

So God created the great creatures of the sea and every living and moving thing with which the water teems.

Genesis 1:21



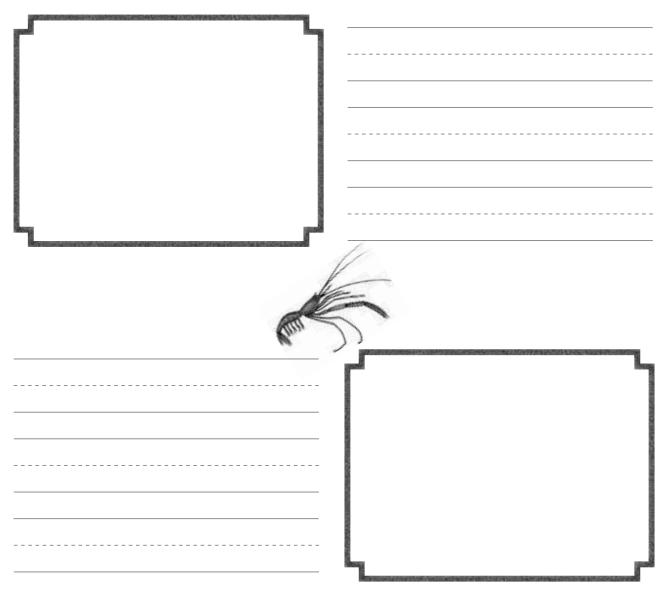
Praise the LORD from the earth, you great sea creatures and all ocean depths.

