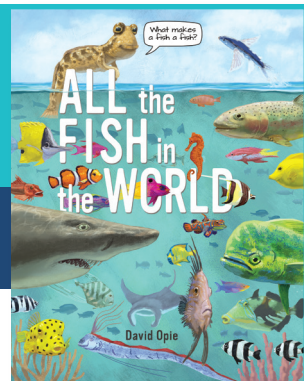


ALL THE FISH IN THE WORLD

by David Opie

Common Core Teaching Guide



ABOUT THE BOOK

WHAT MAKES A FISH A FISH?

Trout thinks he knows the answer.

“That’s easy! Fish are like me! They have scales, pairs of fins, and backbones. Fish live underwater, are cold-blooded, and breathe through gills,” says Trout. *“Not so fast,”* says Mudskipper. *“What about me?”* Trout soon learns that a clingfish doesn’t have any scales, a hagfish doesn’t have any fins, and Mudskipper lives *in* and *out* of the water!

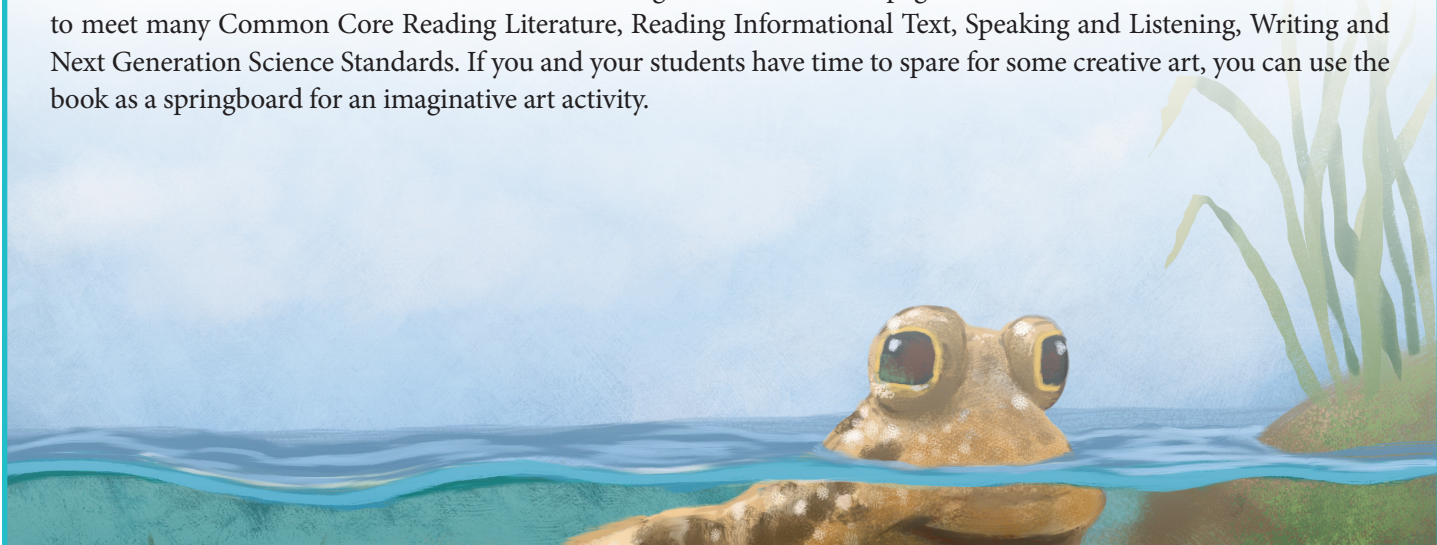
As Trout and Mudskipper explore below and above the world’s waters, they are introduced to a multitude of fish in various shapes, colors, and sizes, forcing Trout to rethink his notion of what a fish is. Maybe there is a vast watery world of unimagined possibilities (like a walking fish, or a fish with a transparent head!). And maybe, *just maybe*, there’s not just one way to be a fish— but *many, many* ways!

INTRODUCTION

Dear Teacher,

In *All the Fish in the World*, readers are invited to observe and explore the world of fish and discover many of the amazing facts and features that make up these diverse and complex creatures. Guided by the book’s two main characters, Mudskipper and Trout, students will explore what makes a fish a fish.

All the Fish in the World asks readers to look closely at fish—from their physical characteristics to their habitats—opening up an opportunity for literary and scientific discussions about fish and their part in the natural world. This is a book that will be revisited often, with new and exciting discoveries at each page turn and re-read. It also allows students to meet many Common Core Reading Literature, Reading Informational Text, Speaking and Listening, Writing and Next Generation Science Standards. If you and your students have time to spare for some creative art, you can use the book as a springboard for an imaginative art activity.



