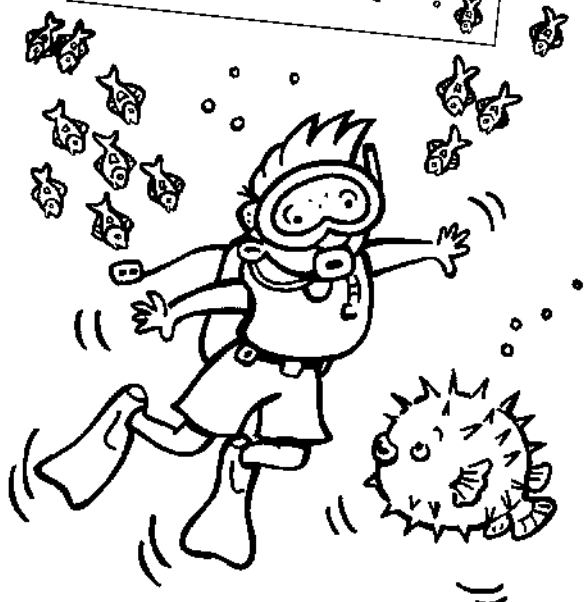


BOOK 9



Tommy Goes to the Ocean



Tommy Tales

Guide for Teachers and Parents

Book 9: Tommy Goes to the Ocean

This is the ninth in the *Ewe Books* series of illustrated books available on the **Learning Page** Web site for downloading and printing FREE of charge. A new book in this series will be "published" every month.

The books are written to a second or third grade reading level, but pre-kindergarten to first graders will also love having the stories read to them.

Introduction

If possible, make enough copies of the book for each member of the class or group. See Book 1, *The School Lunch Room*, pages 2 and 3 of the Teacher's Guide for directions on how to make the book. If you download and copy the pages in advance, the students can assemble the pages and tape or staple them together. Before starting the reading, have students color the covers of the books in any way they choose. While coloring, initiate a discussion on what the title could mean.

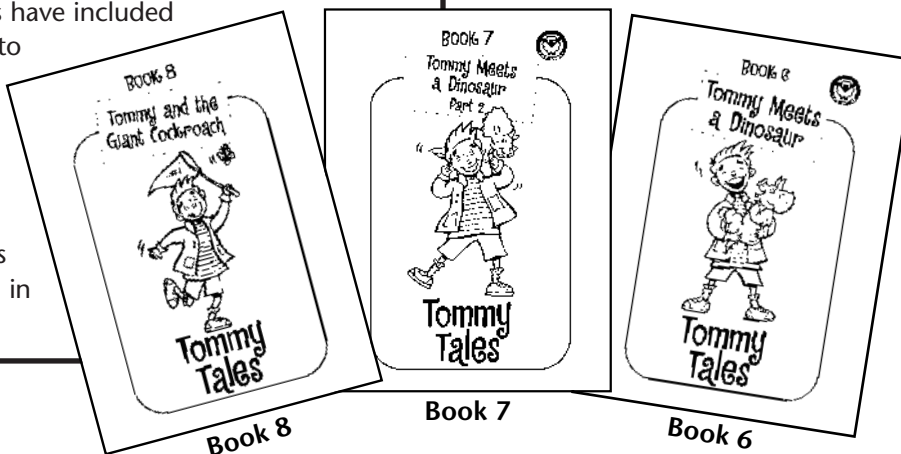
Before starting to read *Tommy Goes to the Ocean*, share with the class that this book is another in a series and that this story is part of a much longer one.

Planning with Ewe Books

As you are beginning your planning for the year, depend on the Learning Page and this delightful serial story to add variety and fun to your reading routines. One new book a month, and all accompanying teachers' materials and **Fun Sheets**, supplement your other classroom activities and curricula.

THE STORY SO FAR . . .

Tommy, his sister Sam, their friends, Taffy the dog, and Bongo the monkey have been on some wild learning adventures, thanks to RK-5, their robot friend from outer space. Recent adventures have included being shrunk in order to explore the world of insects and spiders, and being taken back in time to learn about dinosaurs. Each adventure occurs in response to the children's curiosity about the world in which they live.



Preparing for Reading

Before the first reading of the story, ask students to share experiences of the ocean or with ocean animals at an aquarium or zoo. Tell them you are going to be reading a story about Tommy and his friends and their diving adventure in the ocean.

After the first reading, consider asking questions such as these: "Is this ocean adventure like anything that has ever happened to you? Have you ever been frightened by a jellyfish? Is the children's adventure a realistic one? Which events could be real and which ones could be made up?"

Reading Guide

You may structure the reading time for this story in many ways.

1. You could read it aloud, all the way through, with the entire class on the rug during your regular story time. Then, review the story spread by spread and begin implementing the various objectives and **Fun Sheets**.
2. After reading aloud the first two pages, you could stop and begin questioning for comprehension and work on some of the **Fun Sheets** and **activities** cited in this section. Proceed to the second two pages, etc.
3. After reading the story all the way through, go around the class or group and have each student read a page, noting any difficult words to work on later.

Opening Lesson

Introduce the book by showing the cover and saying the title clearly: *Tommy Goes to the Ocean*. You could also write it on the board. Read the first two pages of the story, then discuss the following questions.

1. What are some key elements that students remember about the previous stories? (*The School Lunch Room*, *The Animal Shelter*, *Bongo Gets Adopted*, *A Visit to the Zoo*, *The North Pole*, *Tommy Meets a Dinosaur*, and *Tommy Meets a Dinosaur, Part 2*, *Tommy and the Giant Cockroach*)
2. Ask students what they can predict about the story from what you have read on these first two pages. Write their ideas on the board.

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Tommy and his friends were at Kim's house. Kim was showing her photo album. "This is me at the beach," said Kim.

"There you are swimming in the ocean," said Andy. "I wish I could go to the beach," he added. "I've never seen the ocean."

"We can go to the ocean," said Tommy. "RK-5 can take us there!"



learningpage.com resources ★

Several areas of the Web site provide useful resources for studying this story and teaching an **Oceans Unit**.

1. **The Oceans Unit**, featuring over 300 **Fun Sheets**, **Fact Files**, **Cut Outs**, and a **Mural**. **Fun Sheets** are in the areas of math, science, language arts, and fundamental skills.
2. **Oceans Lesson Plans**. 40 activities: introduction to oceans, coral reefs, ocean animals, the economy of the oceans and associated careers, book making and journal writing activities, art activities for creating an undersea classroom environment and learning about fish, setting up a Learning Center, reproducibles, and an extensive book list.
3. **Tommy Goes to the Ocean: 20 Fun Sheets** designed to be used with the story, along with this teacher's guide.

Combine all of these materials for a comprehensive and exciting **Oceans Unit**!

"Yes I can," said RK-5. "I can also teach you how to swim underwater."

"Yes! Let's go," said Sam. "It will be fun."

RK-5 told Tommy to press 15 3 5 1 14 x 7 on his number pad. After Tommy pressed the buttons, there was a flash of light and a cloud of blue smoke.



