TIME FOR KIDS

DEMONS OF THE DEEP



Timothy J. Bradley

For teachers' inspection ONLY

Consultants

Timothy Rasinski, Ph.D.
Kent State University

Lori Oczkus
Literacy Consultant

William B. Rice
Natural Science Author
and Consultant

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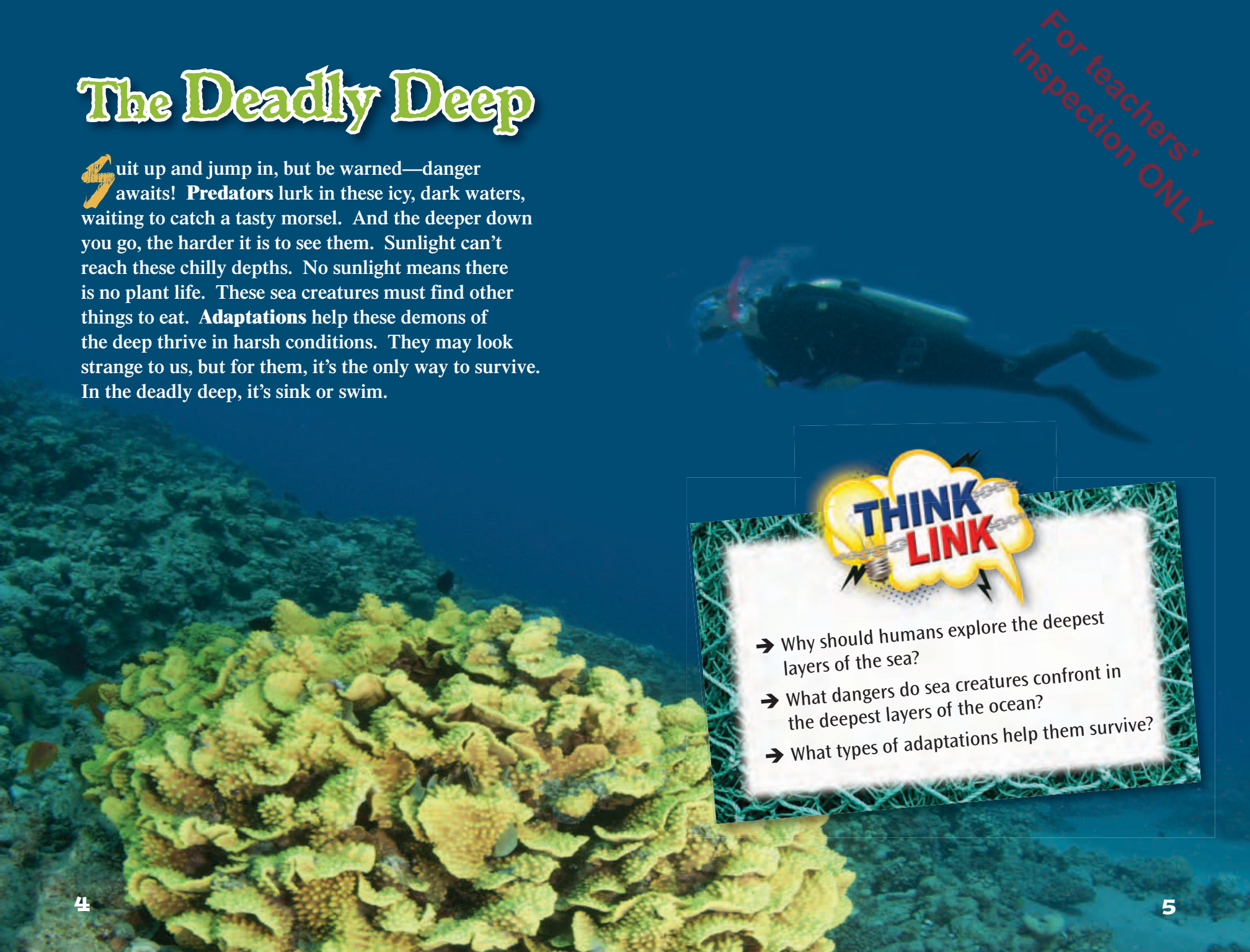
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The Deadly Deep