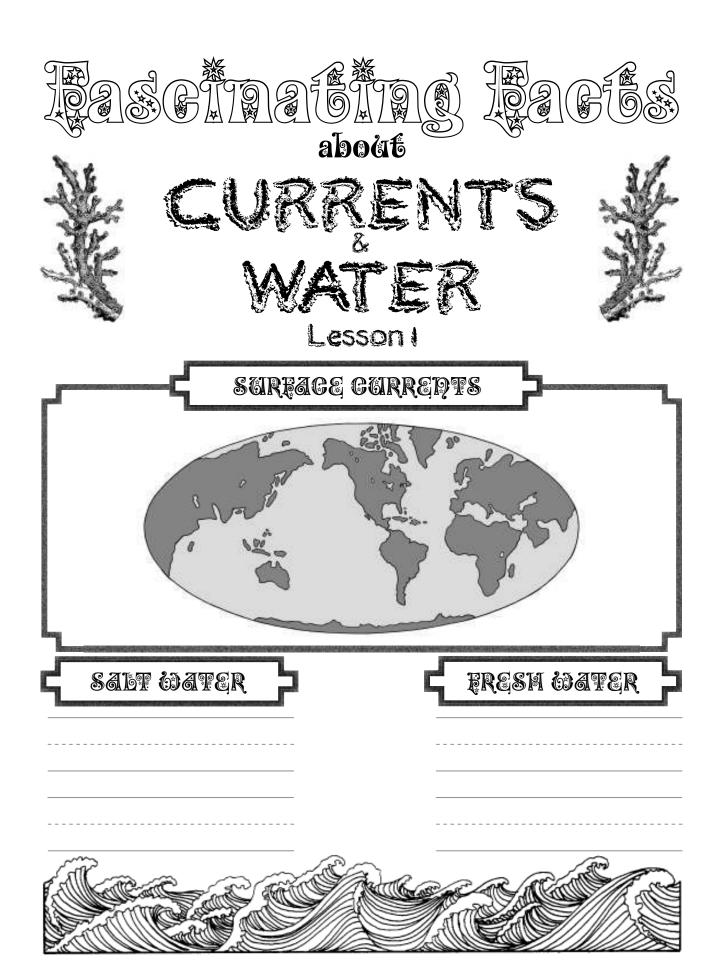
# 

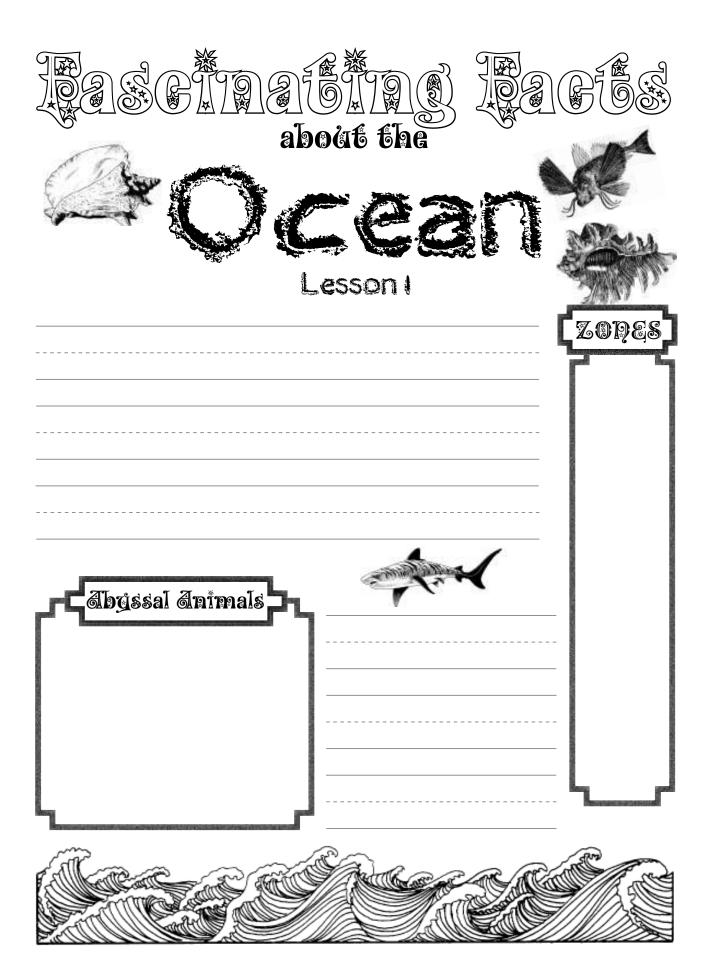


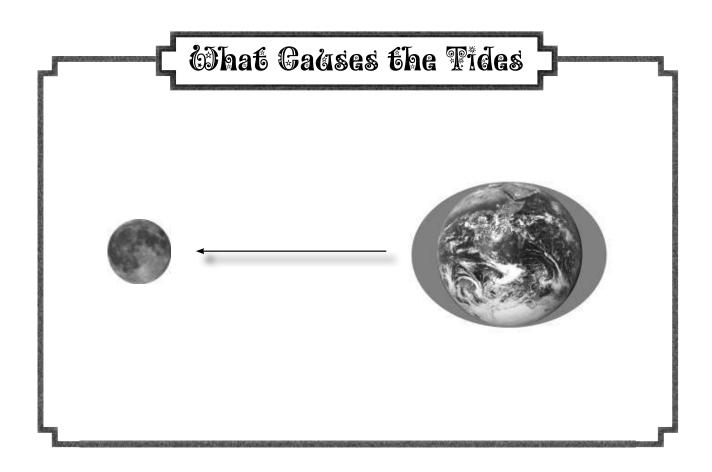
## AQUATICA

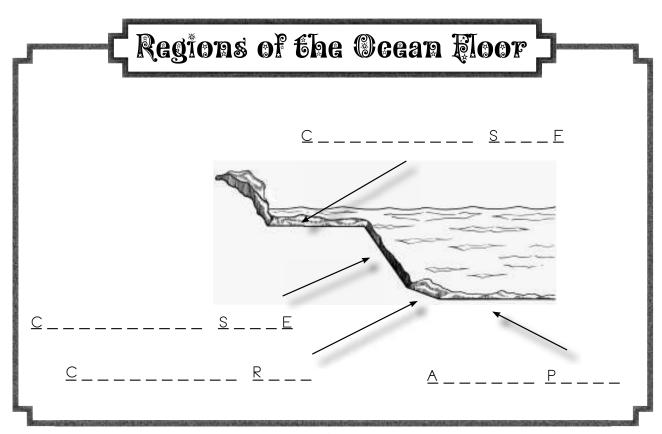
Lesson !













Praise the L	ORD from the earth,
you great se	ea creatures and all
ocean depths	<u> </u>
	Psalm 148:7
<b></b> ***********************************	18



you	great sea creatures and all and depths.
	Psalm 148:7

#### ZOOPLANKTON

BIOLUMINESCENCE

The place where a river meets with an ocean or sea.

CONTINENTAL SHELF

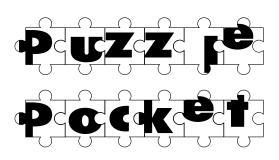
Circular patterns formed by the surface currents in the world's oceans.

What we call it when the ocean's water comes way up onto the

Glue along this edge

Cut out each puzzle piece on this page and the next. Match each vocabulary word puzzle piece to the correct definition puzzle piece. Cut out this rectangle and glue it to your Puzzle Page along the bottom and side edges to create a pocket. After you've played your Vocabulary Puzzle Game a few times, place all your puzzle pieces in the pocket for safe keeping.