Readers' A to Zs

Readers can practice letters by trying to think of an ocean creature that begins with each letter of the alphabet (*anemone, blue whale, California sea lion, dolphin, emperor penguin, five-armed sea star, green turtle, hammerhead shark, indo-Pacific nurse shark, jellyfish, killer whale, leatherback turtle, manatee, northern elephant seal, octopus, polar bear, quahog, ray, swordfish, tree coral, unicornfish, venus comb [a mollusk], walrus, Xenocarcinus [scientific name for spider crab], yellow-faced angelfish, zoanthidea [relatives of soft corals]*). Encourage students to refer to **Oceans Fact Sheets** or library books for help with this activity. Students also can try to come up with more than one ocean animal for each letter.

Previous Reading

This story can be a part of an extended **Oceans Unit**. After the first reading of *Tommy Goes to the Ocean*, ask students to name other books they have read about oceans and ocean animals. If you have a Learning Center set up to support your **Oceans Unit**, be sure to stock it with plenty of the books listed on the Learning Page's extensive book list (go to **Oceans**, then **Recommended Reading**).

RK-5's Secret Code

RK-5 asked Tommy to press "15-3-5-1-14 x 7" to transport them to the ocean. Students may remember learning RK-5's secret code from teaching activities related to *A Visit to the Zoo*, the fourth book in this series.

15-3-5-1-14 x 7
O-C-E-A-N times 7

5 children +
2 animals

Students may wish to play with this secret code again. If so, write the alphabet on the board with the numbers 1–26 directly under it. Then assign the task of writing a secret message. When completed (this could take 20 minutes), have students exchange messages, decipher, and then read them to the class.

ABCDEFGHIJKLMNOPQRSTUVWXYZ
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

Extension Assign a buddy to each student, as RK-5 did in *Tommy Goes to the Ocean*. Have each pair of students work on coming up with their own secret code. (Remind them that it need not be complicated.) When the task is completed, each pair can take a turn in front of the class presenting a word or sentence in code and asking classmates to decipher it. Some possible code ideas are:

- using an adjacent letter

ABCDEFGHIJKLMNOPQRSTUVWXYZ
B C D E F G H I J K L M N O P Q R S T U V W X Y Z A

- spelling words backwards
NAECO for OCEAN
- putting the first letter at the end of the word
CEANO for OCEAN
- changing all vowels to the initial vowel
OCOON for OCEAN
- substituting a particular consonant for the first consonant in each word
OZEAN for OCEAN

Introduction to the Ocean

Two-thirds of the Earth's surface is covered by seawater, which makes up 97 percent of the planet's entire water supply. The largest expanses of water are called oceans, while smaller ones (usually close to or partially enclosed by land) are called seas.

The ocean floor is made up of mountains, valleys, plateaus, and plains as complex as geological formations on land. The area of the ocean floor along coastlines is called the continental shelf, where the water is relatively shallow. At the outer edge of the continental shelf, the ocean floor drops away steeply.

Oceans are home to some of the most diverse life on Earth. Plants live only at the upper zone of the ocean (the sunlit zone), where there is enough light for growth. Animals, however, are found at all depths of the ocean, and many are practically unknown to humans because of the technological challenges associated with going deep enough to encounter some of the bottom dwellers. Some animals live in several zones of the ocean; the sperm whale, for example, dives very deep to feed but returns to the surface to breathe air.

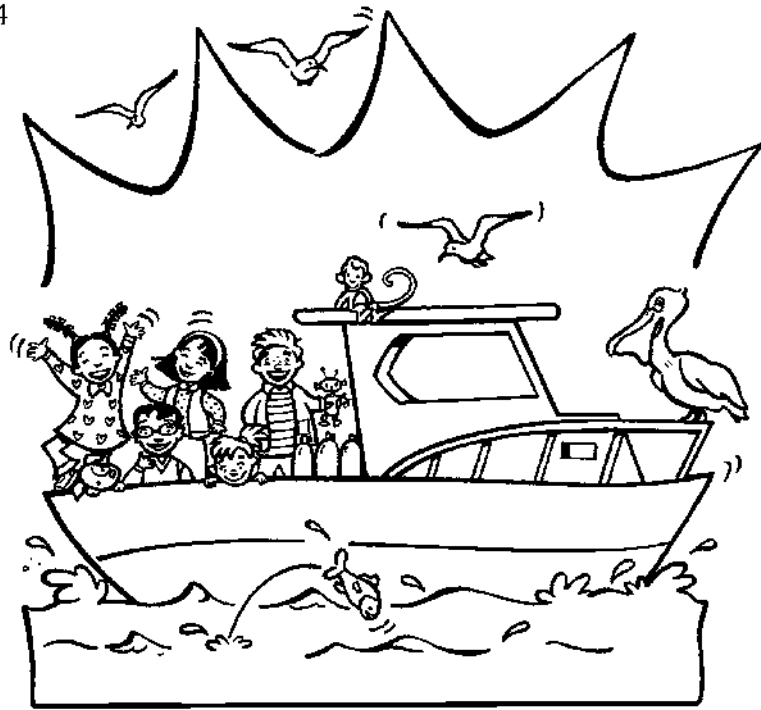
Kelp is perhaps the best-known ocean plant. Each leaflike blade of a kelp plant has an air bladder that keeps the plant afloat so that it can maximize its absorption of sunshine, necessary for staying alive and growing.

Geography Ask students whether they can name the five oceans of the world (*from largest to smallest: Pacific, Atlantic, Indian, Antarctic, and Arctic*). Using a globe or a map of the world, help them to identify the oceans, as well as some of the major seas, such as the Bering, Mediterranean, Caribbean, and Arabian.

Weather Ask students if they are familiar with these ocean-related weather terms:

- **Hurricanes**—violent tropical storms originating over oceans; characterized by low pressure at the center and circular wind motion (also called *cyclones* or *typhoons*, depending on where in the world they occur)
- **Tsunamis** (sometimes called tidal waves)—huge waves created by undersea earthquakes or volcanic eruptions
- **Waterspouts**—whirling columns of air, similar to tornados but over water

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The next second, they were all on a little red boat. The boat was bobbing on the ocean. The sun was shining brightly. They could see the seashore in the distance. RK-5 told them they would find swimsuits and diving equipment in the cabin. "Change quickly," said RK-5. "We're going diving!"

We're Going Diving!

RK-5 took Tommy and his friends on a diving adventure. Teach students about the two kinds of diving:

- **Skin diving or snorkeling**—swimming done in shallow water with a minimum of equipment, including a face mask, a snorkel (a short breathing tube that extends above the water), and flippers. A wet suit may be used in cold water.
- **Scuba diving** (scuba is an acronym for self-contained underwater breathing apparatus)—This kind of diving allows divers to go much deeper under the surface of the water since they carry an air supply with them. Scuba divers dive for a variety of reasons, including for recreation, to hunt for fish, to explore sunken ships, and for scientific purposes such as studying marine life and water pollution.

Have students look at **Tommy Tales Fact File 8, Diving Equipment**, to learn about scuba equipment, and **Fun Sheets 005 and 007** to test their knowledge.

After they changed, RK-5 taught them how to use the diving equipment. He explained that each of them needed a diving buddy. "Sam and Lucy will be buddies. Kim and Andy will be buddies. Taffy and Bongo will be buddies," said RK-5.



Why a Buddy?

