# God's Little Oceanographer

Discussion Guide for Classrooms and Homeschools



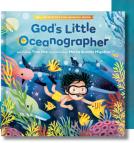
# GOD'S LITTLE OCEANOGRAPHER DISCUSSION GUIDE

This guide for classrooms and homeschools is written by Tina Cho, author of the children's book, God's Little Oceanographer, from the Big Adventures for Growing Minds series. Tina is an elementary teacher of over twenty years with a master's degree in education from Drake University and a bachelor's degree in elementary education from Faith Baptist Bible College. This resource also features illustrations by Marta Álvarez Miguéns.

# BEFORE READING

- Invite children to observe the cover of the book and ask: What do you think this book is about?
- Read the title. Ask: What do you think an oceanographer is? Define an oceanographer. (An oceanographer is a person who studies the ocean, from the waves to the seafloor and all the plants and animals that live within.)
- Ask: Can you name a few things an oceanographer can see on the book cover? What do you already know about them?
- Introduce a KWL chart using the template on page 7. Ask: What do you know about the ocean? What do you want to know? And what did you learn after reading the book?
- Invite children to consider: How do you think everything in the ocean got there? Who created them?





# GOD'S LITTLE OCEANOGRAPHER DISCUSSION GUIDE

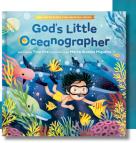
## DURING THE READING

- As you read the book, invite children to begin working on the KWL chart after each page. Ask: What did you learn? What would you like to know more about?
- Invite children to place sticky notes on the pages: Mark a smiley face or heart for things the children liked, a question mark for things to learn more about, or an exclamation point for new facts.

### AFTER READING

- Review the KWL chart and talk through it: What did you learn? What would you like to know more about?
- Go over the book again and discuss the parts marked with sticky notes: What was your favorite part of the book? Is there a Bible verse that stood out to you?
- Close the discussion with these questions:
  - How do you think everything in the ocean got there?
  - What Bible verses can you think of to tell someone about the creation of the ocean and everything that lives in it?
  - What did you learn about God after reading this book?
  - From learning about God's creation of the ocean, what did you learn about God's love for you?





# GOD'S LITTLE OCEANOGRAPHER **EXTENSION ACTIVITIES**

Here are more ways to help young marine scientists explore and celebrate God's role in creation:

### COMPLETE A BIBLE STUDY

Search "God's Little Oceanographer" under the Plans section for a free 5-day family devotional on the YouVersion app or Bible.com. Invite children to write some of their favorite Bible verses from the book on a note card and try memorizing them.

### OCEAN CREATURE FLASHCARDS

Print and cut God's Little Oceanographer Ocean Creature Flashcards on pages 8 to 11. Play a game of I Spy and find the creatures in the book, or play a Memory Match game using two sets of flashcards.

## MY FAVORITE OCEAN CREATURE

What is your favorite ocean creature? What makes it special to you? Write it down and illustrate or paint it on the activity sheet on page 12.

# **WAVES IN THE TUB**

Experiment with waves in the bathtub the next time you take a bath. Recreate a series of waves in the water and observe. What do you see? What causes big waves and small waves?

# OCEAN IN A BOTTLE CRAFT

Make an ocean in a bottle: Use a plastic water bottle, add sand, water, blue food coloring, tiny seashells, and tiny plastic sea creatures or stickers.





# GOD'S LITTLE OCEANOGRAPHER **EXTENSION ACTIVITIES**

## **OCEAN SCAVENGER HUNT AT HOME**

The ocean is a rich source of nutrients and materials. Marinederived compounds are often found in products. Check the ingredients in food, drinks, and personal care products at home. Do any come from the ocean?

### COLOR THE DEPTHS OF THE OCEAN

Imagine yourself deep in the ocean and color what you see on the coloring page on pages 11 and 12.

### **OCEAN ZONES ACTIVITY**

Use the template on pages 13 and 14 to color in and match the kinds of ocean creatures that live in each zone. How many can you remember?

### **BEACH ACTIVITIES**

Collect seashells on your next vacation to the beach. Notice the colors, patterns, and shapes. Sort them. Count them. Or glue seashells on a picture frame to create a unique piece of ocean art.

