

ASTRO-NUTS

Mission Two: The Water Planet

By Jon Scieszka

Illustrated by Steven Weinberg

9781452171203 • \$14.99 HC • Ages 9 to 12

F&P Text Level Gradient: R • Lexile® Measure: 630L

ABOUT MISSION TWO: THE WATER PLANET

AstroNuts Mission Two: The Water Planet is the second book in the laugh-out-loud series by children's literature legends Jon Scieszka and Steven Weinberg. The book follows a new mission, where AstroWolf, LaserShark, SmartHawk, and StinkBug must find a planet fit for human life after we've finally made Earth unlivable. After they splash-land on the Water Planet, they find power-hungry clams, a rebellious underwater force, and a world full of too-good-to-be-true. Can this aquatic place really be humans' new home? And why are these clams so eager to swap planets?

ABOUT THE AUTHOR

Jon Scieszka is best known for his bestselling picture books, including *The True Story of the 3 Little Pigs!* and *The Stinky Cheese Man*. He is also the founder of guyssread.com and a champion force behind guysslisten.com, and was the first National Ambassador of Young People's Literature. He lives in the Catskills in New York.

ABOUT THE ILLUSTRATOR

Steven Weinberg writes and illustrates kids' books about dinosaurs, roller coasters, beards, and chainsaws. He lives in the Catskills in New York.



NOTE ABOUT THIS GUIDE AND *ASTRONUTS MISSION TWO: THE WATER PLANET*

This guide consists of classroom extension activities, discussion opportunities, and vocabulary that can be used when reading, teaching, or discussing *AstroNuts Mission Two: The Water Planet* (together, in a small group, or individually).

These activities and discussions with AstroNuts allow the readers to:

- delve into science and math activities looking at our Earth’s future, graphing, plants, pollution, and more;
- take part in literacy activities such as word play, vocabulary study, prediction using foreshadowing, analyzing text structure, looking at a unique point of view, and comparison and contrast;
- look at historical figures and wonders of our world;
- be able to analyze and create artwork.

The discussion opportunities and classroom extension activities in this guide are designed to be used in 4th through 7th grade as the text is read as a whole group, small group, or independently. Although this guide primarily focuses on this text’s use in middle grade classrooms, that does not mean it should be limited to these grade levels.

The Next Generation Science Standards, Common Core Anchor Standards in Math & English Language Arts, National Curriculum Standards for Social Studies, and National Core Art Standards Anchors that can be addressed using this guide are:

Science

PS1A: Structure and Properties of Matter

PS2B: Types of Interactions

LS2C: Ecosystems Dynamics, Functioning, and Resilience

ESS1A: The Universe and Its Stars

ESS1B: Earth and the Solar System

ESS2A: Earth Materials and Systems

ESS3C: Human Impact on Earth Systems

ESS3D: Global Climate Change



Math

CCSS.MATH.PRACTICE.MP1

Make sense of problems and persevere in solving them.

CCSS.MATH.PRACTICE.MP4

Model with mathematics.

CCSS.MATH.PRACTICE.MP5

Use appropriate tools strategically.

English Language Arts

CCSS.ELA-LITERACY.CCRA.R.1

Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.

CCSS.ELA-LITERACY.CCRA.R.2

Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.

CCSS.ELA-LITERACY.CCRA.R.3

Analyze how and why individuals, events, or ideas develop and interact over the course of a text.

CCSS.ELA-LITERACY.CCRA.R.4

Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.

CCSS.ELA-LITERACY.CCRA.R.6

Assess how point of view or purpose shapes the content and style of a text.

CCSS.ELA-LITERACY.CCRA.W.3

Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences.

Social Studies

THEME 3: People, Places, and Environment: Social studies programs should include experiences that provide for the study of people, places, and environments.

THEME 6: Power, Authority, and Governance: Social studies programs should include experiences that provide for the study of how people create, interact with, and change structures of power, authority, and governance.

Art

Creating: Anchor Standard #1: Generate and conceptualize artistic ideas and work.

Connecting: Anchor Standard #10: Synthesize and relate knowledge and personal experiences to art.



