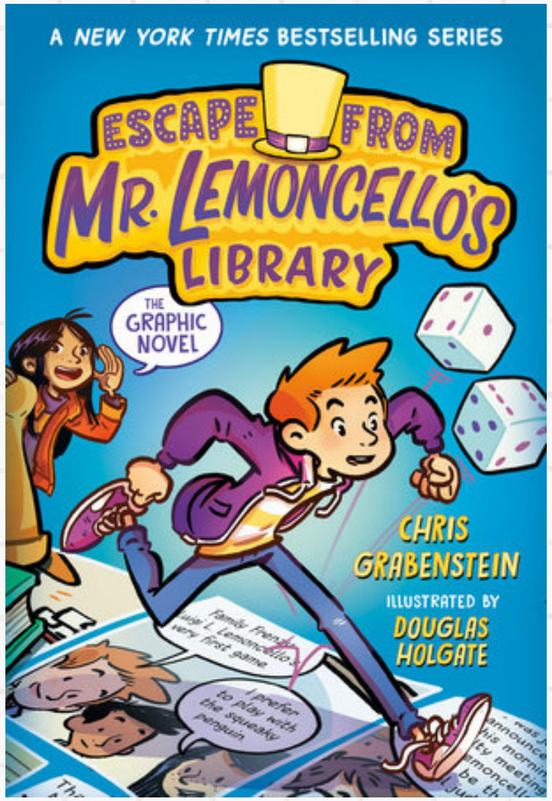
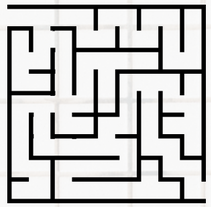
ESCAPE FROM MR. LEMONCELLO'S LIBRARY



BY: CHRIS GRABENSTEIN

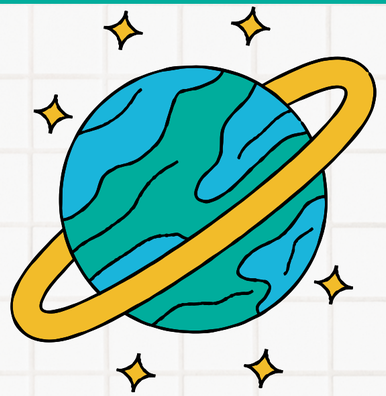
ILLUSTRATED BY: DOUGLAS HOLGATE

Activity: Magnet Maze

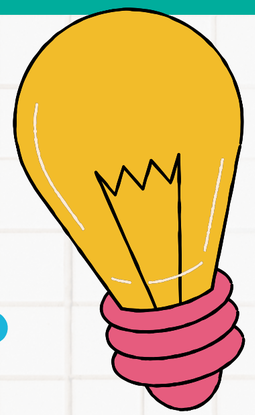


Developed by Chloe Brusich and Lillian Koster for CU Boulder's Children's Book Festival 2024, Open Education Resource, Creative Commons.

BY: CHLOE BRUSICH AND LILLIAN KOSTER



STANDARDS!



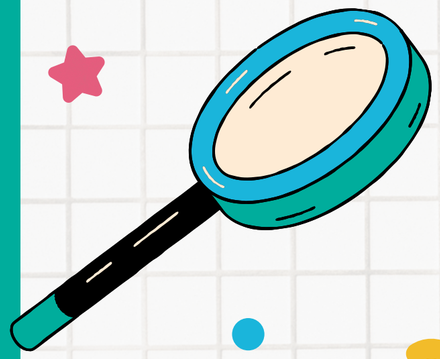
Content Area: Science

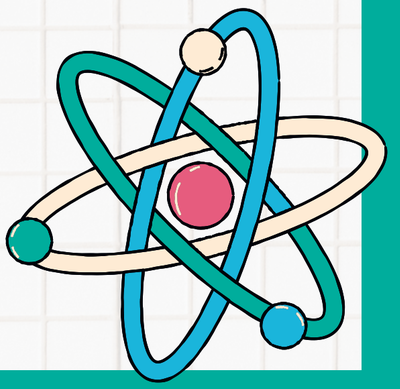
Grade: Middle School

Standard Category: Physical Science

Grade Level Expectations: 4. Forces that act at a distance (gravitational, electric, and magnetic) can be explained by force fields that extend through space and can be mapped by their effect on a test object.

Evidence Outcome: c. Conduct an investigation and evaluate the experimental design to provide evidence that fields exist between objects exerting forces on each other even though the objects are not in contact. (MS-PS2-5) (Clarification Statement: Examples of this phenomenon could include the interactions of magnets, electrically-charged strips of tape, and electrically-charged pith balls. Examples of investigations could include firsthand experiences or simulations.)





Colorado Academic Standard information retrieved from https://www.cde.state.co.us/apps/standards.