## COMMUNITY BEACH CLEANUP

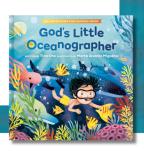
Bring family and friends together to clean up your local beach. Make a list of all the litter and debris you find on the beach.

# GO ON A MARINE FIELD TRIP

Visit your local aquarium, zoo, or science center. Check out the ocean activities. What ocean creatures did you see? Use the field trip summary worksheet on page 15 to summarize what you have learned.







# GOD'S LITTLE OCEANOGRAPHER EXTENSION ACTIVITIES

## TRY OCEAN-THEMED FOOD

What kinds of seafood have you tried? Have you tried seaweed snacks or fish sticks? Did you like them? Make ocean-themed foods with your favorite food items for your next afternoon snack! Here are some ideas: Goldfish crackers or blue Jello with whipped cream waves and gummy fish.

## MAKE YOUR OWN 'JARRARIUM'

A 'jarrarium' is simply a jar aquarium. It describes a self-contained and self-sustaining aquatic ecosystem in a small container to raise marine organisms with minimal maintenance required. Try creating a simple jarrarium as a marine science experiment! You will need a clean, transparent 64-oz mason jar or fishbowl and a visit to your local pond or lake.

Gather mud and water from the pond or lake. Pick a few tiny rocks and plants from the shallow parts of the pond or lake. Fill the jar with up to one inch of mud. Then, place the rocks and plants in the jar. Finally, pour the water, leaving at least one inch of air at the top of the jar. Seal the jar and set the jarrarium aside in an undisturbed location indoors with moderate lighting for one to two weeks to allow the ecosystem in the jar to stabilize.

Observe your jarrarium daily with a magnifying glass and watch it unfold: What do you observe? What happens to the plants and the color of the water? You may even find a living creature emerge in your jarrarium (perhaps a pond snail)—where do you think it came from?

When the experiment has concluded, return the contents of your jarrarium to its original ecosystem by emptying them into the pond or lake you visited.



Do not pour the jarrarium contents down your toilet, sink, or neighborhood drain, and be sure to thoroughly clean your jar out.



# GOD'S LITTLE OCEANOGRAPHER ADDITIONAL RESOURCES

## CHILDREN'S BOOKS

Sharing books in text sets related to a conceptual purpose deepens children's understanding of concepts and vocabulary. Consider sharing books about the ocean and marine life below alongside God's Little Oceanographer.

- The Ocean Calls: A Haenyeo Mermaid Story by Tina Cho; illustrated by Jess X. Snow
- Shark Lady: The True Story of How Eugenie Clark Became the Ocean's Most Fearless Scientist by Jess Keating; illustrated by Marta Álvarez Miguéns
- An Anthology of Aquatic Life (DK Children's Anthologies) by Sam Hume

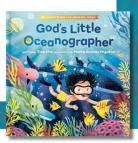
## **ONLINE FAITH-BASED RESOURCES**

- Why Are There Ocean Basins, Continents, and Mountains? -An article by Kids Answers from Answers in Genesis https://kidsanswers.org/ocean-basins-continents-mountains/
- Just a Day at the Beach An article with discussion questions by Kids Answers from Answers in Genesis https://kidsanswers.org/just-day-at-beach/
- Salty Seas and Density An article and science experiment by Kids Answers from Answers in Genesis https://kidsanswers.org/salty-seas-and-density/
- Did We Come from the Ocean? An article by Kids Answers from Answers in Genesis https://kidsanswers.org/did-we-comefrom-ocean/

# **AUTHOR AND ILLUSTRATOR RESOURCES**

- Author website: www.tinamcho.com
- Illustrator website: www.martalvarez.com





# GOD'S LITTLE OCEANOGRAPHER KWL CHART







# What I know about God and the ocean

Write or draw the information you already know about the topic in this column

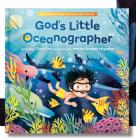
# What I wonder about God and the ocean

Write or draw the information you want to know about the topic in this column

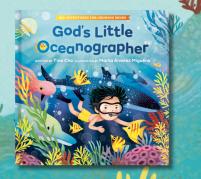
# What I learned about God and the ocean

Write or draw the information you have learned about the topicin this column

Complete this KWL graphic organizer to summarize what you have learned about God and the ocean as you read God's Little Oceanographer.



