

ALBUM ROLLER COASTERS AND NEWTON'S LAW OF GRAVITY

Album Description

Ninth grade general science students will come to the library participate in several activities after being introduced to Newton's Law of Gravity. We will begin with a recall activity that involves the recall of New's Law of Gravity and Motion. For this activity, students will be divided into teams and ask to create a team sketch note(visual note) on there understanding of Newton's Laws of gravity and motion. Next, I will model analyzing a a photo using the LOC analysis tool. I have created a Padlet in which students will choose a photo of a roller coaster to analyze using the LOC photo analysis tool. I have modified the tool to include the science they see reflected in the photo. Also in the padlet, students will be asked to choose a blog entry from the LOC that I have included in the padlet to read and reflect upon. I created that graphic organizer with strategies from the photo analysis tool in mind. Students choose from a choice board a series of activities from our STEM lab. For example, they may construct a marble run or experience a roller coaster ride from our VR stations. 9 - 12 Science Technology library

THE THRILL OF PHYSICS



Teaching Notes:

This blog will be an option for students to read before building their roller coaster from STEM materials.

Reference Link: https://blogs.loc.gov/inside_adams/2012/06/the-thrill-of-physics/

[THUNDERBOLT ROLLER COASTER]



Teaching Notes:

This roller coaster will be in the Padlet for students to choose to analyze.

Reference Link: <http://www.loc.gov/resource/ppmsca.71302/>

Created / Published

- [August 1964]

Genre

- Film negatives--1960-1970

Notes

- - Title devised by Library staff.
- - Date from caption information for contact sheet RZ-1964-8-84 or corresponding negative sleeve.
- - Contact sheet available for reference purposes: RZ-1964-8-84.
- - Forms part of: Anthony Angel Collection (Library of Congress).

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

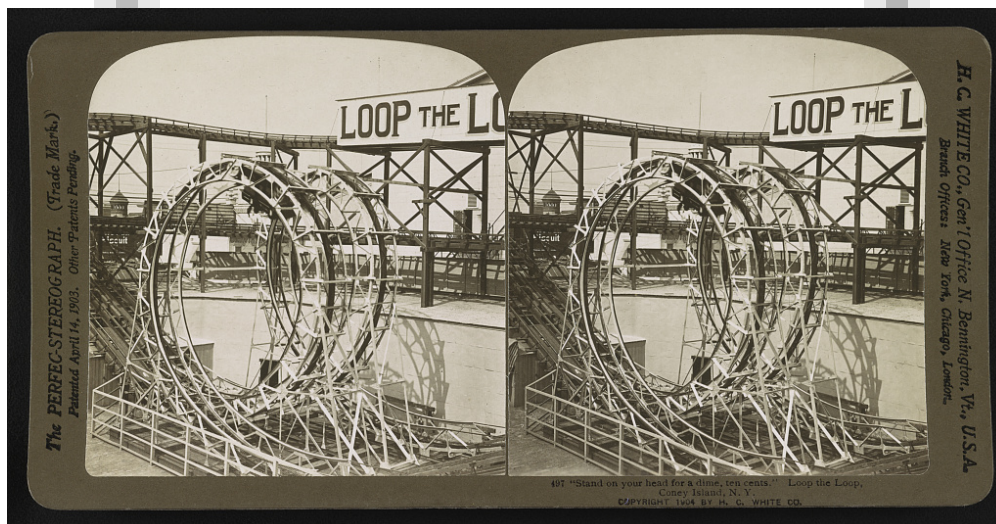
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Digital Id

- ppmsca 71302 // hdl.loc.gov/loc.pnp/ppmsca.71302

"STAND ON YOUR HEAD FOR A DIME, TEN CENTS". LOOP THE LOOP, CONEY ISLAND ISLAND, N.Y.



Teaching Notes:

This ride, a different type of ride, will be an option in the Padlet for students to analyze.

Reference Link: <http://www.loc.gov/item/2017656921/>

Created / Published

- North Bennington, Vt. : H.C. White Co., Publishers, 1904.

Genre

- Stereographs--1900-1910
- Photographic prints--1900-1910

Notes

- - H53508 U.S. Copyright Office.
- - Copyright 1904 by H.C. White Co.
- - On mount: The "Perfec" Stereograph. (Trade Mark.) Patented April 14, 1903.
- - No. 497.
- - Title from item.
- - Forms part of: Marian S. Carson Collection at the Library of Congress.

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

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Digital Id

- stereo 1s07335 //hdl.loc.gov/loc.pnp/stereo.1s07335

I SCREAM ROLLER COASTER, WILDWOOD, NEW JERSEY



Teaching Notes:

This roller coaster is in the Padlet for students to choose to analyze.

Reference Link: <http://www.loc.gov/item/2017712306/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.

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https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 10220 <https://hdl.loc.gov/loc.pnp/mrg.10220>

MOREY'S PIER ROLLER COASTER, WILDWOOD, NEW JERSEY



Teaching Notes:

This roller coaster will me an option in the Padlet for students to choose to analyze.

Reference Link: <http://www.loc.gov/item/2017712205/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.

Image not found

https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 10119 <https://hdl.loc.gov/loc.pnp/mrg.10119>

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Teaching Notes:

Hey Dana!

I think that the activities you have planned are super cool. I love the photos of the different roller coasters, and I think that you have identified some cool activities. I think that the padlet will work well, and I love the use of a marble run for some of the more tactile learners!

HUNT'S PIER ROLLER COASTER, WILDWOOD, NEW JERSEY



Teaching Notes:

This roller coaster is a coaster is an option for student analysis and review.