Suit up and jump in, but be warned—danger awaits! **Predators** lurk in these icy, dark waters, waiting to catch a tasty morsel. And the deeper down you go, the harder it is to see them. Sunlight can't reach these chilly depths. No sunlight means there is no plant life. These sea creatures must find other things to eat. **Adaptations** help these demons of the deep thrive in harsh conditions. They may look strange to us, but for them, it's the only way to survive. In the deadly deep, it's sink or swim.



THINK LINK

- Why should humans explore the deepest layers of the sea?
- What dangers do sea creatures confront in the deepest layers of the ocean?
- What types of adaptations help them survive?

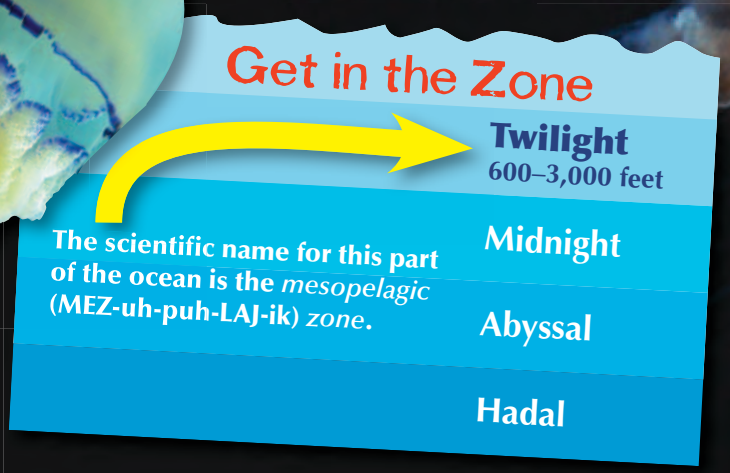
The Twilight Zone

Earth's oceans cover 71 percent of the planet, but only a small portion of these waters has been explored. Most of what we know about the oceans comes from studying areas closer to the surface. That includes parts of the **twilight zone**. It begins 660 feet below the surface. The water is as dim as the evening sky when the sun sets. At this depth, there is not enough light for **photosynthesis**, making plants scarce. Food is difficult to find. Special adaptations help fish hunt at this level. Some animals swim up to the surface to feed at night. Others wait for food to fall down from above. And some eat each other.



barrel jellyfish

Get in the Zone



The scientific name for this part of the ocean is the *mesopelagic* (MEZ-uh-puh-LAJ-ik) *zone*.

lion mane jellyfish

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Life in the Dark

The deep sea is one of the most hostile places to live on Earth. But it is home to an amazing array of life. Scientists have found more than 16,000 species that live in the depths of the ocean. These creatures live their entire lives without seeing light from the sun.

Megamouth Shark

At nearly 1,500 pounds, megamouths are some of the largest sharks in the ocean, but they eat some of the smallest **organisms**. They take in large gulps of water and push them through their gill slits. Tiny organisms such as **plankton** are caught by **gill rakers**. They filter the food so it can be swallowed. That is why they are known as **filter feeders**.

The four-foot-wide mouth is surrounded by light-producing **photophores**. This light attracts plankton. Scientists think megamouth sharks spend their days in deep water, from 400 to 660 feet deep. At night, they migrate closer to the surface to eat plankton.

Filter Feeders

Many creatures survive by filter feeding. Several types of whales are filter feeders. Manta rays are filter feeders, too. Not all filter feeders live in water, though. The flamingo, a large bird, is also a filter feeder.

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All You Can Eat

Plankton is a great food source because there is so much of it in the ocean. It is made up of tiny creatures, but their numbers are huge.



plankton magnified nearly 100 times its natural size

megamouth shark

The megamouth is very rare. Fewer than 50 have been found.