RK-5 assigned a buddy to each of the friends before they went in the water. Before continuing past this page in the story, ask students why it's advisable to have a buddy. Ask them to share experiences where they've had a buddy, especially where it turned out to be a good idea that they had one.

In scuba diving, and in life, it's a good idea to have a buddy for these reasons:

- Four eyes are better than two in case of danger, whether a shark, a bully, a venomous snake, busy traffic, or any other challenging situation.
- If someone gets trapped or hurt, a buddy can rescue them, apply first aid, or get help.
- Having a supportive friend always helps, whether for encouragement when doing something that requires bravery or to provide a calming perspective and soothe fear.
- Each person has different skills that can be useful in a challenging situation. Some people are better at remembering directions, some are stronger swimmers or hikers, some are better at problem solving on the spot. Teaming up pays off.

Extension The following activities can support students to further explore the concept of buddies.

- If students have read most or all of the Tommy Tales stories, ask them to imagine why RK-5 paired up the friends as he did. Why might Sam and Lucy make good buddies? How about Kim and Andy? Encourage students to be creative as they imagine what qualities or strong points each of the friends brings to the pair.
- Ask each student to assess his or her strong points as half of a buddy team. Who is good at not getting lost? Who is self-disciplined enough to be somewhere on time? Who is brave enough to ask for help if needed? Who is good at giving comfort if someone is afraid?
- On a field trip, ask students to search out a buddy who has a strong point that they lack so that each pair has at least the basics: the ability to follow directions, stay safe, and get along.

Safety Lesson: Real Dangers in the Ocean

The ocean is a wonderful world for children to both study and experience. As part of an **Oceans Unit**, students should also be made aware of the many real dangers that exist in the ocean so that they are careful when they go for a visit. These include:

- **Rough water**—The surface of the ocean can quickly change from calm to wild. Rough waves can be created by high winds, undersea geological events, or colliding water currents. Strong whirlpools can pull swimmers underwater, and rough water can capsize boats.
- **Tides**—Oceans are influenced by the pull of the moon and the sun, which creates high and low sea levels. Unaware ocean visitors can get stranded.
- **Dangerous animals**—These include sharks and other large fish, jellyfish, poisonous octopi, eels, rays, and many more.

Words to Watch

These words from the story may be new or unfamiliar to students, or might present a spelling challenge. Use them for a spelling test to be given sometime after you have introduced the story.

1. bobbing (p. 4)
2. equipment (p. 4)
3. gracefully (p. 7)
4. communicate (p. 7)
5. signaled (p. 9)
6. creatures (p. 10)
7. tentacles (p. 11)
8. adventure (p. 14)
9. fantastic (p. 15)
10. souvenir (p. 15)

Write the words on the board, and have students copy them onto a piece of paper. Then, using dictionaries or on line, have them write a definition for each word. Remind students to reread the sentences in the story where the words appear to make sure they choose and write the correct definition.

At a later time, have students read the definitions they chose for each word. Then have them write a sentence using each word.

Using the Illustrations

Enlarge copies of several story illustrations without the text. Ask students to choose their favorite and do one of the following:

- a. Write a short paragraph describing what is happening in the picture.
- b. Draw a picture of what could happen next, something different from the actual outcome of the story. For example, Tommy and his friends might encounter ocean creatures that are not part of this story, such as a sea lion or a killer whale.
- c. Write a caption for several of the illustrations, based on actual events in the story. Explain that a caption is a short explanatory comment accompanying an illustration.
- d. Look at an illustration and pretend that it is part of a different story, one that the student imagines. Write a caption based on this imagined story. A single picture can suggest many different stories. For example, on this page, Tommy could have just spotted a shark.

6

"What about me?" said Tommy. "I don't have a diving buddy!"

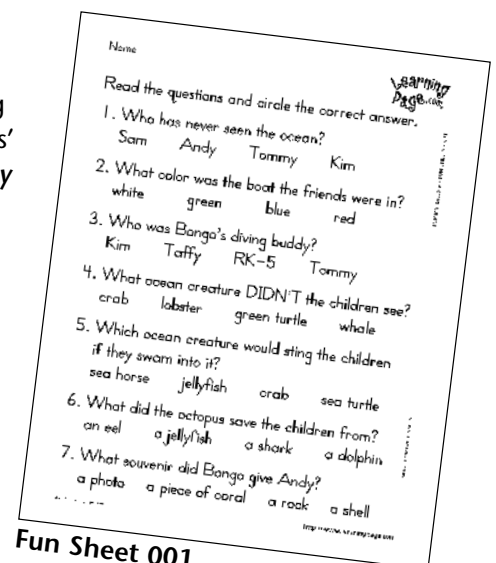
"Don't worry," said RK-5. "I will be your buddy. Let's dive!"



Comprehension

There are several **Fun Sheets** with questioning strategies to aid students' understanding of *Tommy Goes to the Ocean*.

Fun Sheets 001 and **019** will get students started on testing their comprehension of the story. After assessing their answers, reread the story as needed to clarify what students don't understand.



One by one, they jumped into the water. The water was warm. Soon they were all swimming gracefully underwater. They couldn't speak to each other underwater. They used hand signals to communicate.



Communicating without Words

Tommy and his friends used hand signals underwater to communicate with each other. Students can learn several basic underwater hand signals (actually used by scuba divers) by referring to **Tommy Tales Fact File 9**, and can test their knowledge using **Fun Sheet 009**.

Use the topic of communication without spoken words to introduce students to deaf communication and American Sign Language (ASL). ASL is a complex language that uses thousands of signs made with the hands, as well as fingerspelling, facial expressions, movement, and body postures. ASL is the first language of many deaf North Americans, and one of several communication options available to deaf people. Like any other language, fluency in ASL happens only after a long period of study and practice.

ASL is the fourth most common language in the United States. Different sign languages are used in different countries. Gallaudet University, in Washington, D.C., is the only liberal arts college for deaf people in the world.

Be sure to let students know that not only deaf people use sign language. People with family members or friends who are deaf or hard of hearing learn sign language as well. In addition, a wide variety of opportunities exist to serve the deaf community; for example, teachers, lawyers, counselors, medical personnel, and others who are able to communicate with deaf people are in demand.

Extension Ask students to think of other situations where communication without spoken words might be used. Some examples:

- **For safety**—for example, when noise would prompt a bear or other wild animal to attack
- **For consideration**—for example, if an ill family member is sleeping
- **For fun**—for example, creating a drama presentation that is mimed (refer to page 13 of the **Teacher's Guide** for Book 8 in the **Tommy Tales** series for several mime ideas)

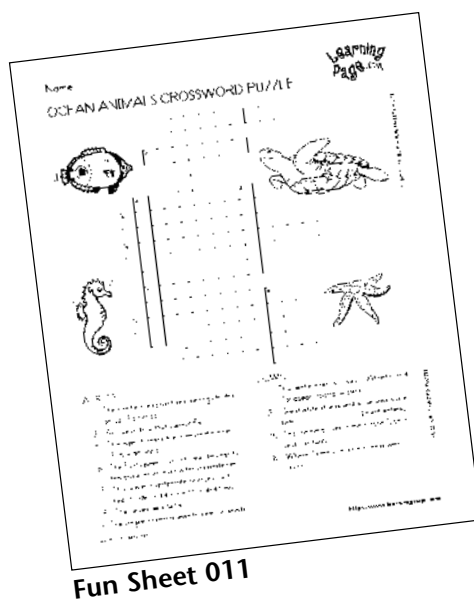
Other ideas to explore with students:

- Ask students to come up with several hand signals they might use in each of the three situations above.
- Ask students to imagine life without the sense of hearing. Ask them what they would miss most.