This guide was prepared by Michelle Gajda, an elementary school teacher, reading specialist, President of the Berkshire County Reading Council and recipient of a Massachusetts Reading Association Sylvia D. Brown Scholarship for action research in the field of literacy.

It's a Fact!

KINDERGARTEN, GRADE ONE, GRADE TWO:

Although *All the Fish in the World* implements fictional characters (Mudskipper and Trout), it is primarily a non-fiction book filled with fun and fascinating facts. Before reading the book to your students ask them to pay attention to the facts that they learn as the book is read. Using the **3-2-1 Fish Fact Sheet** on the following page, have students complete (with teacher support or independently) each section after reading the book.

Let's Talk About It: Before, During and After Reading

KINDERGARTEN, GRADE ONE, GRADE TWO:

Create a K-W-L-(M) Sheet. You'll use this chart paper to write down what students **KNOW** about fish, what they **WANT TO KNOW** about fish and, after reading the book, what they **LEARNED** and what **MISCONCEPTIONS** (if any) they had in their original knowledge about fish. (Students in Grades 2–4 can receive the chart as a hand-out to fill out individually, while younger students in Kindergarten and Grade 1 can complete the activity with a teacher.)

At the appropriate places in the story, prompt and challenge the students to answer the following questions about details in the text.

BEFORE READING:

- *Discuss the title All the Fish in the World. How many fish is that? Where do fish live?* Investigate and build students' background knowledge about fish and their features.

DURING READING:

- *Text Structure: What did the author do to show the difference from when the two main characters (Mudskipper and Trout) are speaking vs. the non-fiction text portion of the book proper? How does that help the reader?*
- *How do the illustrations help to reinforce the information the readers are learning in the text?*
- *Discuss the facts on each page. As the book is read aloud, have students give one "thumbs-up" if the fact is one that they already knew about fish and have them gently tap their heads if it's a new fact that they're learning for the first time.*

AFTER READING:

- *Revisit the K-W-L-(M) chart. What did students learn? What misconceptions (if any) did they have before reading the story?*
- *All the Fish in the World is an invitation to all readers to pay attention and notice the world of fish around them and throughout the world. Discuss which fish is each student's favorite fish and what makes it special to them. Which fish do they wish they could see in real life? Why?*
- *Do all fish have the same body parts? What evidence in the text supports your answer? What makes certain body parts so important to the fish who have them? For example, deep sea fish have glowing parts. Why is that important for them? Why don't other fish need them?*
- *On the last page of the book, Mudskipper says "Fish can do all sorts of amazing things. Whether they have fins, scales, bones, gills, live above or below water, fish are fascinating creatures. There's never just one way to be a fish." How can this same concept be applied to humans? Create a sentence together that uses that same concept but has humans as the topic of the sentence.*
- *In a Note from the Author, David Opie shares that "Birds and mammals (including humans) evolved from ancient fish." What do you think about this?*

3-2-1 FISH FACT SHEET

Name: _____ Date: _____



3 New Facts I Learned About Fish:

1. _____

2. _____

3. _____

2 Facts I Found Interesting:

1. _____

2. _____

1 Question I Still Have About Fish:

1. _____



Writing: Compare and Contrast

“ARE THEY THE SAME OR DIFFERENT?”

GRADE TWO, GRADE THREE, GRADE FOUR:

Using the information gathered throughout the book as well as the “About the Main Characters” page at the end of the book, have students use the **Compare and Contrast** handout on the following page, to note differences and similarities of Mudskipper and Trout. How are they alike? How are they different? Be sure to use features that were discussed throughout the book: body parts, habitats, special features/abilities, color, size, etc. Using the information from the **Compare and Contrast** diagram, have students either independently write a paragraph describing their similarities and another paragraph describing their differences, or compose these paragraphs together as a group.

Writing Mechanics: Dialogue

“WHAT DID THEY SAY?”

GRADE TWO, GRADE THREE, GRADE FOUR:

Give each student a copy of the **What Did They Say?** handout in the following pages. Invite students to practice writing dialogue using quotation marks and correct punctuation. Discuss what dialogue is and why it is important to a story. Ask: *How does the author’s use of dialogue between Trout and Mudskipper in this non-fiction story add to the information in the book?* Ask: *Why do you think the author used this writing technique?*

*This activity can be paired with the **Create a Fish** art activity in this guide.

