

## ***The Neptune Challenge***

By Polly Holyoke

### **Teacher's Guide**

#### **ABOUT THE BOOK**

*The Neptune Challenge* is the thrilling sequel to the award-winning novel, *The Neptune Project*.

#### **ABOUT THE AUTHOR**

Polly Holyoke grew up in Colorado where she spent her childhood skiing, camping, reading and dreaming up stories. She went on to graduate from Middlebury College and became a middle school social studies teacher. She lives in Plano, Texas with her family, as well as two cats, two Chihuahuas and a beagle. An experienced educator and presenter, Polly has given assemblies and taught writing workshops at schools across the United States. For more information visit: <http://www.pollyholyoke.com>.

#### **Using *The Neptune Project* with the Common Core State Standards**

This guide is aligned with several of the College and Career Readiness Anchor Standards for reading, writing, speaking and listening, and language. Teachers may visit the Common Core State Standards website ([corestandards.org](http://corestandards.org)) for specific grade level standards.

**PLEASE NOTE:** We hope this guide will prove equally useful to educators in non-Common Core aligned states.

Prepared by Laney Nielson, M.Ed and Author Polly Holyoke

## DISCUSSION QUESTIONS

CCSS.ELA-Literacy.CCRA.SL.1 Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on other's ideas and expressing their own clearly and persuasively. CCSS.ELA-Literacy.CCRA.2 Determine central ideas or themes of a text and analyze their development: summarize the key supporting details and ideas.

How does Nere adjust to life at Safety Harbor? What are some of the challenges she faces? Do any of these challenges resurface later when she is at Atlantea?

In chapter six, Nere's team breaks Sea Ranger protocols during a test. Do you think Nere made the right decision to use telepathy and Penn's disrupter? What was Vival testing? Could you imagine a situation in which following the rules would be more important than saving a life?

How would you describe the mission of Ran Kuron? Do you think Nere's comparison of Kuron to Dr. Frankenstein is accurate? Are the actions of Dr. Hanson and the other Neptune Project scientists more ethical than Kuron's? Explain.

How is Nere portrayed? What qualities does she possess that you find relatable? Likable? Which of the Neptune Project kids do you connect with the most?

What physical advantages do Kuron's kids have? What are the dangers of splicing the genes of sea creatures into human beings? If you could have some qualities of one marine animal, would you do it? Which animal would you choose? Why?

At the start of the mission, Nere doesn't trust Dai or her feelings for him. Why? How does Dai regain her trust?

Both Nere and Dai have complicated feelings towards their fathers. How are their relationships with their fathers similar? How are they different? How do these relationships evolve?

With the exception of Dai, Kuron collars all of the kids at Atlantea. What is the literal and symbolic significance of this? How does Kuron keep Dai under control? Is Dai figuratively collared?

After Sunny tells Tobin and Nere how Kuron's kids were raised, Tobin says, "I'm not sure I would have turned out that nice if I'd been raised the way

she was." What do you think about the role of nurture versus nature in how personalities are formed and developed? Give examples from the text to support your viewpoint.

Do you think Wasp would be different if she had been raised in another environment? How does Wasp's inability to touch anyone without causing harm shape her personality and life experiences?

What are the qualities of a successful team? How do the Neptune Project kids work together? Kuron's kids appear divided. Which of Kuron's kids seem sympathetic to the Neptune kids? Explain why you think that is.

In chapter twenty-five, Nere wants Dai to stop the shark crew from attacking a trapped orca. Dai tells them, "Just because we were raised like animals doesn't mean we have to act like them." Do you think Kuron's kids are more like animals than human beings?

Whitey confronts Dai and says he is proud of his shark genes. How does Dai feel about his own genetic background? Why does he keep it a secret from Nere?

What does Rad do to help free the others? Why do you think he does this? Are there other examples in the novel of individual's making sacrifices for the good of the larger group?

*The Neptune Challenge* is a story of survival. What interpersonal qualities do you think contribute to a person's ability to survive? Compare and contrast that to the qualities a marine animal needs to survive. What characteristics does a society or civilization need to survive? What is the difference between surviving and thriving?

## READING

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.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 conclusion drawn from the text. CCSS.RA.L.5 Demonstrate understanding of figurative language, word relationships and nuances in word meanings.

### **From Plot to Game** (Key Ideas and Details)

Have students complete story maps for *The Neptune Challenge*.

Elements to include:

Setting, Characters, Problem, Attempts to Resolve the Problem (multiple events) and Resolution.

Once the story map is complete, students may design a board game or a storyboard for a video game.

### **Prove It!** (Finding Evidence from the Text)

Write each of the following statements on large newsprint or in a shared document. Have students find and record evidence from the text to support the statement. If students disagree with the statement, they should find textual evidence to support their opinion. Students should include pages numbers where the evidence was found.

1. Kuron's kids want to feel connected and belong to a group.
2. Mako is dangerous.
3. The shredders aren't responsible for their actions.
4. Nere is claustrophobic.
5. Wasp is evil.