Crossword Puzzle

Encourage students to study the **Oceans Fact Files** to learn about the wide variety of animals that live in the ocean. Then direct them to **Fun Sheet 011** to test their knowledge as well as their spelling skills.

Students can use **Fun Sheet 012** for practice in alphabetizing using the names of ocean animals.



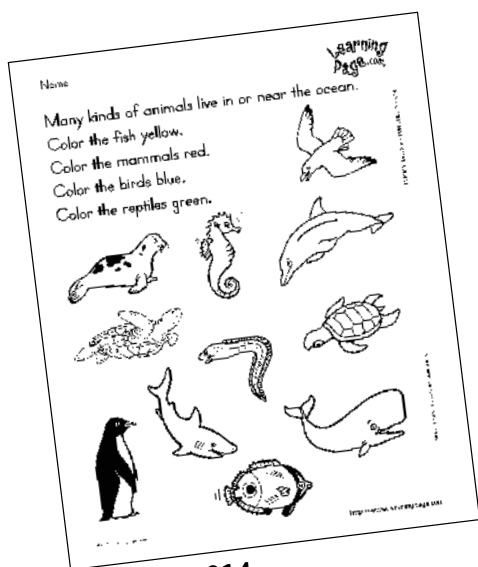
Create a Simple Chart

Use **Oceans, Grade 1–2, Lesson Plan 002A**, to teach students what distinguishes fish from other animals, and **Oceans, Grade PreSchool–K, Lesson Plan 007**, to learn about crustaceans and mollusks. Building on these activities, introduce to students the many groups of animals that live in the ocean. (**Fun Sheet 014** provides visual practice in distinguishing the groups.) Create a chart to organize the categories of animals and two or more examples of each one.

Example:

Group	Examples
invertebrate	octopus, seastar
mollusk	clam, scallop
crustacean	lobster, crab
fish	shark, tuna
reptile	green turtle, marine iguana
bird	penguin, seagull
mammal	whale, sea lion

Students who have interest in exploring the rich variety of ocean animal life in more depth may wish to create a web diagram. Refer to the Teacher's Guide for Book 8, *Tommy and the Giant Cockroach* (pp. 10–11), for instructions.



Fun Sheet 014

8

Tommy and his friends saw many pretty fish. They also saw beautiful coral and sea plants. A green turtle came to say hello. They followed RK-5, who pointed out crabs and lobsters in the rocks.

Lucy tapped Sam on the shoulder. She wanted to show her two pretty sea horses.

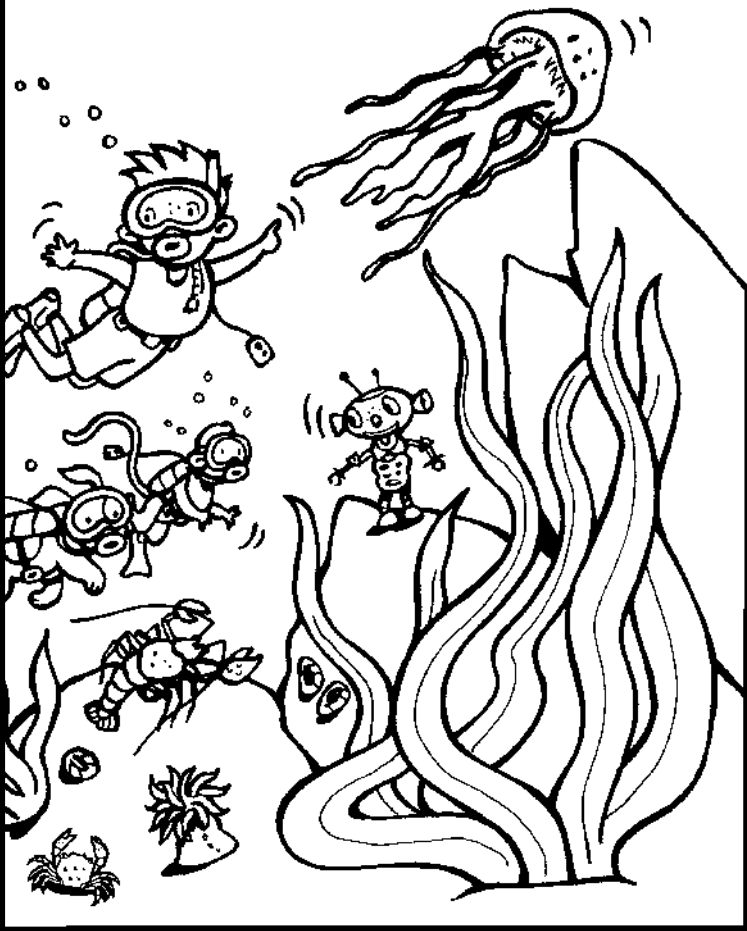


Midway Comprehension Check

Pages 8–9

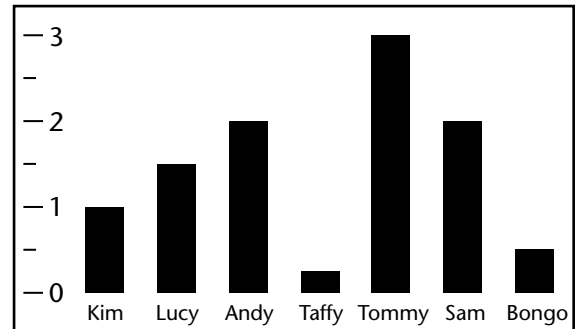
- How did this ocean adventure start? Who first got the idea to go to the ocean?
- How did the children learn to swim underwater?
- Why do you think RK-5 assigned a buddy to each of the friends?
- How did the friends communicate with each other underwater?
- What are some of the animals the children saw underwater?
- Why did Tommy signal for everyone to stop? What was the danger ahead?

They reached some pointed rocks. Tommy signaled for everyone to stop. There was a big jellyfish ahead. If they swam into it, someone would get a very painful sting.



Learning to Make Graphs

Teach students how to make graphs using ideas from *Tommy Goes to the Ocean*. First, work with students to complete **Fun Sheet 008**, a math exercise where they figure out how much weight Tommy and his friends need on each of their weight belts in order to stay underwater. Show students how to present the answers in **bar graph** form, drawing bars of different heights that correspond to a scale along the left-hand edge of the graph.



After students have created a bar graph using small numbers, have them use the following information to make a second bar graph.