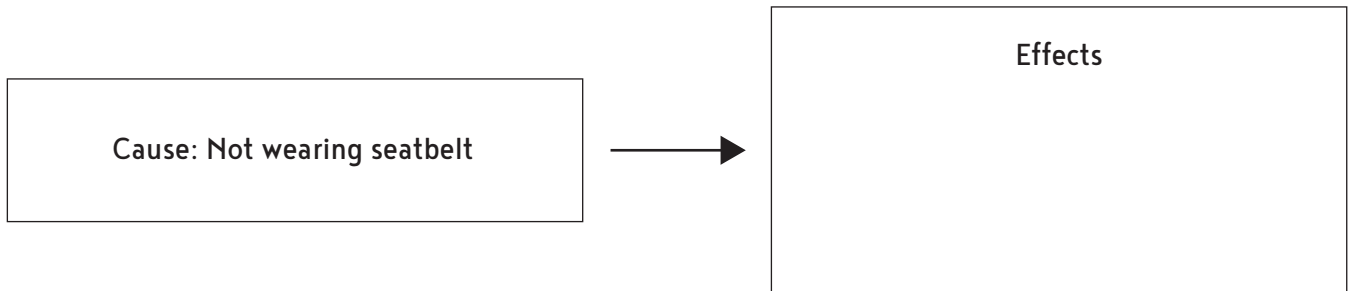
ACTIVITIES

Use these activities to extend students' learning with *AstroNuts Mission Two: The Water Planet*.

Math/Science

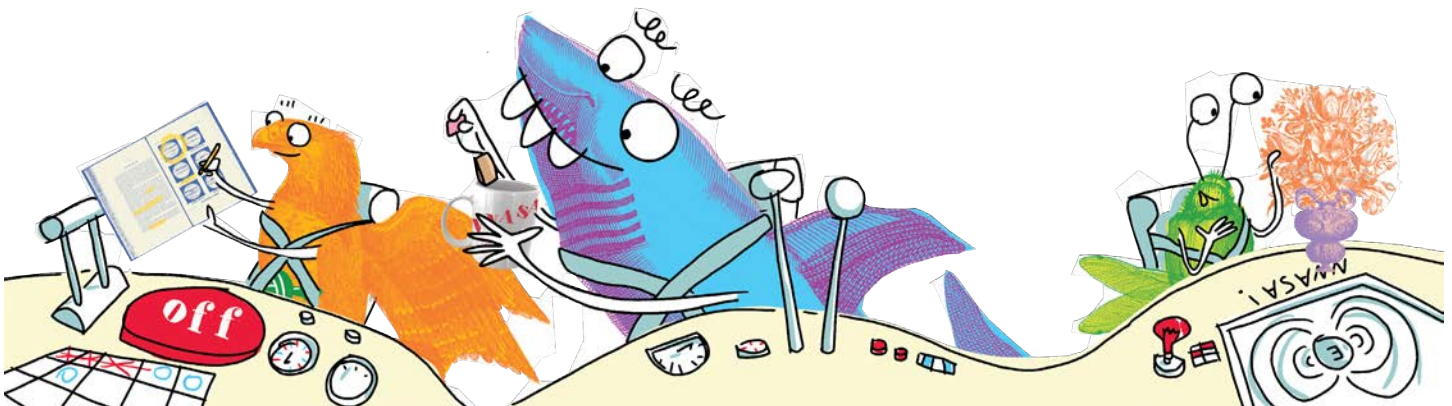
Seat Belts

- On page 15, we see that AstroWolf is not wearing a seat belt and is floating around the spaceship.
- Introduce students to the history and physics behind seatbelts and why they are so important.
 - Smithsonian Channel: The Physics of Seatbelts <https://youtu.be/o4gD8dCVbys>
 - BBC: Newton's Law and Car Safety <https://www.bbc.co.uk/bitesize/guides/zgn82hv/revision/11#:~:text=Seat%2obelts%2ostop%2oyou%2otumbling,exerting%2oa%2oforce%2oon%2oit>
- Then share that astronauts are seat belted into shuttles/rockets just like you are in cars.
 - NASA: Astronauts Learn Ropes Strapping in Crews https://www.nasa.gov/mission_pages/shuttle/flyout/flyoutcapecrusaders.html
- With this new information, have students complete a cause and effect of the consequences of not wearing a seatbelt, both for themselves and loved ones in cars and for AstroWolf in the rocket.



Biomes

- On page 80 biomes are quickly mentioned. Biomes are one of the things that makes Earth so special.
- On The Water Planet, there is one biome: Marine. On Earth, there are 12 major biomes. Have students each choose a biome to study. They will then share with the class the basic idea of the biome and what we would miss if that biome did not exist anymore (or if we were on a planet without the biome).



