

The Day-Glo Brothers: The True Story of Bob and Joe Switzer's Bright Ideas and Brand-New Colors

By: Chris Barton

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Genre: Nonfiction, Biography

Summary: This book explains how Bob and Joe Switzer developed Day-Glo colors. It describes the various circumstances that led them to their discovery and how these bright colors have saved lives during war and peacetime.

Book Talk: It took a magic act and a head injury to get Bob and Joe Switzer working together in a dark basement, inventing glow-in-the-dark paint. And it took a lot of crazy experimenting for them to come up with blinding Day-Glo colors. Seen any shocking green, blazing orange, or screaming yellow lately? Look around and you'll see those colors in plenty of places today. Day-Glo colors have been used to save lives and brighten our world. Read the Day-Glo Brothers- it's a book that will brighten your day!

Author's Biographical Sketch:

<http://www.chrisbarton.info/bio.html>

<http://cynthialeitichsmith.blogspot.com/2009/07/author-interview-chris-barton-on-day.html>

Other books written by the author:

Shark vs. Train

Challenging Words (pronunciation, spelling, defining):

illuminating

souped-up

exerted

knack

sleight of hand

barricade

fluorescence

scrounged

uranine

anthracene

mortar and pestle

cavorted

gruesome
spiritualists
gullible
concoction
drought
cockpit
seizures
ultraviolet
emitted
radiated
scrounged
mortar and pestle
Balinese

Discussion Questions:

1. Joe and Bob Switzer made an excellent team. Describe the strengths of each brother and how those strengths helped promote their business.
2. How did the Great Depression, World War II, and the postwar era impact or shape the development of their invention?
3. Day-glo paints are used for fun and also to save lives. Can you think of another invention that does both?
4. What does the illustrator do to show you how this invention developed over time?
5. Why was Joe interested in the fluorescent inks to start with? Why did the Switzer brothers decide to sell the inks? Do you think they would have continued to experiment if the inks hadn't sold successfully?
6. Would you eat a fluorescent angel food cake? Explain.

Suggested Activities:

1. Create a timeline of the events that led to the invention of day-glo colors with this free online program:

<http://www.readwritethink.org/files/resources/interactives/timeline/> .

English/Language Arts

- 4.4.4 Use logical organizational structures for providing information in writing, such as chronological order, cause and effect, similarity and difference, and posing and answering a question.
- 5.2.2 Analyze text that is organized in sequential or chronological order.
- 5.4.11 Use logical organizational structures for providing information in writing, such as chronological order, cause and effect, similarity and difference, and stating and supporting a hypothesis with data.

- 6.4.4 Use a variety of effective organizational patterns, including comparison and contrast, organization by categories, and arrangement by order of importance or climactic order.

2. The Switzer brothers sold their fluorescent inks and Day-Glo paints for many uses. Over the course of a week, seek out, observe, and write about at least three items that you see that use Day-Glo colors. What color was used, how is the product used, and where did you see the product? Examples include clothes, construction cones, highlighters, or post-it notes.

English/Language Arts

4.5.1 Write narratives that:

- include ideas, observations, or memories of an event or experience.
- provide a context to allow the reader to imagine the world of the event or experience
- use concrete sensory details. (Core Standard)

3. Try this experiment:

http://www.sciencekidsathome.com/science_experiments/sunlight_1.html#more

It uses a cup of tap water and a cup of tonic water with a black piece of paper behind them, placed in the sunlight. The tonic water should glow in the sunlight, much like Day-Glo paint. Although this experiment uses daylight fluorescence, it replicates the Switzer brothers' experience of shining the black light into their father's darkened drugstore and seeing a bottle of liquid light up. If you had a black light, you could also try this experiment in a darkened room and see if the tonic water fluoresces there as well... or you could try other liquids.

Science

4.2.5 Write descriptions of investigations, using observations and other evidence as support for explanations. (Core Standard)

6.3.21 Investigate, using a prism for example, that light is made up of a mixture of many different colors of light, even though the light is perceived as almost white.

4. Chris Barton writes about how the artist Andy Warhol used fluorescent Day Glo paints in his artwork. Examine prints of some of Warhol's work. Design and create a print using Day Glo colors.

Art

6.1.1 Identify and analyze the relationship between a work of art and the history, geography, and technology of the culture, and identify where, when, why, and by whom the work was made (focus: Europe and the Americas, including the diversity of past and contemporary cultures and ethnicities).

6.7.4 Demonstrate appropriate use of various media, techniques, and processes to communicate themes and ideas in artwork.

Life skills:

Curiosity

Initiative

Problem Solving
Resourcefulness

Related Internet Sites:

Activity and Discussion Guide

http://www.charlesbridge.com/client/client_pdfs/downloadables/DayGlo_Activity_Guide.pdf

Animation of how day-glo colors work as compared to regular colors:

<http://www.charlesbridge.com/day-glo-animation.html>

Robert Switzer Foundation Biography

<http://www.switzernetwork.org/about-us/bob-switzer>

Great story of the invention and uses of Day Glo with illustrations, in slightly more detail

<http://www.cabinetmagazine.org/issues/30/turner.php>

Day-Glo company's website

<http://www.day-glo.com/>