Reference Link: <http://www.loc.gov/item/2017712248/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.
- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

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Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 10162 <https://hdl.loc.gov/loc.pnp/mrg.10162>

ROLLER COASTER, ATLANTIC CITY, NEW JERSEY



Teaching Notes:

This roller coaster will be an option for students to analyze and review.

Reference Link: <http://www.loc.gov/item/2017712044/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.
- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

Image not found

https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 09958 <https://hdl.loc.gov/loc.pnp/mrg.09958>

THE PHYSICS OF ROLLERCOASTERS



Teaching Notes:

This video will be an option for those students who do not wish to experience the virtual reality station.

Rollercoasters are so thrilling because our bodies frequently experience changing forces. To a physicist, they also offer a perfect example of classical physics in action, which can be used as a teaching tool. This video offers a brief introduction to rollercoaster mechanics and how technology developments are bringing new opportunities for thrill-seekers. Find out more about the physics of rollercoasters in this article <https://physicsworld.com/a/the-physics-of-rollercoasters/>

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Teaching Notes:

One of the challenges you're likely to encounter is that of copyright restrictions, particularly because vinyl albums really only got their commercial start in the 1930s and 1940s (post 1923 copyright laws). I wonder if you might start with sheet music art? <https://www.loc.gov/collections/historic-sheet-music/about-this-collection/> Your students could then follow with research into vinyl album covers, the technology of listening devices, etc. I love the idea of students creating their own album covers and inner sleeves!

WHY DON'T I FALL OUT WHEN A ROLLER COASTER GOES UPSIDE DOWN?



Teaching Notes:

Students will need to choose an article or blog to read. This will be a choice.

Reference Link: <https://www.loc.gov/everyday-mysteries/physics/item/why-dont-i-fall-out-when-a-roller-coaster-goes-upside-down/>

SPORTLAND PIER SUPERSONIC ROLLER COASTER, WILDWOOD, NEW JERSEY



Teaching Notes:

This photo will also be available for students to choose to analyze.

Reference Link: <http://www.loc.gov/item/2017712251/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.
- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

Image not found

https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 10165 <https://hdl.loc.gov/loc.pnp/mrg.10165>

ROLLER COASTER CAR, ATLANTIC CITY, NEW JERSEY



Teaching Notes:

I will use this photo in a collection of LOC photo's that students may choose to analyze and describe the science involved in the design.

Reference Link: <http://www.loc.gov/item/2017712043/>

Created / Published

- 1978.

Genre

- Slides--1970-1980.--Color

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Margolies category: Atlantic coast.
- - Purchase; John Margolies 2015 (DLC/PP-2015:142).
- - Credit line: John Margolies Roadside America photograph archive (1972-2008), Library of Congress, Prints and Photographs Division.
- - General information about the John Margolies Roadside America photograph archive is available at <http://hdl.loc.gov/loc.pnp/pp.mrg>
- - Forms part of: John Margolies Roadside America photograph archive (1972-2008).

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- mrg 09957 <https://hdl.loc.gov/loc.pnp/mrg.09957>

RIDERS ENJOY (OR ENDURE) A SPIN ON THE BIG DIPPER ROLLER-COASTER AT CAMDEN PARK, AN AMUSEMENT PARK ON THE OUTSKIRTS OF HUNTINGTON, WEST VIRGINIA



Teaching Notes:

This photo will be my example of analyzing a photo. I will begin with question about the photo. Then, I will ask the content teacher to add her perspective as far as the science depicted in the photo. We will model this strategy for the class.

Reference Link: <http://www.loc.gov/resource/highsm.31846/>

Created / Published

- 2015-05-09.

Genre

- Digital photographs--Color--2010-2020

Notes

- - Title, date and keywords based on information provided by the photographer.
- - Established in 1902 as a picnic spot by the Camden Interstate Railway Company, where riders traveling between Huntington and nearby cities would stop to change lines, the park soon gained a carousel and other roadside attractions. As of 2015, Camden Park was West Virginia's only amusement park, home to more than thirty rides and attractions.
- - Credit line: West Virginia Collection within the Carol M. Highsmith Archive, Library of Congress,

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https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

Prints and Photographs Division.

- - Purchase; Carol M. Highsmith Photography, Inc.; 2015; (DLC/PP-2015:055).
- - Forms part of: West Virginia Collection within the Carol M. Highsmith Archive.

Repository

- Library of Congress Prints and Photographs Division Washington, D.C. 20540 USA
<http://hdl.loc.gov/loc.pnp/pp.print>

Digital Id

- highsm 31846 //hdl.loc.gov/loc.pnp/highsm.31846

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Teaching Notes:

I will take a look. As I stated, I am disappointed in the amount of time I will have to work with the students.

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Teaching Notes:

Great idea! Thanks. I was told yesterday the music will be Christmas music. I will only have the students for a total of two hours. I wish I had more time. I am going to ask the choir director if he covers copyright also.

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https://sites.msudenver.edu/tpswesternregion/wp-content/uploads/sites/476/2021/11/tps_logo-1.png

Teaching Notes:

Dana, I can echo Mary's comments about copyright. I also think it is an interesting research topic for students. I am wondering if you have posted this in the group for The Arts And Primary Sources here in the Network. Members of that group may have some very good ideas. You don't have to re-create the album. You can add a discussion and make a post that gives the members of that group a link to your album in this group. Since they are members of the Network, it would work best if you give them the network link rather than the link for sharing outside the network. The Network link will let them submit comments to your album.

--Ann