Language Conventions: Parts of Speech Sort

“NOUN, VERB, OR ADJECTIVE?”

GRADE TWO, GRADE THREE AND GRADE FOUR:

Before introducing this activity, create three large cans or shoe boxes and label one “NOUNS”, another “VERBS” and another “ADJECTIVES”. Cut out all of the words included in the **Parts of Speech Sort** sheets in the following pages. Explain the definition of nouns, verbs, and adjectives to the students.

- *Nouns*: a person, place, thing (or idea).
- *Verbs*: a word that shows action (physical or mental)
- *Adjectives*: a word that describes a noun

Give students the slips of paper (differentiate the number of slips given out based on grade and skill level). Invite them to sort the words based on whether the words are nouns, verbs, or adjectives, and place the slips of paper into the appropriate containers. This is a good opportunity to discuss how some words can be considered more than one part of speech depending on how they are used in a sentence. Have students explain their reasoning for why they chose to put their word in the chosen container. Students who have experience with identifying parts of speech, can be encouraged to go through the book to locate and record nouns, verbs, and adjectives independently (without the use of the word slips provided).

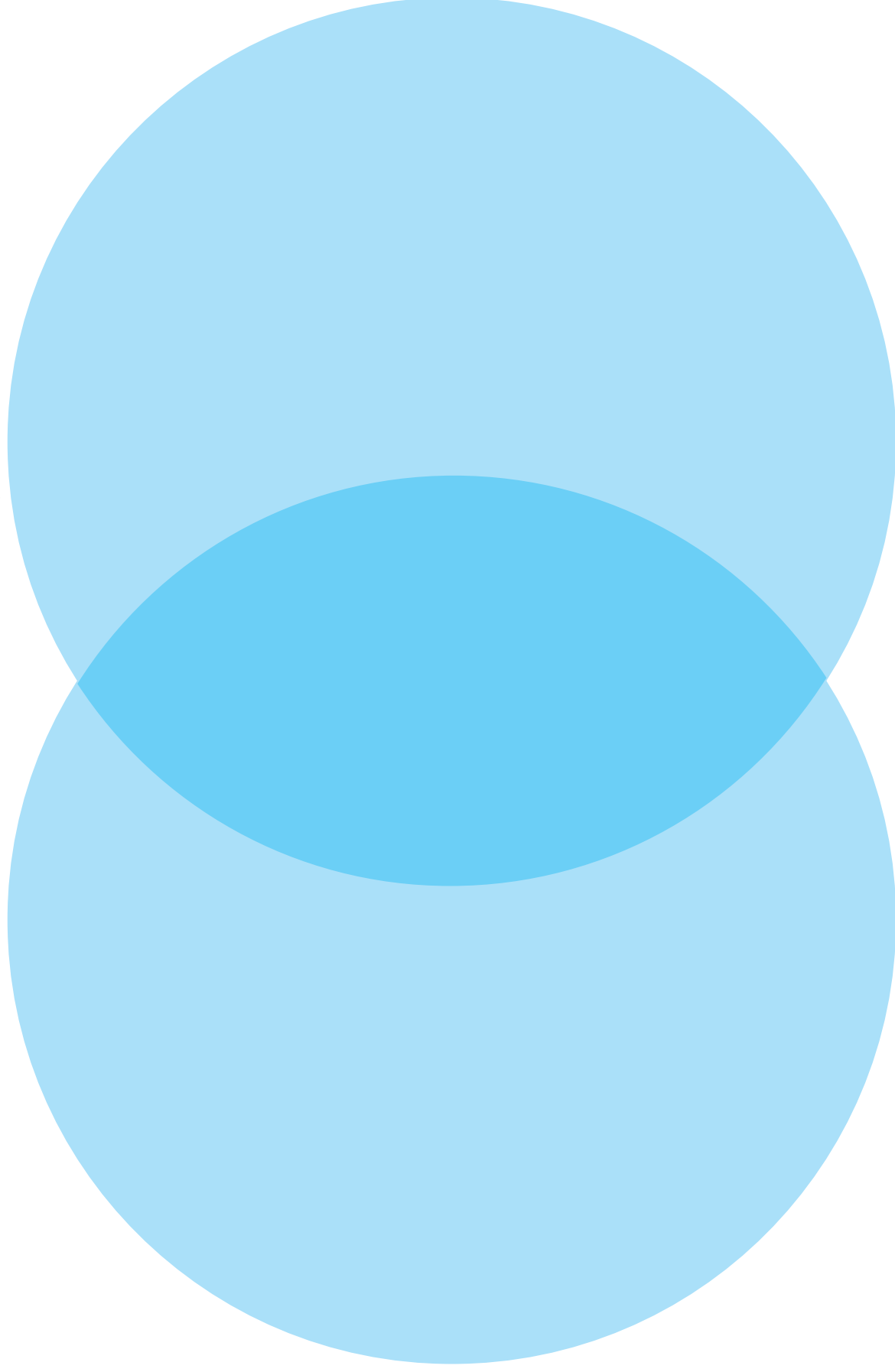
Writing Extension Activity: Have each student choose one slip from each Part of Speech container. Either independently or as a group, create a sentence using all three words. For example: *Chosen words*: weave, purple and weeds. *Sentence*: The purple fish weaves in and out of the weeds.