View the full standards at Link

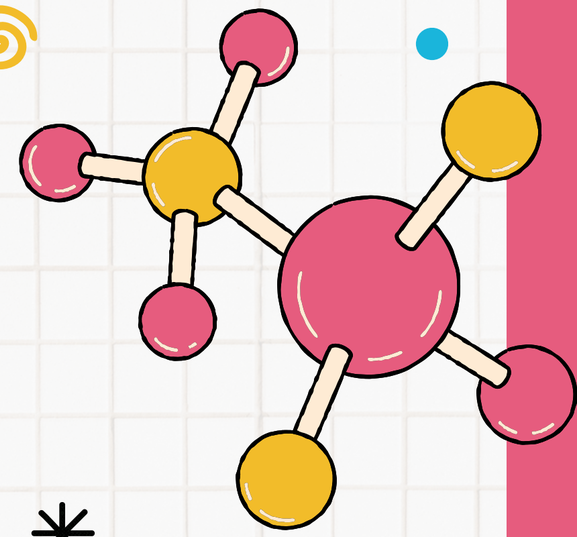
OVERVIEW

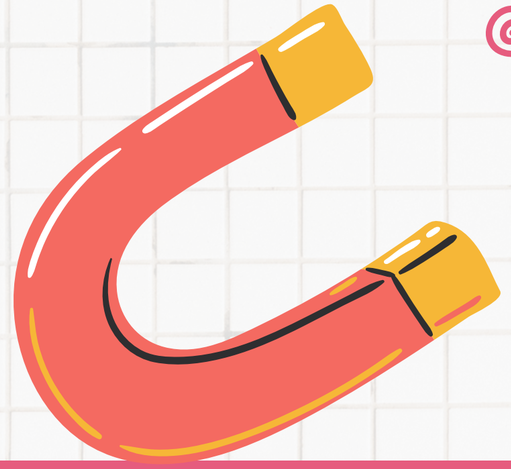
On page 212, In Mr. Lemoncello's Library, Kyle, the main character, had to make it through a maze of bookshelves in order to complete one of the challenges. The bookshelves kept sliding/moving, which made it difficult for Kyle to complete. The Magnet Maze is an **individual** activity that will hopefully connect the themes of magnetic force and electricitiy that are in the library's technology and the challenge of escaping a maze. This engaging activity requires students' creativity of drawing out their maze and problem solving of escaping their own maze.

Adopted by Go Science Kids

Available via:

https://gosciencekids.com/index.html%3Fp=2522.html



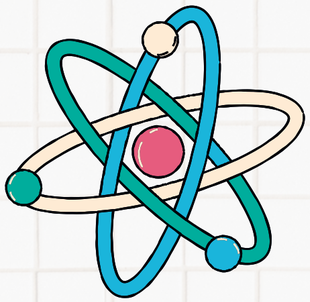


MATERIALS

- Paper plates (Link)
- Markers, Crayons, Colored pencils (Link)
- Magnet Wand (Link)
- Paperclip OR anything that attracts a magnet (Link)

DIRECTIONS

Introduction to activity: Teacher should explain to students about how Mr. Lemoncello's Library involves elements of magnetic force throughout the machinery and objects in the library. Explain how the library is built up of technology and magnetic fields which is important for the different aspects of the book. Transition into passing out materials to individuals students and give directions on previous slide.



Wrapping up activity: You can really make this your own. We suggest asking questions such as...

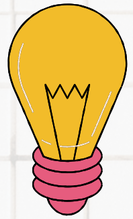
a. What did you notice?

b. Wonder?

c. Were you successful? Not?

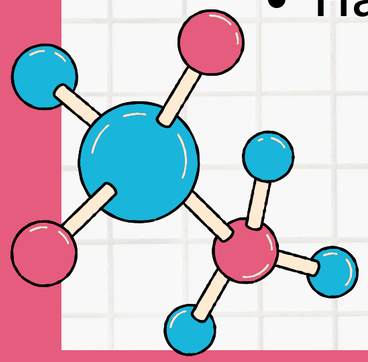
d. Do you know why there was an attraction? – You can explain if there are incorrect answers.

e. Did you find a connection between Mr. Lemoncello's Library and this activity?



DIRECTIONS CONTINUED *

- Take a paper plate and coloring tool.
- Start drawing a maze on a paper plate. This is where the student can get creative and design it however they want. *see right-hand corner for further explanation
- Take a paperclip and put it on the maze side.
- Take a magnet and put it underneath the paper directly under the paper clip.
- Move the magnet underneath and the paper clip will move along with it.
- Have students try to guide the paper clip through the maze.



