

LET'S INVENT WITH FRANKIE SPARKS

Frankie Sparks and the Class Pet

About the Author

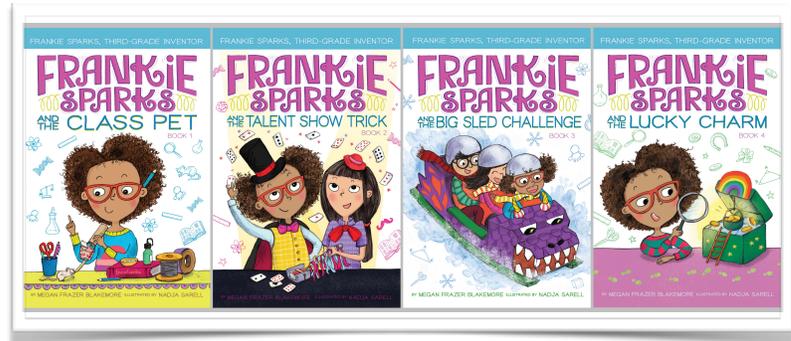
Megan Frazer Blakemore is an award-winning author for children and young adults. A former school librarian, she helped to launch a maker space in her school. Frankie Sparks is inspired by her students and their design thinking skills. Visit her online at meganfrazerblakemore.com

About the Illustrator

Nadia Sarell is an illustrator from Helsinki, Finland. She is also a dancer and musician. Her work for can be found in books for children all over the world. Visit her online at www.nadjasarell.com

Aladdin Books

The Frankie Sparks, Third-Grade Inventor series is published by Aladdin Books, a division of Simon & Schuster. You can find out all about their awesome books for young readers at simonandschuster.com and follow @SimonKids and @SSSEdLib on Twitter.



About Frankie Sparks, Third-Grade Inventor

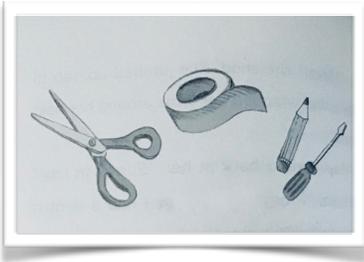
Frankie Sparks is the world's greatest third-grade inventor. In this STEM-centered series, she solves everyday problems through inventions. Each book focuses on one part of the design process and encourages children to invent alongside Frankie.

Frankie Sparks and the Class Pet

The best thing EVER is happening in Frankie Sparks's third-grade class: They are getting a class pet! Their teacher, Miss Cupid, tells them they will vote on their pet, but it has to meet some "parameters." Their pet must:

1. Fit in an aquarium.
2. Cost less than \$50.
3. Be easily portable.
4. Be able to be left alone for the weekend.

Frankie thinks that a rat—just like the rats in her beloved Aunt Gina's lab—would be the perfect fit. But her best friend, Maya, doesn't think a rat would be great at all. They are kind of gross and not as cool as a hermit crab, which is Maya's top choice. Using her special workshop, can Frankie find a way to convince her teacher and her best friend that Team Rat is the way to go?



Supplies

You will need inventing supplies. What you provide is up to you. Recommended supplies include:

- Cardboard and paper
- Tape or glue
- Scissors
- Miscellaneous recycled materials.

Preparation

You don't have to have read the whole book with students before you start, but you should familiarize your students with Frankie and her challenge.

Print out student packets for each student or student group.

Find the Let's Invent with Frankie Sparks video (<https://youtu.be/T9lg6lpesqk>) and share with students.

Gather materials and get ready to invent!

Educator Information

This activity is broken up into five parts. Each part can be completed in roughly 45 minutes, though time may vary based on the number of children, the age of the children, and their experience with designing and building. You can spread the activities out over the course of the week or complete them all in one day. If you are a STEM teacher or librarian, you could plan on one session each time you meet with your students.

Schedule

Block 1

Introduction & Problem Identification

1. Show the Let's Invent with Frankie Sparks video to give an overview of the project. Link: <https://youtu.be/T9lg6lpesqk>
2. Go over the "Problem Identification" student page.
3. Have students complete the "Problem Identification" page.

Block 2

Brainstorm & Design

1. Explain to students that the brainstorm stage is the time for all the wild and wonderful ideas to come out – but also the not so great ones. Sometimes you have to go through some bad ideas to get to the good ones. Or, an impossible idea can inspire a practical one.
2. Have students complete the "Brainstorm" page. Students should brainstorm for at least 15 minutes.
3. Review brainstorm ideas as a group. What sounds like it might make an awesome invention?
4. Have students complete the "Design" sheet. Encourage them to use both pictures and words. Tip: It can be helpful to show students what supplies they will have at this stage.

Block 3

Build

1. Provide materials for students. Tip: Decide beforehand if you will give students a set of supplies or allow them to choose supplies as needed.
2. Let students build.

Block 4

Test & Retest

1. Students test their design. They can pretend to be the pet or use a stuffed animal.
2. Have students complete the "Test & Retest" page.

Block 5

Share

1. Have students complete the "Share" student page.
2. Hold a share session so each student or group can share their work.
3. If you want, document and share your projects on social media. Please use hashtag #FrankieSparksInvents tag the author if you do (@meganbfrazier on Twitter and @megbmore on Instagram).