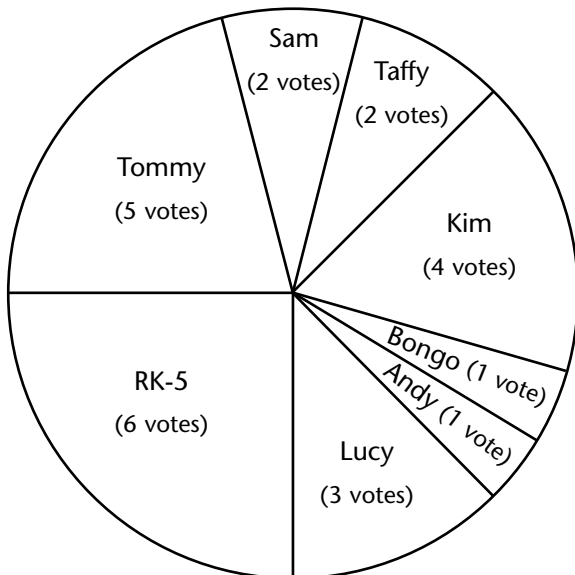
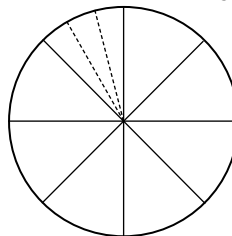
How Deep Did The Friends Dive?

Kim	17 ft.	Tommy.....	16 ft.
Lucy	14 ft.	Sam.....	13 ft.
Andy	15 ft.	Bongo	18 ft.
Taffy	16 ft.	RK-5	20 ft.

After completing these bar graph activities, introduce students to a different kind of graph, the **circle graph**, also referred to as a pie chart. For this activity, have students generate the numbers to be graphed by voting on who among the friends each would prefer as his or her buddy. As an example, if you have 24 students, let's say the vote comes out like this:

Kim.....	4	Tommy.....	5
Lucy.....	3	Sam.....	2
Andy.....	1	Bongo	1
Taffy	2	RK-5	6

On a chalkboard, use a ruler to divide a large circle in half, then in quarters, then in eighths (solid lines at left). Then divide each $1/8$ pie piece in thirds (dotted lines at left). This gives you the piece size ($1/24$) for each person who got one vote.

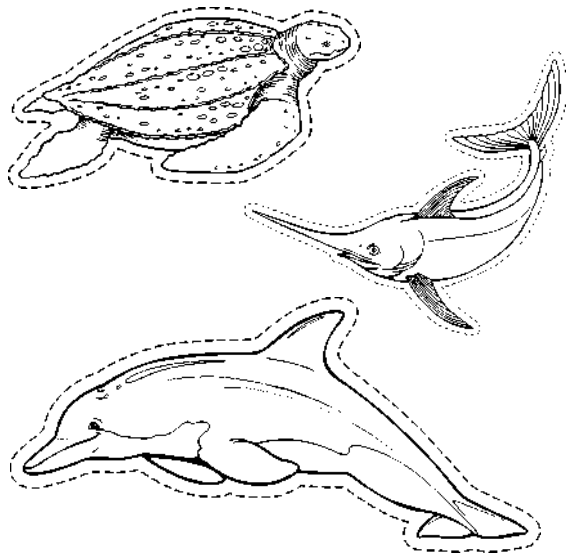


Buddy Preference
as a
circle graph

Oceans Mural

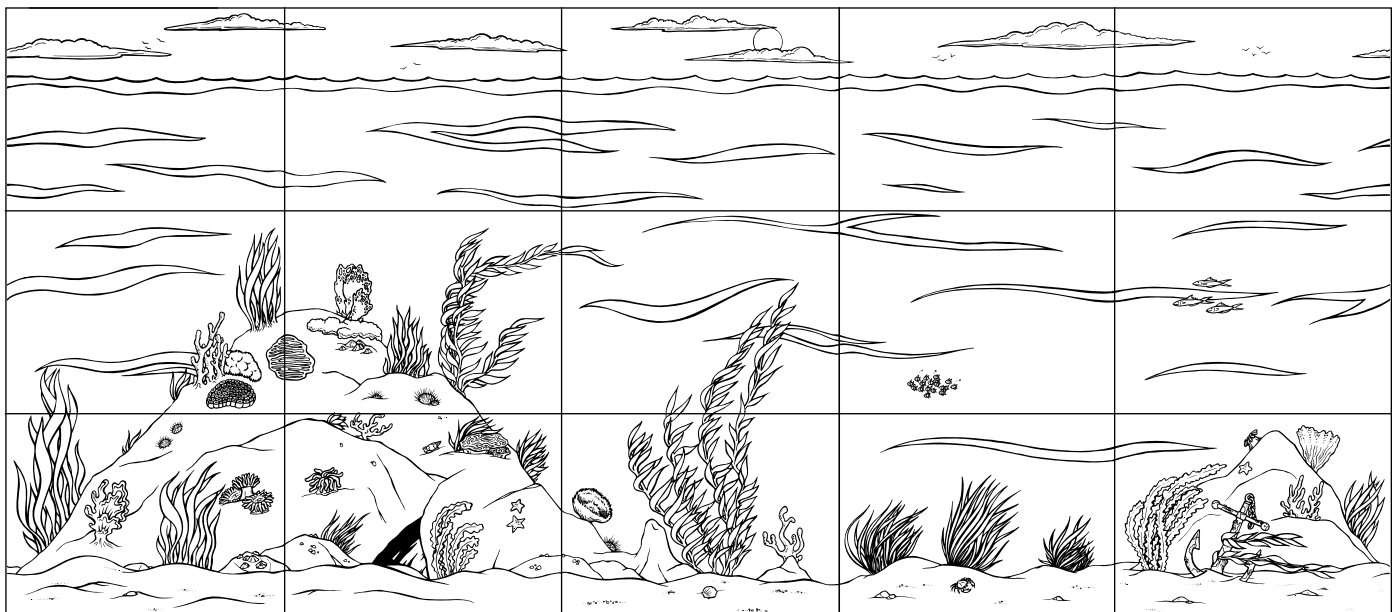
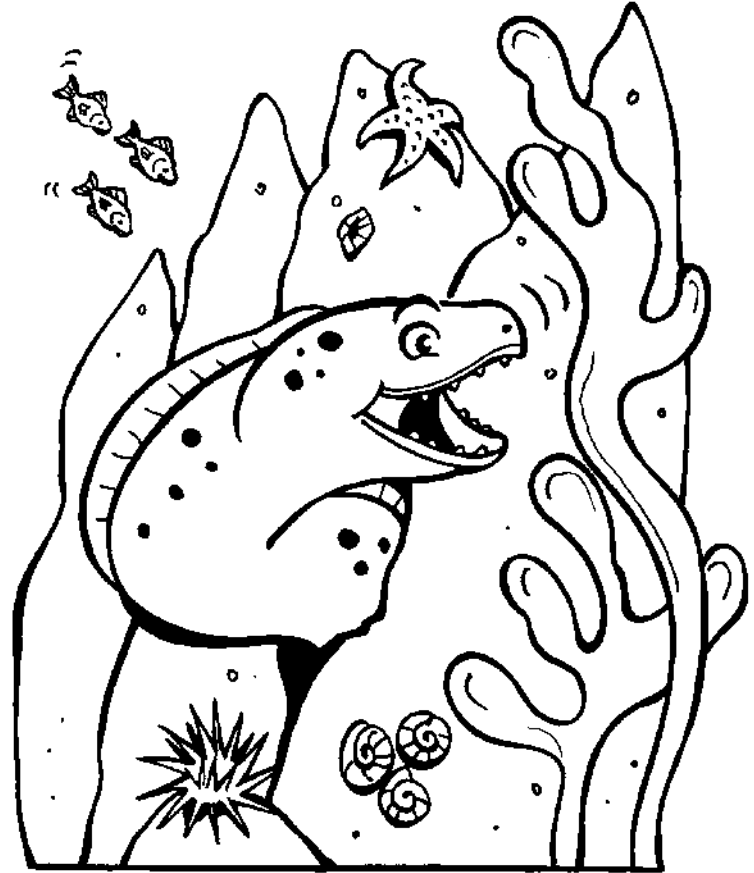
Download and put together the **Oceans Mural** as explained in the **Learning Page Teachers Notes**. Students can help with putting the pages together like a puzzle. For a longer mural, print out multiple sets of the mural and attach as a continuous image. The mural is an ocean setting with underwater plants, invertebrates, seashells, and a ship's anchor.