# God's Little Oceanographe



# **OCEAN CREATURE FLASHCARDS**

### DIRECTIONS:

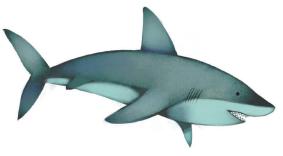
- Print the flashcards on white cardstock paper and cut them out. You may also laminate them.
- Create your own flashcards with the blank templates on the last page. Read the book, God's Little Oceanographer by Tina Cho, and see if you can spot other underwater wonders that God has made! Write their names and draw them on the blank cards.

### WAYS TO USE:

- Play an I Spy game match the flashcards to the ocean creatures in the book!
- Make two sets to play a Memory Match game.
- Hide the flashcards indoors for a fun Scavenger Hunt.
- Use them as bookmarks or lunchbox notes.
- Turn them into fridge magnets!







Great white sharks smile with up to 300 teeth in several rows.

INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO | ART BY MARTA ÁLVAREZ MIGUÉNS



Each dolphin has its own unique whistle, just as you have your own voice.

INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO | ART BY MARTA ÁLVAREZ MIGUÉNS

GREAT WHITE SHARK



Otters float on their backs in forests of kelp, munching on sea urchins, mussels, and crabs.

INSPIRED BY *God's little oceanographer* by tina cho | art by marta álvarez miguéns

JELLYFISH

DOLPHIN



Jellyfish drift on the ocean currents, eating fish, crabs, shrimp, and plants.

INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO | ART BY MARTA ÁLVAREZ MIGUÉNS



(113 kilometers per hour), making them the fastest fish.

INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO | ART BY MARTA ÁLVAREZ MIGUÉNS

Seahorses use their tails to hold on to seagrass, camouflaging themselves as they wait for food.



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On the sandy seafloor, spotted eagle rays use their snouts to dig up clams and marine worms.

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Elephant seals hold their breath for up to two hours to hunt for octopuses, squid, and eels.

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INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO ART BY MARTA ÁLVAREZ MIGUÉNS



Sea turtles eat seagrass and seaweed in the warm, shallow water around the reefs.

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**SEA TURTL** 

SEAWEED



Strawberry squid sparkle with lights and gaze out of two differently placed eyes to see prey above and below.

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Whale sharks, the largest fish in the ocean, feed in the sunlight zone but dive into the twilight zone.

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Female anglerfish have a lightbulb-like hook coming out of their forehead. It glows because of the bioluminescent bacteria living inside it.

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**Emperor and king** penguins leave the ice to go fishing in the twilight zone.



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# **DUMBO OCTOPUS**



**Dumbo octopuses have earlike fins** and are the deepest-living octopuses in the ocean.

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# Black swallower fish can swallow fish

bigger than themselves because of their hanging stomach.

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# EVELESS SHRIMP

SEAGULI



Eyeless shrimp have eyes when young but lose their eyes as adults and grow a lightsensing organ on their backs.

INSPIRED BY GOD'S LITTLE OCEANOGRAPHER BY TINA CHO | ART BY MARTA ÁLVAREZ MIGUÉNS .................

With an attractive light hanging from their chin and sharp, pointy teeth, female dragonfish don't let a meal escape.