### **From Words to Pictures** (Understanding Figurative Language)

Working with partners, students discuss the similes listed below:

"I stare at James, my stomach churning like a pebble caught in the surf (p.33)."

"Vival carries herself like a soldier even when she's swimming in the scuba gear (p.48).

"Being around Dai was like trying to surf a rogue wave (p.96)."

"I stare at Mako, my thoughts all tangled up like an abandoned fishing net (p.185)."

“Sham’s face is a red as a boiled lobster now (p.190).”

“:Which is why you’re already starting to shake like a jellyfish,: Sham says gleefully (p. 261).

Questions to ask:

What two things are being compared?

Does the simile enhance the reader’s understanding of the scene or situation? How?

Working individually students will draw a representation of their favorite simile. Challenge: Have students select a scene from the novel and write a simile to express how a character is feeling.

## **WRITING**

CCSS.ELA-Literacy.CCRA.W.1 Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence. CCSS.ELA-Literacy.CCRA.W.3 Write narratives to develop real or imagined experiences or events using effective technique, well chosen details, and well-structure event sequences.

### **Blog Posts/Post-its**

Using the statements from the “Finding Evidence from the Text” activity, students will write a short blog post (electronically or on paper). The post should support or refute one of the statements and cite the text at least twice. If this is done on paper, students will “post” their entry by putting their paper on classroom desks. Students will then walk around, reading and responding (posting comments) using post-it notes.

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### **Writing A Back Story**

What do you know about the early life of Dai, Sunny, Shadow, Rad or Mako? How about Wasp, Whitey, Ocho, or Sham? Could there be more to their stories than what you know? Select one of these characters. Write a short story or monologue from that person’s point of view.

## ACROSS THE CURRICULUM

CCSS.ELA-Literacy.CCRA.W.7 Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. CCSS.ELA-Literacy.CCRA.W.8 Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism. CCSS.ELA-Literacy.CCRA.SL.4 Present information, findings and supporting evidence such that listeners can follow the line of reasoning and the organization, development and style are appropriate to task, purpose and audience.

## MARINE LIFE AND ANIMALS

### Mini Research Projects

- Dr. Hanson believed plankton were part of the solution in combating global warning. Watch the video on plankton found on this channel:

<https://www.youtube.com/user/DiscoverTheBlue/videos> Record three facts you learned from the video and one question you still have. What makes plankton unique?

- Dolphins assist Nere and her friends throughout the story. Based on your reading, what do you already know about these animals? What do you want to learn? There are many available resources, but you may want to start here:

<http://www.vanaqua.org/learn/aquafacts/cetaceans/pacific-white-sided-dolphin>

- Ran Kuron splices the genes of sea creatures with humans in an attempt to develop a superior race. Research and chart the animal traits for each character listed. Draw a sketch or use a mash up of photographs to represent each character.

| Character | Marine Animal | Dominant Traits |
|-----------|---------------|-----------------|
| Wasp      |               |                 |
| Dai       |               |                 |
| Mako      |               |                 |
| Ocho      |               |                 |
| Sham      |               |                 |
| Shadow    |               |                 |
| Sunny     |               |                 |

## ENVIRONMENT

### Create a Public Service Announcement

Research the impact of global warming on the oceans. Visit:

<http://www.epa.gov/climatestudents/impacts/signs/oceans.html>

How will these changes impact marine life? How will they impact us?

### Research and present a report on Acidification

Nere's brother James is excited to be working with a team that is researching ocean acidification. What is this problem and why is such a threat to sea creatures and reefs?

### Research and present a report on Orca

Killer whales are mentioned several times in *The Neptune Challenge*, and Sham actually possesses killer whale genes. Find out more about this highly intelligent and highly social species. Do you think aquariums should be allowed to keep and display marine mammals like orca and dolphins? Why or why not?

## GEOGRAPHICAL FEATURES

**Create and present a poster** (paper or electronic) depicting the following features: inlet, cave, cove, island, strait, harbor and channel. Students can teach these, as well as other geographic features, to younger buddies or another class studying geography.

**Challenge:** Using clues from the text and a student's imagination, students will draw a detailed map of Safety Harbor and Atlantea.

## MUSIC

In chapter seventeen, Shadow plays a song called, *Lost*. Given what you know about the lives of Shadow, Rad and Ocho, **write lyrics for this song.**

Shadow plays a water organ and Ocho plays a homemade instrument he calls an Omniphone. **Design an underwater instrument.**

The kids at Safety Harbor are excited when Penn finds a way to stream music into their ear receivers. **Select a character and create a playlist for that character.**

## ART AND TECHNOLOGY

Sunny loves to sculpt sea creatures and create swirling designs based on the sea life she sees all around her. **Create images, both abstract and concrete, of sea life or sea scenes** you find in books or on the internet.

Spearguns and seapacks are tools for survival in this underwater world. **Design a gadget or tool to make life easier for the Neptune kids.** What is your invention's purpose and how does it function? Create a prototype.