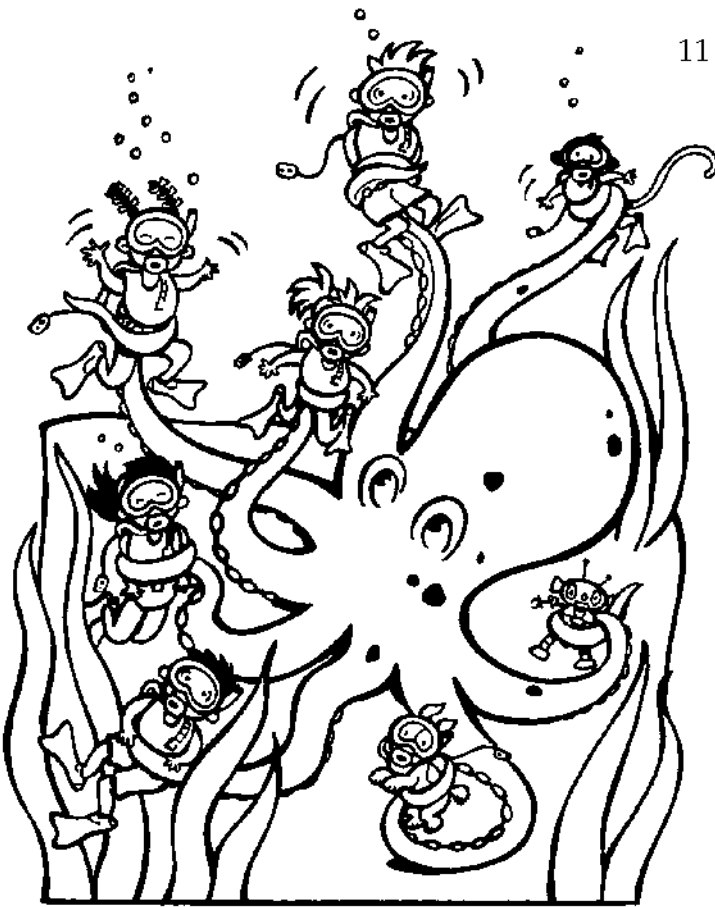
Use the **Oceans Cut Outs** as patterns to create stand-up versions of ocean animals to place on the mural. Stand-up figures for Tommy and his friends can be created by downloading each character's **Cut Out**, pasting it onto cardboard or oaktag, and then cutting on the dotted line. For complete assembly instructions, refer to page 8 of the **Teacher's Guide for Tommy Tales Book 8, Tommy and the Giant Cockroach**.



10

They stayed near the pointed rocks and watched all the colorful fish swim around them. A spotted eel poked its head from a hole in the rocks. The eel had never seen such strange creatures.





Suddenly, they each felt something slippery slide around their waists. They were all dragged into the seaweed. A big, blue octopus had caught each of the friends in her long tentacles.

Invertebrates

Students can begin learning about invertebrates (animals without backbones), such as the octopus in the illustration above, by studying the **Oceans Fact Files**. In addition, have each student choose one invertebrate not covered in the **Fact Files** and research it either at a library or on line. Possible choices include:

anemone	jellyfish	sea cucumber
barnacle	mussel	sea urchin
crab	nudibranch	shrimp
chambered nautilus	oyster	sponge
feather star	scallop	squid

Have students introduce their invertebrate to the class; be sure to have them include drawings or photographs.

Students can use **Fun Sheet 010** for identifying several basic invertebrates.

Fun with the Letter S

Suddenly, they each felt something slippery slide around their waists. They were all dragged into the seaweed.

There sure are scads of S words in this story! Have students make a list of the S words on each page (omitting repeats):

p. 2showing	p. 11suddenly
swimming	something
p. 3smoke	slippery
p. 4second	slide
sun	seaweed
shining	p. 12soon
seashore	she
swimsuits	shark
p. 7speak	saved
signals	p. 13swam
p. 8saw	swiftly
sea	p. 14safely
p. 9someone	p. 15seconds
sting	shell
p. 10stayed	souvenir
seen	
such	
strange	

Then have each student make up two sentences, each as long as possible, using as many of these S words as possible (in any form, past or present, singular or plural, etc.). The sentences they write will be examples of alliteration, a literary device that uses repetition of an initial consonant sound. The sentences can be as nonsensical as students wish, as long as they use parts of speech correctly.

Some examples:

The shining sun swam safely to the seashore.

She saw a strange shark showing shells and souvenirs to a slippery eel.

Extension Give students more practice with alliteration with the following activities:

- Have students use the first letter of their first name to make up a third-person sentence about themselves that uses alliteration.

Example: *Maria and her mother murmured while making marmalade muffins.*

- Have students choose an ocean animal and make up two sentences about it using alliteration, one realistic and one nonsensical.

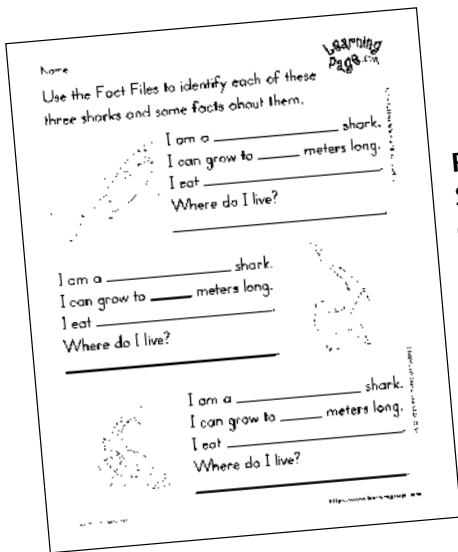
Example: *The lonely leatherback left Liverpool, looking for love.*

Sharks

Children are fascinated with sharks. Sharks are terrifying, magnificent, and mysterious. They have been swimming in Earth's oceans since before dinosaurs were alive. They live in all oceans, from cold to temperate. Some live in shallow water, some live in deep water, and some migrate.

Almost all sharks are carnivores, or meat eaters. They eat other fish, even other sharks, as well as sea mammals such as seals and dolphins. Some sharks also eat plankton (a mixture of plants and small shrimp-like creatures), and some bottom dwellers eat crustaceans (such as crabs) and mollusks (such as clams).

Have students study the **Oceans Fact Files** to learn about the great white shark, whale shark, and hammerhead shark. Students can test their shark knowledge with **Fun Sheet 015**.