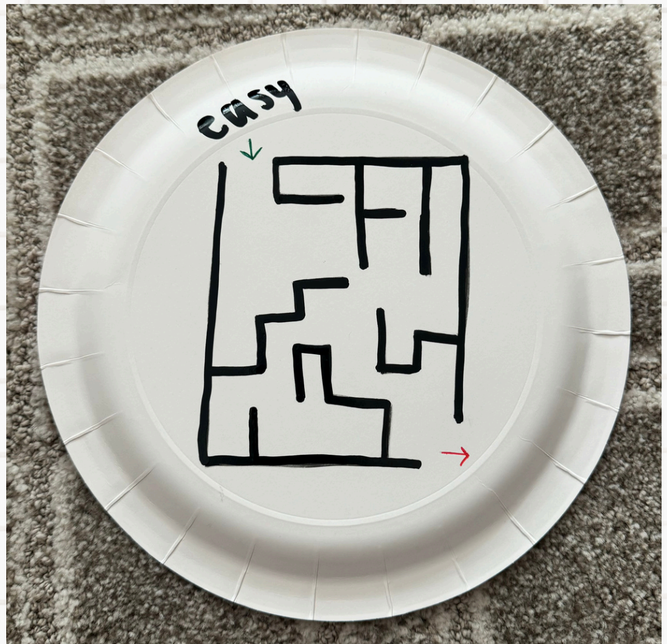
Reference video: Link

Note: Creating a maze may be difficult for some students. We suggest printing some papers [Link] and having students cut them out if you anticipate any challenges. This way, they can cut out the black part of the maze and use it to trace onto their plate.

EXAMPLE AND EXTENSION

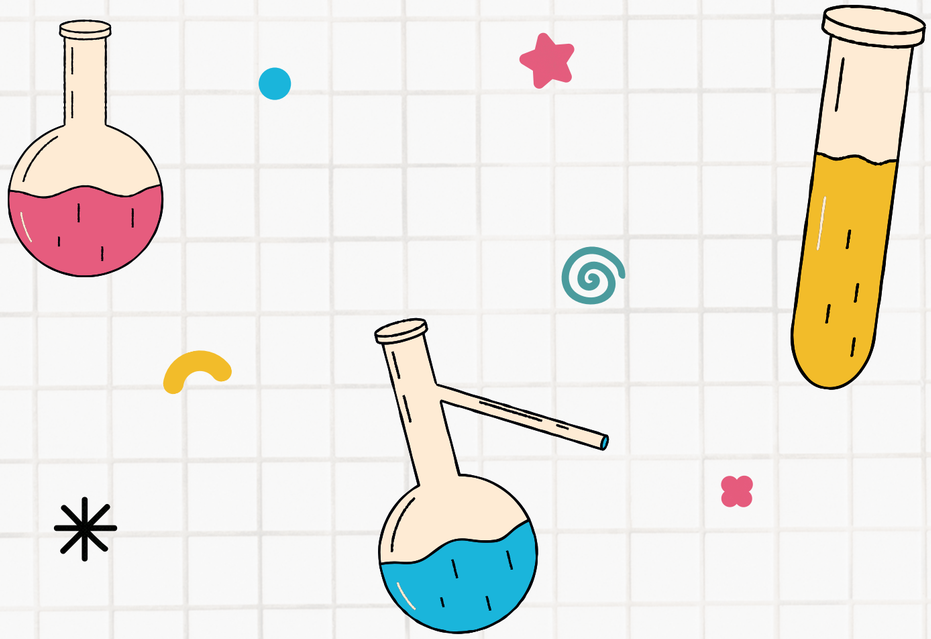
EXTENSION!!

Feel free to allow students to trade mazes! This is a fun way to have the activity stretch longer. Additionally, if you think students may need help or a less complex maze, they can make larger mazes that may be easier to follow and them to be able to gain an understanding of why we are conducting this experiment.



JOIN US!

We also hope you can join us on Saturday, November 9 at the Boulder Public Library to meet Chris Grabenstein and hear more about Escape from Mr. Lemoncello's Library in person...along with other authors and illustrators! For more information, visit https://www.colorado.edu/event/bookfest



The CU Boulder School of Education and Boulder Bookstore present

2024 Children's Book Festival

Saturday, November 9 | Boulder Public Library

JENNY SUE KOSTECKI-SHAW

BRITTANY CICCHESE

JULIE LEUNG

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AMALIE HOWARD

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Join us on Saturday, November 9, 2024 | 10 a.m. – 5 p.m.

Boulder Public Library (Main Branch) - 1101 Arapahoe Ave.
Free parking available

This free event includes author talks, a panel for educators, book sales and signing, children's activities and more. Come for part of the event, or stay for the day!

Free educational resources available on our website. Continuing Education Units (CEUs) available for teachers and librarians.

Support provided by the CU Boulder Office for Public and Community Engaged Scholarship

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