

THE GIRL WHO NAMED
PLUTO

The Story of Venetia Burney



Alice B. McGinty

Elizabeth Haidle



THE GIRL WHO NAMED PLUTO

CLASSROOM ACTIVITY GUIDE

About the Book

When Venetia Burney's grandfather reads aloud from the newspaper about a new discovery—a "ninth major planet" that has yet to be named—her eleven-year-old mind starts whirring. She is studying the planets in school and loves Roman mythology. "It might be called Pluto," she says, thinking of the dark underworld. His grandfather loves the idea and contacts his friend at London's Royal Astronomical Society, who writes to scientists at the Lowell Observatory in Massachusetts, where Pluto was discovered. After a vote, the scientists agree unanimously: Pluto is the perfect name for the dark, cold planet.

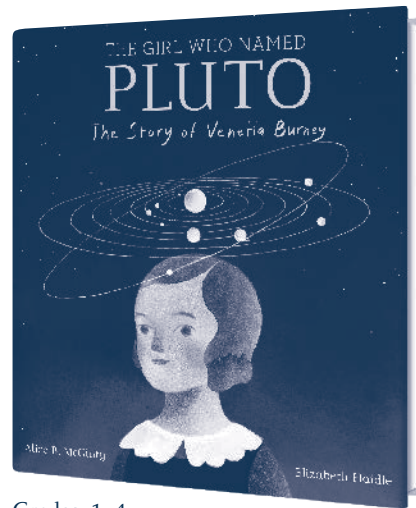
Here is a picture book perfect for STEM units and for all children—particularly girls—who have ever dreamed of becoming a scientist.

About the Author

ALICE B. MCGINTY is the award-winning author of over forty books for children, including *Darwin*, an Orbis Pictus Honor Book and one of *Booklist's* Top 10 Biographies for Youth. It received three starred reviews and was called "exquisite and enlightening" by *Kirkus Reviews*. Her most recent picture book, *Rabbi Benjamin's Buttons*, was named a Sydney Taylor Notable Book. She also runs a writing camp for kids, Words on Fire. Visit her on the web at alicebmcginty.com or follow her on Twitter at @AliceBMcGinty.

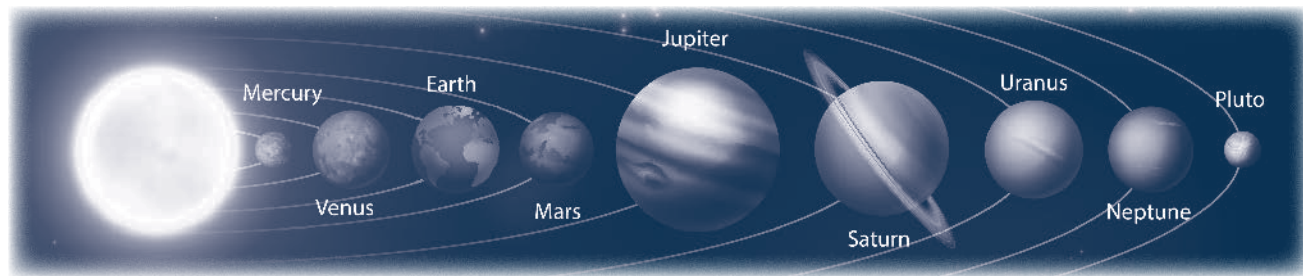
About the Illustrator

ELIZABETH HAIDLE is the creative director of and a regular contributor to *Illustrator* magazine, as well as a collaborator at Mascot Press, an independent comics press. She has illustrated a graphic novel, *I, Parrot*, written by Deb Olin Unferth, and she has several nonfiction comics series in the works. Ms. Haidle received her MA in illustration from Savannah College of Art and Design. You can follow her on Instagram at @ehaidle.



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ACTIVITIES

Walking the Solar System

The book opens with Venetia's class taking a walk to map out part of the solar system. Discuss how the teacher and students figured out the number of paces needed. Then figure out how many more would be needed for Uranus and Neptune. As a class, duplicate the walk using the same pacing and the same or similar objects. If possible, take the walk in a place where the class can also mark Uranus and Neptune. Then discuss the difference between reading about the relative distances between planets and experiencing them in a walk.