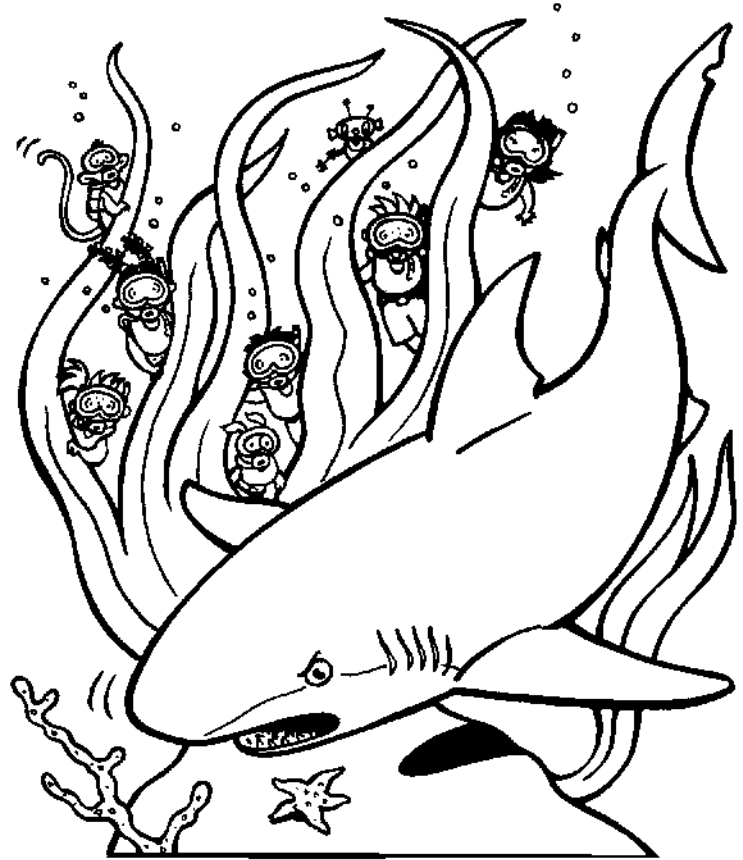


Fun Sheet 015 is a worksheet titled 'Use the Fact Files to identify each of these three sharks and some facts about them.' It contains three identical sets of questions, each accompanied by a dotted outline of a different shark species for coloring. The questions are: 'I am a _____ shark.', 'I can grow to _____ meters long.', 'I eat _____', and 'Where do I live?'. The worksheet is branded with 'Learning Page.com' and 'AS 015001-001-001-001'.

Fun
Sheet
015

12

Everyone soon realized that she was a friendly octopus. They looked through the seaweed and saw a huge shark swimming near the pointed rocks. The octopus had saved them from the dangerous shark.



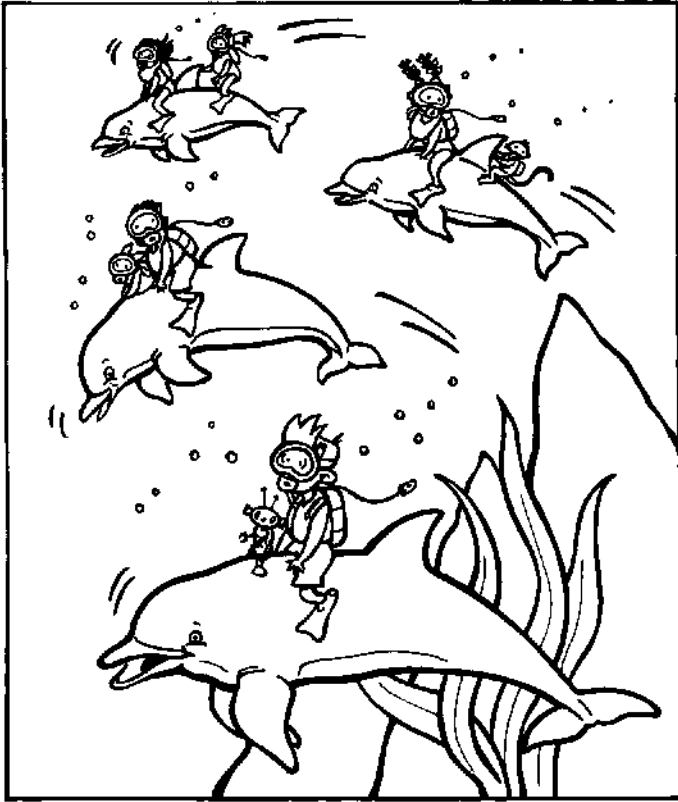
Migration

Many animals of the world make long migrations each year. They migrate to follow warmer weather, to find food, or for a safe place to breed and raise their young. Marine turtles can spend more than a year building up the fat reserves they need for their trip to lay eggs. The longest journey is made by the Arctic tern, a sea bird that migrates from the top to the bottom of the globe each year. Whales mate and give birth in warm waters but migrate to polar seas for feeding.

Extension Use the topic of migration as a jumping-off point for introducing students to the concept of genealogy—tracing their family

roots. Ask students whether they know their grandparents or great grandparents. If not, ask whether they know their names and where they were born and lived. Encourage students to ask family members to help them create a **family tree**, and see how many generations back they are able to identify.

Then introduce students to the idea of creating a **family map**, a map of the places where they and their ancestors have lived. First, ask students whether they have moved during their own lifetime; then ask whether their parents have moved, either to a new country, state or province, region, or city. Depending on the range of locations needed, provide students with an outline map of their state, province, or country, or a map of the entire world. Markings can be color-coded for each person or each generation, depending on the scope of each student's project. See page 13 for an example of a family map.



They waited with the octopus until the shark swam away. Then suddenly, four playful dolphins appeared. The dolphins took the little buddies on their backs. The dolphins then swam swiftly to the little red boat.

Cetaceans

Whales, dolphins, and porpoises are all members of the animal group called cetaceans, one of the most highly intelligent groups of animals on Earth. There are two subgroups of cetaceans: toothed cetaceans (including all dolphins and porpoises, as well as toothed whales) and baleen whales (whales that filter food through a baleen plate in their mouth). There are 81 known cetacean species.

