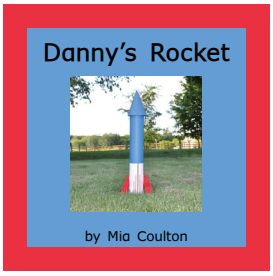
March 2017 Classroom Activity

The Maker Movement is a educational problem-solving trend that is quickly gaining STEAM (pun intended) in museums, libraries and schools across the country. Students of all ages, work individually or in small groups, solving design challenges by planning, tinkering and building, using a variety of tools and repurposed materials. MAKING integrates well with language arts.

Design Challenge Using the Story from Danny's Rocket:



A good story, like Danny's Rocket, is a fine jump-off point for a fun design project. After students have read the book, ask them to identify a need or problem. Have them brainstorm together to come up with ideas to solve the problem. Then instruct students to design and build their solutions, using the tools and materials that are available. Once completed, each student's solution can be tested, written about, and presented to the class.

Identify the Problem:

"In our story, Danny and Bee don't make it to the moon on their first try. Can you help them? How can we help Bee get to the moon?"

Suggested Raw Materials:

- *Re-usable materials (shoeboxes, clean plastic food containers, paper towel rolls or newspaper)*
- *Connectors (glue, glue sticks, tape, labels, or staples)*
- *Craft odds and ends (markers, pipe cleaners, paper bags, yarn, felt, craft paper, straws)*
- *Simple Tools (scissors, hole punch, ruler, stapler)*

Think & Brainstorm Together:

Ask, "What are some different ways that Bee could go to the moon?" Encourage creativity!

Our group of clever Kindergartners had a wide variety of wonderful ideas, including using a two-jet rocket, an airplane, an oversized jet pack, a very large trampoline, a flying superhero, a large bat, a helicopter, and even a unicorn. See some of their projects, beginning at right and continuing on the next page.

"This is Bee's jet pack. See? This is the button," pointing to the orange mandala drawn on the tube.

"This is Wonder Woman. She has a cape and is wearing gold. Bee rides on her back and she flies him to the planet."

"This is a ship. Bee rides in here. It's like a bus with no wheels. It can go to the moon with boosters and rainbow power."

"I made a superhero to fly Bee up to the moon."

Design & Build:

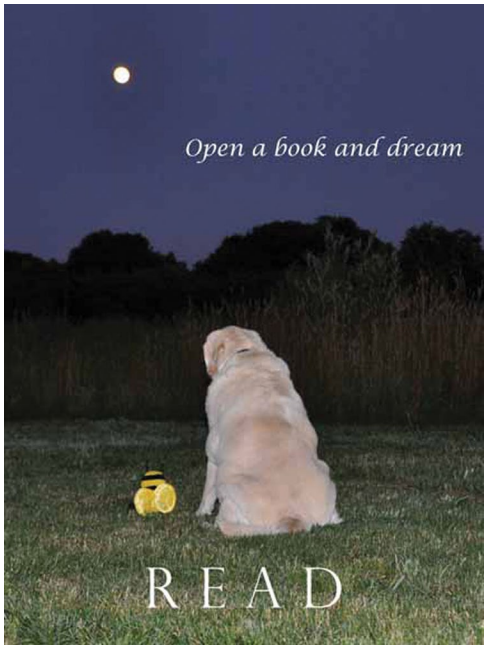
Students can work individually, in pairs, or in small groups as they decide on a plan for sending Bee to the moon. After they agree on a method, instruct them to design and build it using the tools and materials on hand.

Writing Ideas:

- *Draw and label a picture of the finished design*
- *Write instructions for using the design*
- *Create a how-to text for building the design*
- *Have students continue the story in Danny's Rocket using their design as a possible solution*

We'd Love to Hear From You!

If you try this activity in your classroom, we'd love to hear about it. Please send us a brief summary or photo of your project. As a "Thank You," we'll send you a FREE Dream Poster, featuring Danny and Bee. It's the perfect way to bring a spirit of imagination into your classroom.



For More Information About the Maker Movement:

https://www.weareteachers.com/making-matters-how-the-maker-movement-is-transforming-education/

https://www.edutopia.org/blog/maker-movement-world-beyond-things-stacey-goodman

https://www.edutopia.org/blog/maker-movement-moving-into-classrooms-vicki-davis

http://blogs.edweek.org/edweek/DigitalEducation/2016/04/maker_movement_in_k-12_education_research.html