Scientific Method

- The Scientific Method is defined by Earth on pages 94-95. Use this as a time to introduce the method to students.
- To practice, have students pick a question they found themselves asking about Earth from the AstroNuts books that they could answer with some experiments and research (like page 96-97), and have them complete the scientific method.

Garbage Patch

- Share with students that we have five garbage patch zones like the ones mentioned on The Water Planet (p. 126). To help students understand how these patches happen, supply them with articles about our largest one, the Great Pacific Garbage Patch. While students read, they should complete Cornell notes.
 - Resources:
 - [National Geographic's Great Pacific Garbage Patch Resource Library](#)
 - [The Ocean Cleanup: Great Pacific Garbage Patch](#)
 - Ocean Today's video "[What is the Great Pacific Garbage Patch?](#)"
 - Optional Cornell Notes Template

<p>1. Details: Main notes/sketches</p> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>	<p>2. Key Points: After reading is done Synthesize - Pull most important ideas from notes</p>
<p>3. Questions: Do you have any questions about the reading?</p>	
<p>4. Summary: In only one or two sentences, tell what the reading was about.</p>	



TEACHER GUIDE

- When students finish, first have students share the questions they have and discuss them as a class. As questions are answered, have students that had those questions add the answer to their notes.
- Next, compile, as a class, the key points about the Great Pacific Garbage Patch into a bulleted list (and allow students to add to their notes).
- Command Escape mentions in the book that some of the damage on Earth is already irreversible (p. 213) but much of the damage can be reversed. Now that students have learned about the Great Pacific Garbage Patch, have them answer: Do you think the garbage patch is reversible? If so, what action steps need to be taken to reverse the damage? If not, how do you think the patch is going to continue to affect our waters?
- Extension: This same activity could be used to look at the other water problems Earth shared on page 13.

Literacy

Foreshadowing

- In both Missions, things did not go as planned for the AstroNuts, but the reader had many clues foreshadowing the turn for the worse at the end of the book. As students read, have them complete this graphic organizer finding moments of foreshadowing in the books.

Page #	What happened	Prediction of what is being foreshadowed	What happened?	Page #
Example: Mission 2, Page 50	President P.T. Clam says he is president for life.	I predict that the government is more corrupt and life isn't as good as P.T. Clam is trying to claim.	Susan B. Clamthony showed the AstroNuts that my prediction was correct. P.T. Clam was a dictator and was sabotaging his own people.	Mission 2, Chapter 23 & 24



Persuasive Techniques

- P.T. Clam was very persuasive in his argument. He used many different persuasive techniques like those used in advertising. Introduce students to these techniques, specifically looking at pathos, logos, and ethos
 - Resource and activity (page 1)
 - http://www.readwritethink.org/files/resources/lesson_images/lesson1166/PersuasiveTechniques.pdf
- Hang three pieces of butcher paper around your classroom, one for each. Split students into three groups and have each start one of the sheets. Give the groups 10 minutes to find examples in the text where P.T. Clam used their assigned strategy. Then rotate twice so all groups get to all three stations. During rotations, students are allowed to make notes adding to or disputing the other groups' notes.
 - Extension: Add in the more specific techniques from page two of the resource.
- When finished, bring all the sheets to the front of the room and review them as a class, making sure that each example is agreed upon.
- Finally, make a class chart:

Technique	When it was used by P.T. Clam
Pathos: an appeal to emotions	<ul style="list-style-type: none"> • • •
Logos: an appeal to logic or reason	<ul style="list-style-type: none"> • • •
Ethos: an appeal to credibility or character	<ul style="list-style-type: none"> • • •

- Finally, have students answer: Which technique do you think was most effective in P.T. Clam's quest for convincing AstroWolf to switch planets with him? Use evidence from the text to support your answer.

Sea Monsters

- Activity 1: Have students create their own sea monsters (like on pages 174-177). They should combine real and mythological creatures, give them a mutant power, and give them a mutant resistance. Students should be able to share what they took from each of the creatures they used to make their sea monster.
- Activity 2: On page 178, the Earth speaks about monsters she’s seen over time. Have students create trading cards for each of the monsters.
 - Front: Drawing of the monster
 - Back: Fiction or nonfiction, history, size, fun facts

Social Studies

What’s in a Name?

- All of the clams in *The Water Planet* are named after historical figures. Have students determine who they were named after and synthesize information about the clam from the story and facts about the historical figure to determine why the author may have made that choice.