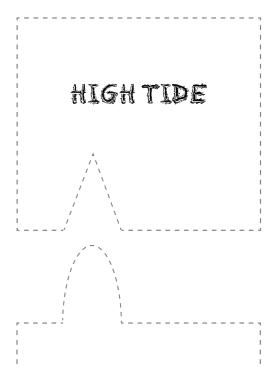
---Glue along this edge-



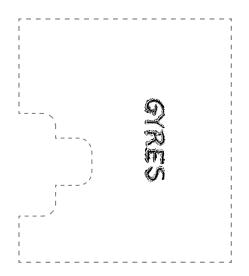
# ESTUARY

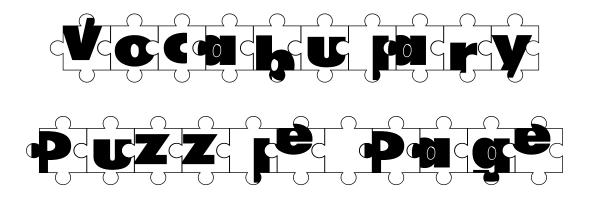
The part of the continent that is underwater. It slopes gradually downward, and the water gets deeper and deeper.

A certain type of plankton that are a lot like animals because they need to eat to get food.



What we call it when a creature has the ability to make its own light, much like a firefly.





Paste your puzzle pocket here.

## Aquatic Animals & the Ocean Minibook Lesson

Paste your Aquatic Animals and the Ocean Tab Book onto this page.



You can create some abyssal animals for your ocean box. Find images on the Internet, or look for them in the books or DVDs below to see what they look like.

#### Why Don't Oceans Freeze?

Have you ever wondered why rivers and lakes freeze in the winter, but oceans do not? Let's do an experiment to see why.

#### You will need:

1 gallon freezer bag 1 quart freezer bag Crushed ice 1 cup salt A thermometer

Fill the gallon freezer bag half way with crushed ice and water. Measure the temperature and record it. Add salt and seal the bag. Allow the ice to melt for 1 hour. Check the temperature again. The temperature should be less than 32 degrees Fahrenheit. Even though the temperature is below freezing, the ice continues to melt. This is because the salt lowered the freezing point of the water. The water will not freeze unless it reaches a much colder temperature than 32 degrees. This is why water in the ocean rarely freezes. The salt keeps the ocean water from freezing. Occasionally, the top layer of the water, which has less salt, will freeze, while the bottom will not. This enables ocean animals to live all year long in their watery world.

#### Create a Model of the Ocean Floor

Using the salt dough recipe below, you can create a model of the ocean floor.

#### **Ingredients:**

4 cups flour

1 cup salt

1 1/2 cups hot water (tap water)

2 teaspoons vegetable oil (optional)

Food coloring

Mix the ingredients together. You may want to add this to your ocean box.

#### **Book and DVD Suggestions**

The Deep: The Extraordinary Creatures of the Abyss by Claire Nouvian. This picture book contains the strange, beautiful, grotesque and wonderful creatures that inhabit the abyss. Artistically presented.

Down, Down, Down: A Journey to the Bottom of the Sea by Steven Jenkins. A top to bottom look at the ocean. IMAX Deep Sea (DVD) narrated by Johnny Depp and Kate Winslet. This stunning film is an exploration of the world beneath the sea and its bizarre and exotic inhabitants.

<sup>\*</sup>Be aware that some titles may contain evolutionary content

## My Aquatic Animals Projects Lesson ! What I did: What I did: What I learned: What I learned:

## Scientific Speculation Sheet

Water Temperature
Lesson 1

Name	Date
Materials Used:	
Procedure:	
Hypothesis:	
Results:	

### ADUATIC ANIMALS & THE OCEAN TAB BOOK

#### **Instructions:**

- 1. Cut out the tabbed rectangles on this and the next two pages. Fold the water cover page along the center fold line.
- Fold the aqua mobility and tides page along the center line so the words "aqua mobility" are on the outside at the top. Place this page inside the water cover page.
- 3. Fold the currents and aquatic animals page along the center fold line so the words "aquatic animals" are on top and "currents" is below "aquatic animals." Place this page in the center of the book so the tabs line up down the side of the book when it is closed.
- 4. Open the book and staple it down the center by inserting a stapler across half the book.
- Write or draw what you learned about aquatic animals and the ocean on the pages of your book. Be sure to label the diagrams.
- Glue your Aquatic Animals & the Ocean Tab Book onto your "Aquatic Animals Minibook" paste page (NJ p. 26).

