibles*

Non-fiction

Allan, Tony. *Isaac Newton* (530)
Brezina, Thomas. *Tips and Tricks for Junior Detectives* (363.2)
Carroll, Colleen. *How Artists See the Elements: Earth*, *Air*, *Fire*, *Water* (760)
DiSpezio, Michael A. *Eye-popping Optical Illusions* (152.14)
Gianopoulos, Andrea. *The Attractive Story of Magnetism*
—Isaac Newton and the Laws of Gravity (530.092)
Gibson, Gary. *Science for Fun*: *Making things Change* (507.8)
Griffiths, Nick. *Incredible Inventions* (032)
Harrison, Peter. *Great Inventions the Shaped the World* (608)
Hughes, Susan. *Canada Invents!* (609.1)
IllusionWorks. *Amazing Optical Illusions* (152.14)
Karpelenia, Jenny. *Atoms*, *Molecules and Compounds* (541.2)
Mason, Adrienne. *Move it! Motion*, *Forces and You* (531)
Macleod, Jilly. *How Nearly Everything was Invented by the Brainwaves* (609)
Murphy, Patricia J. *Creative Minds* (709.2)
Olien, Rebecca. *Motion* (531.11)
Riley, Peter D. *Forces and Movement* (531.6)
Schonberg, Marcia. *I is for Idea: An Invention Alphabet* (600)
Seckel, Al. *The Ultimate Book of Optical Illusions* (152.14); *Supervisions* series
Slade, Suzanne. *States of Matter* (530.4)
Williams, Marcia. *Hooray for Inventors!* (609.2)
Wyatt, Valerie. *Inventions: FAQ* (608)

Online

Thomas Edison
www.thomasedison.com/

The Edison Papers
edison.rutgers.edu/inventions.htm

The Great Idea Finder
www.ideafinder.com/history/

NASA for Kids
www.nasa.gov/audience/forstudents/k-4/index.html

Oxford Illustrated Science Encyclopedia
www.oup.co.uk/oxed/children/oise/sites/atoms/

The Exploratorium Science Snacks
www.exploratorium.edu/snacks/iconmagnetism.html

The Periodic Table Student Version
www.nrc-cnrc.gc.ca/eng/education/index.html

Optical Illusions for Kids
kids.niehs.nih.gov/illusion/illusions.htm

How Spiders see the World
www.amonline.net.au/spiders/toolkit/hairy/see.htm

How Stuff Works—how vision works
health.howstuffworks.com/eye.htm

A Few Words from the Author

Hi Readers!

I'm fascinated by all sorts of stuff in this world, both things that are plainly visible and things that aren't there, but could be. I love the unknown. I love a good mystery—I think life is one big mystery. I also love science. To me the unknown and science go together very well. I mean, really, who would have thought fifty years ago that I would be writing this letter on a thing called a computer and sending it out on a thing called the Internet?

In order for some people to understand ideas like black holes, they need scientific facts. Science has a hard time keeping up because there's just so much exciting stuff out there, ready and waiting to be discovered. It's sort of like the feeling you'd get on your birthday if you thought you'd finished opening up all of your presents and someone told you there were more. They weren't in plain sight but they were there just the same—all you had to do was find them. Every day new things are being discovered and put into terms that we can understand and see.

I also need to have both feet firmly planted on the ground. (It's a balance thing. I guess it's because I'm a Libra.) That's where Addison comes in. He's about as firmly planted as you can get. When I first started to write the book, Addison just jumped off the page. He took over my thoughts for the next few months as I was eating breakfast or feeding the birds or balancing the budget. I knew from the start that even though Addison acted like he knew it all, he also knew that he didn't. He had to be sort of lazy (like we all feel some days), creative (with all of his crazy ideas), proud and sensitive, even though he didn't like to show it.

I chose the idea of public speaking because speeches were a nerve-wracking thing for some of kids in my grade six class. In order to lighten things up, we'd do crazy things like clap after the introduction, the way Addison's classmates did.

Addison, like a lot of other people, hates math. I like math, but fractions really are a pain sometimes. I mean, have you ever tried to divide forty minutes of computer time by three people, minus two half-minute breaks? It adds up to not much more than a blank page, sort of like Addison's brain on speech day.

Well, I'm going to get off this computer right now and go for a walk, after I finish picking the almonds out of my granola. The squirrels might want them. Hope you enjoy the book!

Sincerely,

Melody