Clam’s Name	Historical Figure	How do the historical figure and clam relate?
P.T. Clam	P.T. Barnum	P.T. Barnum was known for exploitation and “less-than-upstanding” business practices just like P.T. Clam. They both were focused on themselves and money instead of the best for all. Resource: https://www.smithsonianmag.com/history/true-story-pt-barnum-greatest-humbug-them-all-180967634/
David H. Clam & Charles G. Clam		
Clam McConnell		
Clamson Rockefeller		



Clam's Name	Historical Figure	How do the historical figure and clam relate?
Cornelius Clamderbilt		
Susan B. Clamthony		
Clam Guevara		
Spartaclamus		
Clamjourner Truth		

Wonders

- In chapter 8, P.T. Clam showed the AstroNuts the seven Wonders of the Water Planet.
- Here on Earth, we have MANY wonders. It started with the Seven Ancient Wonders of the World, but now there are natural wonders, wonders of the underwater world, and many others.
- Have students (individually, in pairs, or in groups) each pick a Wonder of the World from a list you decide
 - Options: the wonders listed in chapter 8, the original Seven Ancient Wonders, or from any list at https://en.wikipedia.org/wiki/Wonders_of_the_World
- Have them pretend that they are P.T. Clam but here on Earth and are trying to convince a visitor that our planet is the best based on the specific Wonder they are showing them. Students can create a commercial, handout, or other presentation showing its history, beauty, and other interesting information.



Resistance

- On the Water Planet, Susan B. Clamthony is leading a secret resistance against corruption. Resistance groups are a huge part of history as a way to fight injustice.
- Introduce the idea of resistance in history to students using the Facing History and Ourselves unit [“Resistance during the Holocaust: An Exploration of the Jewish Partisans.”](#)
- Then, give students a chance to research about more resistance movements throughout history (taking notes as they research; optional notes template below). This activity can be done independently, in pairs, or in small groups. Students may pick their own resistance movement or choose from the list below:

- Civil Rights Movement
- Abolitionism
- Women’s Suffrage
- Dakota Access Pipeline protests
- LBGTQ+ Rights Movement

<p>What resistance movement are you researching?</p>		
<p>What is the basis of the movement?</p>		<p>Resources:</p>
<p>What was the resistance movement fighting against?</p>		<p>Resources:</p>
<p>What were the major events of the movement?</p>		<p>Resources:</p>
<p>Who were the major players in the movement?</p>		<p>Resources:</p>



TEACHER GUIDE

What were the struggles of the movement?		Resources:
Other notes:		Resources:

- Once initial research is done, direct students to plan a hypothetical nonviolent protest for their resistance movement.

Resistance Movement:		Dates of the original movement:	
Hypothetical protest date & location:		Why?	
Official Mission statement for the hypothetical protest:		How does this match the goal of the original movement?	
Who would you ask to come talk?		Why?	
Who is your target audience?			



TEACHER GUIDE

What are some potential problems that may arise?		How would you help avoid these problems?	
Create a flyer to advertise your protest:		Create a poster to carry at the protest:	

- Please ensure students don't take part in any cultural appropriation doing this activity. They should be completing the activity as the identity they hold, not as another person. For example, if the student is cisgender and white and part of the Civil Rights Movement protest plan, they should be planning as a cisgender, white person and should keep that identity in mind while planning.
- Optional: Ask students to present their hypothetical protest plans to the class. Give options on how to present. Some options are:
 - Commercial
 - Social media post
 - Advertisement
 - Protest simulation
 - Mock documentary
 - Formal request for protest permit
- Finally, have students connect what they learned to *AstroNuts: The Water Planet*. Have them answer: How does Susan B. Clamthony's resistance compare to the resistance movement you researched? Use evidence from your research and the book to explain.
- Extension: Move the conversation to students and discuss how they can be part of the resistance using [Teaching for Change's Resistance 101](#).



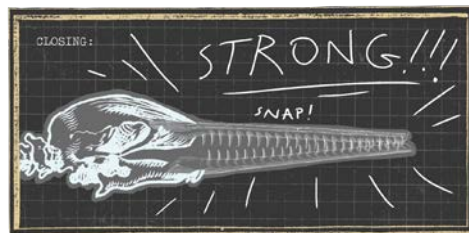
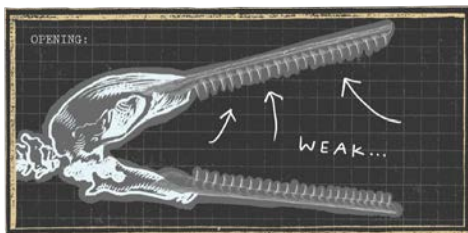
Discussion Questions

Ask your students these questions as whole class discussions, reading check-ins, or writing prompts with *AstroNuts Mission Two: The Water Planet*. Many can be used as jumping off points for research projects/papers.