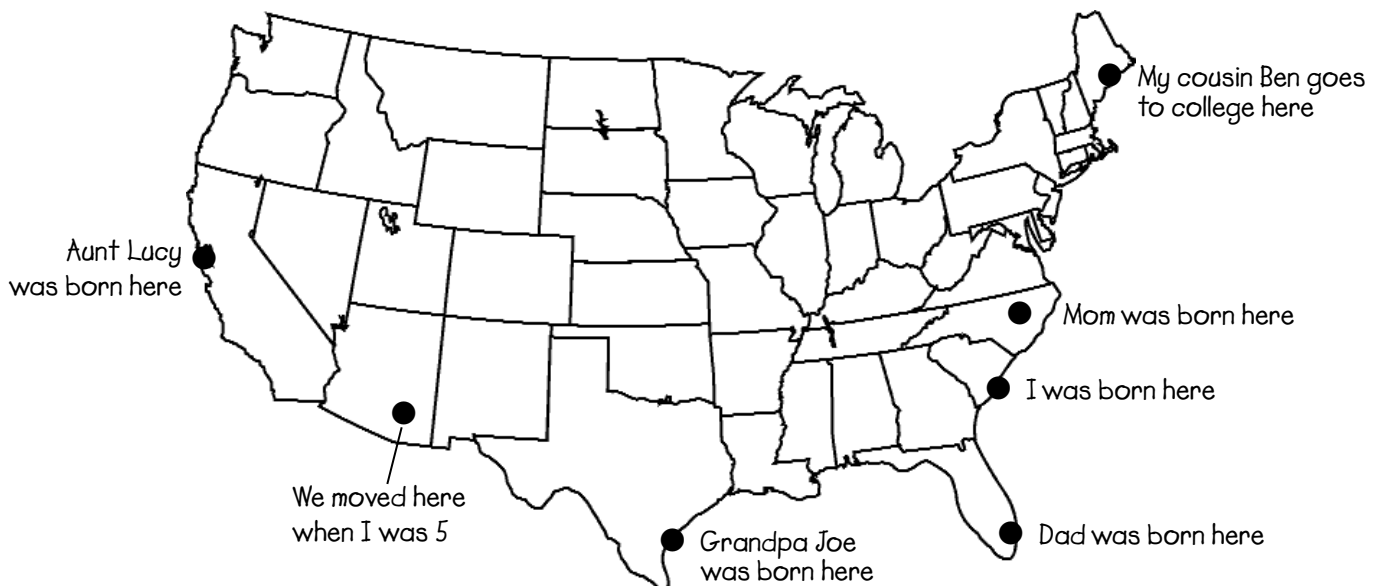
Cetaceans are mammals; like all mammals, they are warm-blooded, they breathe air, they bear their young alive and suckle them on their own milk, and they have hair (though generally only a few whiskers).

Cetaceans can be differentiated from fish by the shape and movement of their tails. A fish tail is vertical and moves sideways when the fish swims. The tail of a cetacean is horizontal and moves up and down during swimming.

A cetacean has a blowhole on the top of its head. When stale air is exhaled it condenses and vaporizes as it meets the cold air outside. This is called the 'blow', or 'spout'. Whale watchers and whalers can identify the type of cetacean by the shape, angle, and height of its blow.

Cetaceans use echolocation (also called sonar) to navigate and catch prey in the same way that bats do; they emit a sound, which bounces off an object and returns to them, providing information about the size, shape, movement, and location of an object.

Cetaceans in the **Oceans Fact Files** include bottle-nosed dolphin, killer whale, blue whale, and sperm whale.



Ocean Awareness

Oceans and the life they support are under threat. Encourage your students to be environmentally conscious and to learn about these and other dangers to our planet's oceans:

- Ocean life is poisoned when hazardous chemicals enter the water through oil spills or dumping of sewage and industrial waste. Sea birds and sea mammals caught in an oil spill die of the cold because the oil prevents their fur or feathers from holding pockets of air to keep them warm. Animals that try to clean themselves of oil often die from consuming it.
- Garbage dumping—Sea turtles mistake plastic bags for jellyfish and eat them. Sea creatures get trapped in the plastic webbing on six-packs of soft drinks. (Teach students to cut each ring with scissors before discarding it!)
- Overharvesting depletes populations of ocean animals. Commercial whalers have reduced populations of whales to such an extent that some species may never recover their numbers despite the present-day protection of most species.
- Fishing hazards—Each year, thousands of sea turtles become entangled in fishing nets and drown. Shrimp trawling accounts for the incidental death of high numbers of juvenile and adult sea turtles. Currently, all U.S. shrimpers are required to put Turtle Excluder Devices in their trawl nets, but not all fishermen comply with the law.
- Manatees feed on underwater plants in coastal areas of the southeastern United States that have undergone extensive development for recreational use. When manatees come up for air, they are often injured or killed by motorboat propellers.
- The souvenir business threatens coral reefs because many shells sold in shops have been taken while the animals were still alive.
- Artificial lighting from beachside development discourages adult female sea turtles from coming ashore to nest. Hatchlings become disoriented and often wander inland, where they die of dehydration or predation.
- There is new concern about the use of sonar for military purposes causing trauma to whales and other marine species.

14

When they were safely back on the boat, everyone was excited. They all talked about their adventure.

"It's time to go back home," said RK-5.

They waved goodbye to the dolphins. After Tommy pressed the buttons, there was a flash of light and a cloud of blue smoke.



Write a Letter to an Ocean Animal

After reading *Tommy Goes to the Ocean*, have students write a letter to one of the ocean animals in the story. In the letter, have them list several qualities they admire about the animal and also questions they want to ask the animal. Students can then exchange letters with a buddy and write responses from the point of view of the animal, using their imaginations as well as knowledge they have gained from their studies of ocean animals. Be sure to have students follow a traditional letter-writing form, with the date, salutation line, closing, and a signature.

June 3, 2001

Dear Ms. Green Turtle,

You are a very good swimmer. How do you swim with a heavy shell on your back? Please write back soon.

Sincerely,

Maria L.

Within seconds, they were back at Kim's house.

"That was fantastic!" said Andy. "But I don't have a photo to remind me of my time at the ocean."

Bongo jumped onto Andy's lap and gave him a shell from the ocean. This would be a souvenir of their exciting adventure at the ocean.



Souvenirs

Bongo gave Andy a shell as a souvenir of his trip to the ocean. Ask students whether they have souvenirs that remind them of memorable vacations. Organize a Souvenir Day, a special day at school when each student brings in a favorite souvenir to show to the class while sharing about the trip where he or she got it.

The following ideas can be incorporated into Souvenir Day:

- Ask each student to dress in a souvenir T-shirt from their vacation or to wear a piece of clothing or jewelry they got on their trip (such as a blouse or necklace from Mexico).
- Students can each bring several trip photos to share as part of their presentation.
- Students who have visited other countries, or other regions of your country, where people eat different foods might want to introduce that type of food to the class by bringing a snack (and a recipe!).

Relationships

This story, like the other stories in the **Tommy Tales** series, continues to reveal to us aspects of the children's relationships with each other. Each adventure teaches the importance of friends and family, teamwork, and staying together on adventures. These stories also encourage readers to be curious about their relationship with the natural world and to appreciate the rich diversity of life that exists on our planet. As a way of wrapping up this story, ask students to share a lesson that this **Tommy Tales** adventure has taught them that they can use in their everyday life.

Feedback

Remind students that this is the ninth book in a series, and that there will be a new one each month. Ask "How do you like it so far?"

Ask them to write a critical book review of this story or of the series so far. Reviews can be in the form of a written essay, a poster, or a drawing. E-mail your reviews to editor1@learningpage.com for possible inclusion in future Teaching Guides.

Conclusion

Ask students for their feelings and thoughts about this story. Stimulate enthusiasm and anticipation for the next story.



Explain to the students that the story continues. They will find out in the book that follows where Tommy and his friends are off to in their next exciting adventure. As RK-5 continues to transport Tommy and his friends to new places, readers' knowledge and understanding of the world around them continues to grow.

When the work with *Tommy Goes to the Ocean* is completed, keep all the books together in a storage box to be used again in the next school year or with the next group. Or students could be encouraged to take the books home to share with their families and have for their own libraries.