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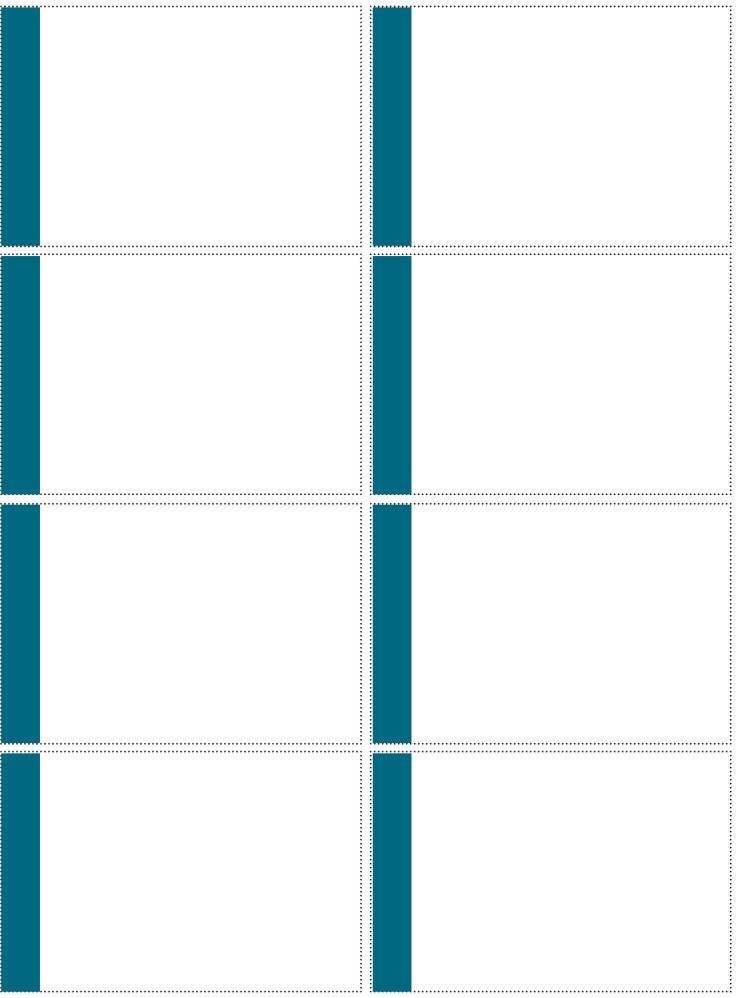


Blind, hairy white yeti crabs live near sea vents and feed on bacteria.

INSPIRED BY *god's little oceanographer* by tina cho | art by marta álvarez miguéns

Many kinds of seagulls scavenge the shorelines for food.



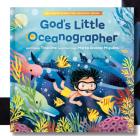


# GOD'S LITTLE OCEANOGRAPHER MY FAVORITE OCEAN CREATURE

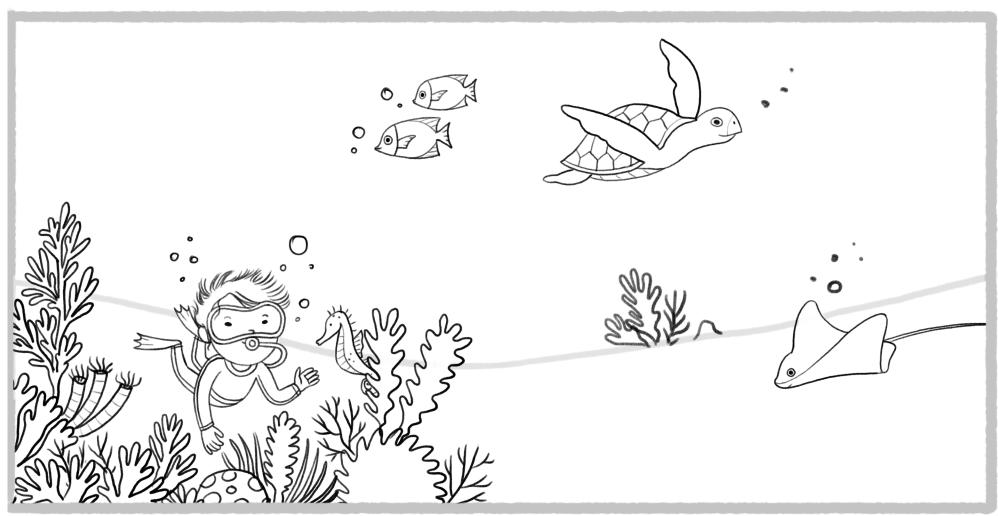


Do you have a favorite ocean creature? What makes it special to you? Write it down and illustrate it below!