- We are taught to always listen to leaders, bosses, teachers, etc. However, should we always listen? If you disagree with leadership, what should you do?
-Use page 42 to discuss this ethical conundrum.
- How does Mission Two show the reader that you cannot always trust first impressions?
- When signing a contract, what should you always do?
- Can you think of any punny sea snacks like the snacks the team has on pages 108-109?
- On page 129, LaserShark asks, “Why would anyone do this to their planet?” Though she is asking about the Water Planet, she might as well be asking about Earth. Why we have allowed our water pollution to get to this point?
- If a fathom is six feet, how many feet below the surface is the clam resistance meeting on page 137? Convert your answer to miles (1 mile = 5280 feet).
- On page 156, which of the answers do you think would have been the best for AstroWolf to say?
- Why do the clams yell out what they did on pages 160-162?
- On page 168, “equality” is mentioned. Up to this point in the book, this term has not been used. How does the lack of equality on the Water Planet help lead to its demise?
- How does the science of bite force (p. 188-191) help the AstroNuts?
- Why do you think the author and illustrator specifically spoke about Ernest Haeckel on pages 220-221?
- How are the clams and the Water Planet similar to humans and Earth?
- What is a quote from either AstroNuts book that resonated with you? Why?
- One theme of the book is the danger of one species taking over a planet. What are the possible dangers of one species eliminating all others?
- What would happen if humans did this here on Earth?

And don’t forget to answer the questions the narrator asks the reader along the way!

- “Then again have you ever had someone try to talk you into something you weren’t sure about? And it felt like they were trying too hard? And it felt like this something was too good to be true?” (p. 70)
- Ask students: How can you tell that something is too good to be true?
- “Have you ever noticed that humans have an amazing ability to think they are most right—exactly when they are most wrong?” (p. 146)
- Ask students: What is an example of being wrong in your life or history?



Vocabulary

These vocabulary words can be found throughout the book. Use these words as a starting point for a vocabulary study with *AstroNuts Mission Two: The Water Planet*. Research shows that reading and discussing vocabulary in context is one of the most effective ways to learn new words.

- scarce (p. 19)
- modifications (p. 29)
- hoopla (p. 48)
- lintel (p. 51)
- bustling (p. 68)
- hustling (p. 68)
- chiaroscuro (p. 72)
- monumental (p. 85)
- conned (p. 98)
- interfere (p. 108)
- disintegrate (p. 126)
- organism (p. 126)
- swoop (p. 132)
- esophagus (p. 134)
- valve (p. 141)
- bumbling (p. 131)
- distraction (p. 141)
- fecal (p. 151)
- filibuster (p. 160)
- monopoly (p. 161)
- diversion (p. 167)
- mobilize (p. 172)

Another effective strategy for learning vocabulary is familiarizing students with affixes. Introduce the idea of affixes to students by comparing them to word puzzles. Take familiar words and break them apart to show students how the parts come together to make meaning (redo, misspell, rewritten, helpful, etc.). Then introduce students to the list of most common affixes: <https://www.readingrockets.org/article/root-words-roots-and-affixes>

Using the list, take words from *AstroNuts*, break them apart, and determine their meaning. Here are examples of words with affixes found in *The Water Planet*:

- astronauts (p. 18)
- superpowered (p. 10)
- colorful (p. 32)
- unfair (p. 62)
- rethought (p. 124)
- hyperspeed (p. 154)
- bivalve (p. 168)
- recompute (p. 211)
- reentered (p. 212)
- irreversible (p. 213)

About the Guide Creator

This guide was created by Kellee Moyer, a middle school teacher-librarian in Orlando, FL. Kellee is the author of various teaching guides for all levels; the co-author of the blog [Unleashing Readers](#); a jury member then co-chair of the 2020-2021 Schneider Family Award Jury; on the 2016-2018 ALAN Board of Directors and current social media chair for ALAN; a member then chair of the Amelia Elizabeth Walden Book Award committee from 2012-2014; and a member of NCTE, ALAN, and ALA. Kellee can be reached at Kellee.Moyer@gmail.com.