See Beyond the Words

In a short book like this, the illustrations provide a lot of details about the time, the place, and the people that aren't in the text. Ask students to study the pictures and write down ten pieces of information shown in the illustrations but not given in the narrative, such as details about clothing, cars, and so on. Have a class discussion about what pictures add, especially to a historical book.

76 Years Later . . .

As a class, listen to this ten-minute 2006 NASA interview with Venetia Burney Phair. Ask students to discuss the interview and what they learned from it. In one answer, Venetia Burney comments on how much the world has changed since 1930: "It leaves one absolutely stunned." Have students talk about what has changed based on what the book shows and their other knowledge. They can also speculate about what might be different when they are old.

Interview podcast: nasa.gov/mp3/141071main_the_girl_who_named_pluto.mp3

Transcript of podcast: nasa.gov/multimedia/podcasting/transcript_pluto_naming_podcast.html

Name a Celestial Body

After doing the Many Moons exercise, have students imagine that they can enter a NASA contest to name a newly discovered celestial body such as a planet or moon. As a class, discuss the traditional sources of such names, as well as other possible sources. Keep in mind that NASA will want a name that meets public approval! Using the Formal Letter Graphic Organizer, each student should write a letter to NASA about their choice, its origin, and why they think the name is a good one. Post the letters on a bulletin board and have the class vote for the name they like best.

For another source about naming, view this list of surface features on Pluto and how they were named, including the Burney crater: nasa.gov/feature/pluto-features-given-first-official-names



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This guide was written by Kathleen Odean, a former school librarian who gives workshops on new children's and young adult books. She chaired the 2002 Newbery Award Committee and served on earlier Newbery and Caldecott Award Committees.

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MANY MOONS

The planets Venus and Mercury do not have moons, but all the other planets have at least one moon. Below is a table with some of the names of those moons. Many come from Shakespeare or from Greek or Roman mythology, but the italicized names on the list for Saturn are from other mythologies. Choose one of the moons to research, and answer as many of the questions as possible. Then explain whether you think the name was a good choice.

Planet	Names of moons
Mars	Deimos, Phobos
Jupiter	Io, Europa, Callisto, Ganymede, Thebe, Metis
Saturn	Titan, Rhea, Prometheus, Pandora, Phoebe, Janus, Calypso, Atlas, Pan, Dione, Iapetus, Hyperion, Tethys, Mimas, Epimetheus, Helene, Telesto, <i>Ymir</i> , <i>Paaliaq</i> , <i>Siarnaq</i> , <i>Tarvos</i> , <i>Kiviuq</i> , <i>Ijiraq</i> , <i>Thrymr</i> , <i>Skathi</i> , <i>Mundilfari</i> , <i>Erriapus</i> , <i>Albiorix</i> , <i>Suttungr</i>
Uranus	Juliet, Puck, Miranda, Ariel, Bianca, Cordelia, Cressida, Ophelia, Desdemona, Portia, Rosalind, Titania, Oberon, Caliban, Belinda, Umbriel, Sycorax, Prospero, Setebos, Stephano, Trinculo
Neptune	Triton, Proteus, Naiad, Nereid, Thalassa, Despina, Galatea, Larissa
Pluto	Charon

Planet name: _____

Moon name: _____

Who named it? _____

What is the origin of the name? _____

Explain why you like the name and whether it was a good choice.

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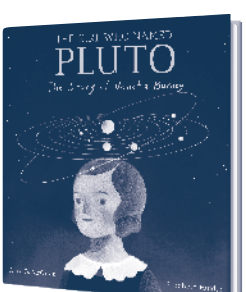
NAME A CELESTIAL BODY

Imagine that you can enter a NASA contest to name a newly discovered celestial body, like a planet or moon. Using the graphic organizer below, write a letter to NASA about what you think the name should be.

Name & address of recipient	NASA Headquarters 300 E Street SW, Suite 5R30 Washington, DC 20546	Your address _____ _____
Date	_____	
Greeting such as "Dear Sir or Madam"	_____	
Paragraph 1	_____ _____ _____	
Paragraph 2	_____ _____ _____	
Paragraph 3	_____ _____ _____	
Closing such as "Sincerely Yours"	_____	
Your name	_____	

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