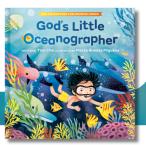




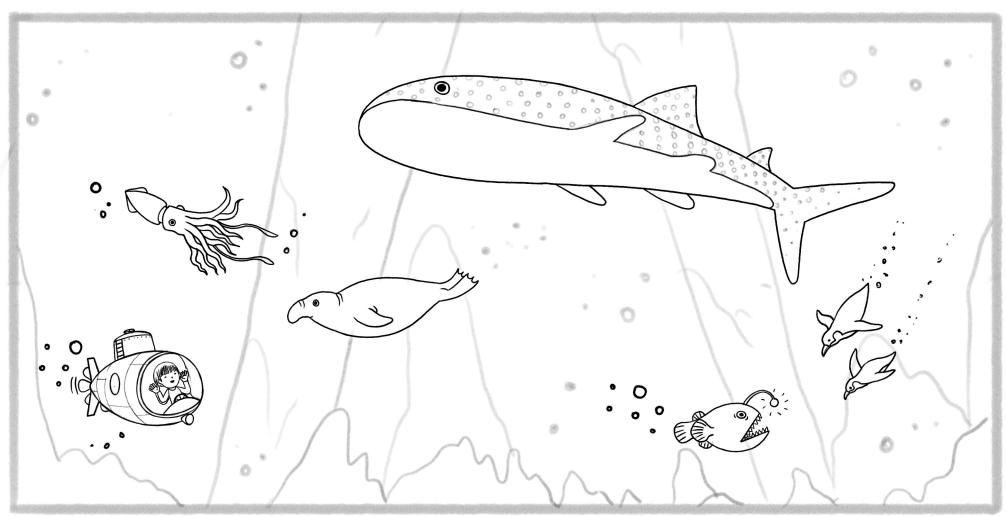
# COLOR IN THE DEPTHS OF THE OCEAN



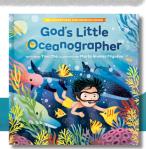
Imagine yourself snorkeling in the ocean. Complete the drawing with new corals and sea animals, and color it in!



# COLOR IN THE DEPTHS OF THE OCEAN



Imagine yourself deep in the ocean in a submarine. What do you see? Complete the drawing and color it in!



# OCEAN ZONES ACTIVITY

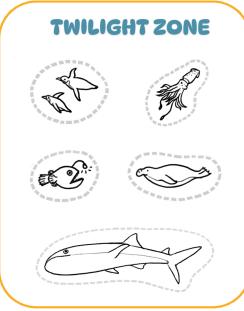
How well do you know the ocean zones and the marine creatures that live there? Let's recreate it in the activity sheet on the next page!

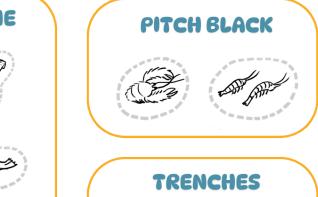
# **SUNLIGHT ZONE**



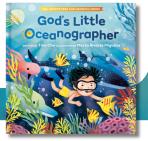
### **INSTRUCTIONS:**

- Print out this sheet and page 16.
- Color in the marine creatures.
- Cut the names of the ocean layers and each marine creature along the dotted lines.
- · Label the layers of the ocean on the activity sheet on page 14.
- Match the marine creatures to their respective ocean layers.



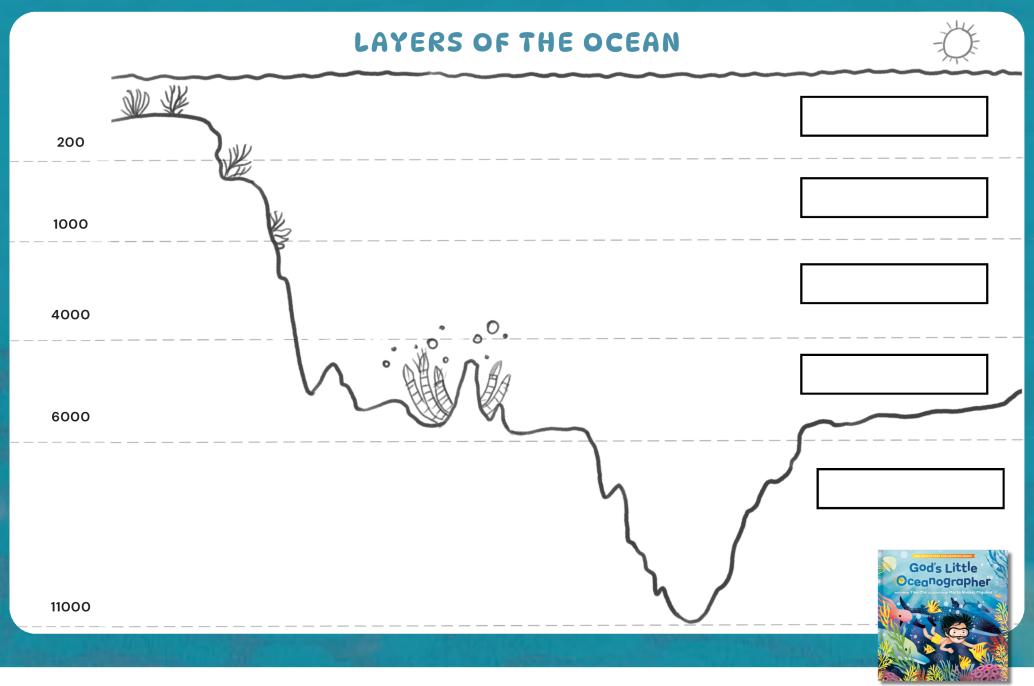






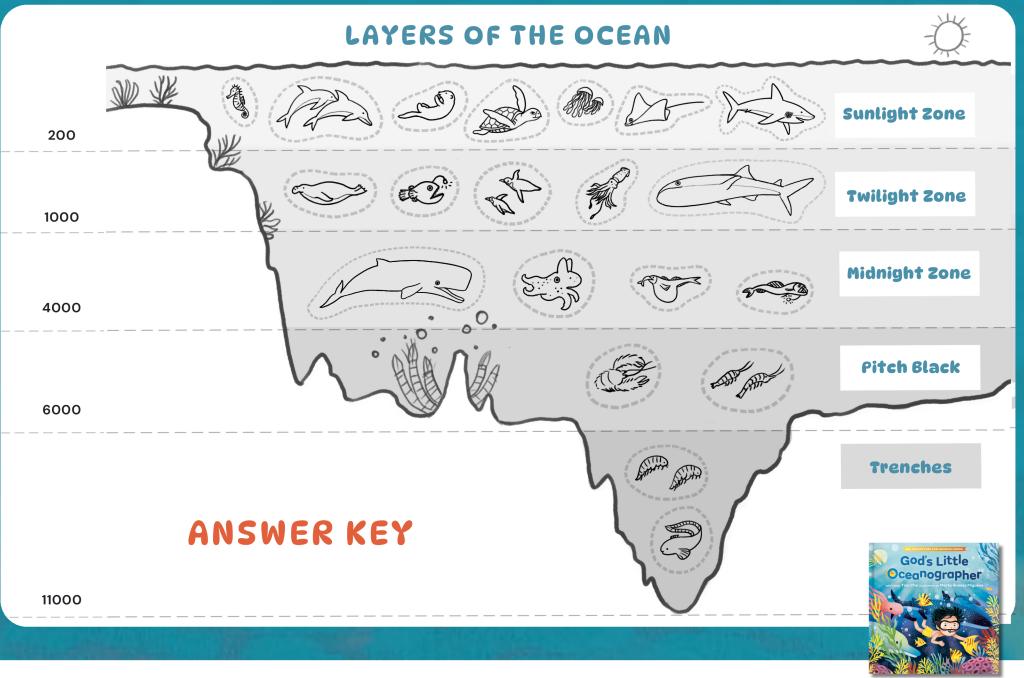


# OCEAN ZONES ACTIVITY





# OCEAN ZONES ACTIVITY



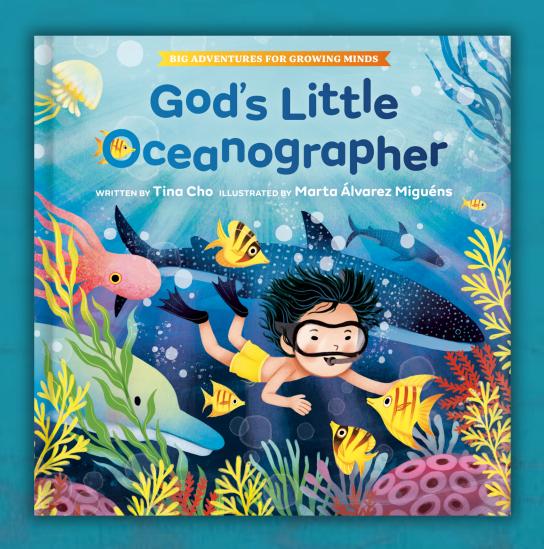


# GOD'S LITTLE OCEANOGRAPHER

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