COMPARE AND CONTRAST

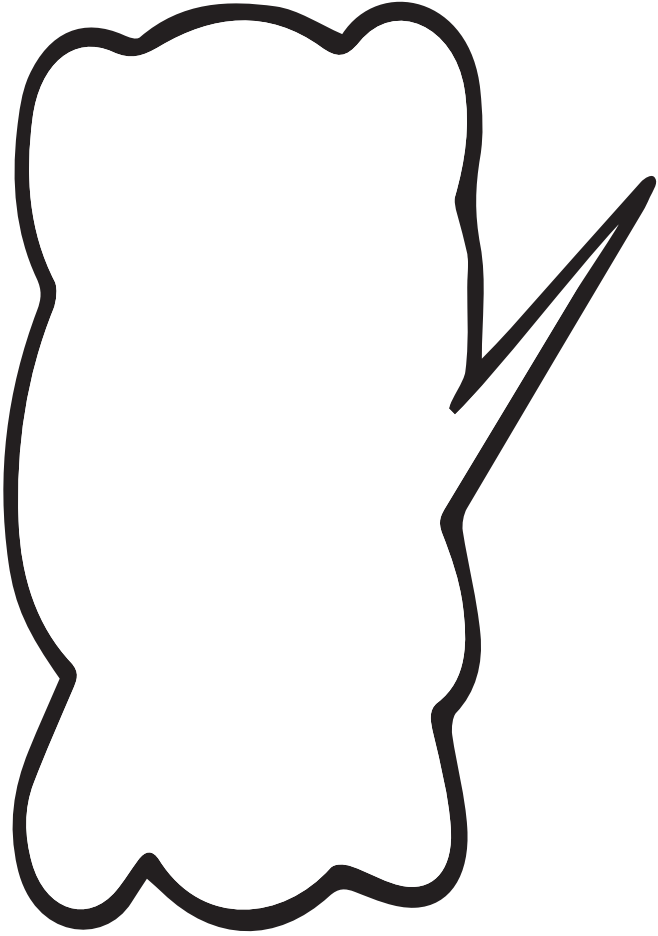
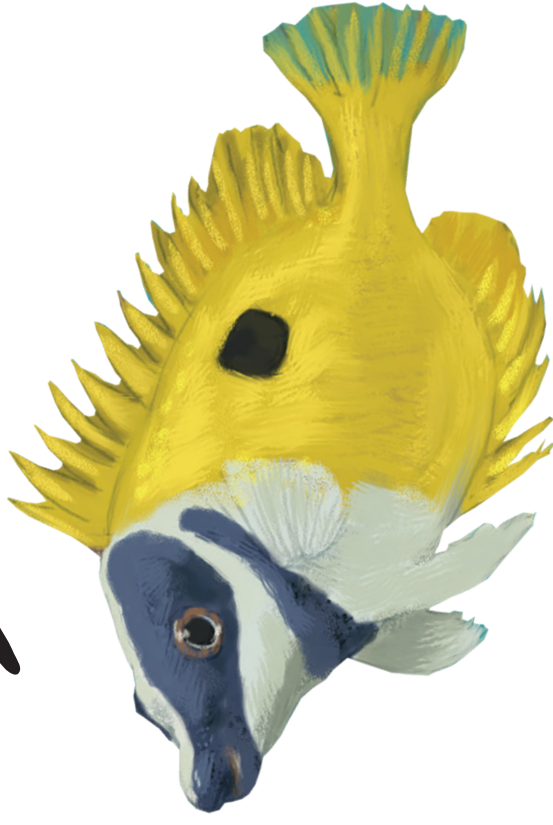
Mudskipper



Trout



WHAT DID THEY SAY?



PARTS OF SPEECH SORT

Cut words out and distribute slips of paper to students for the **Parts of Speech Sort** activity described on page 4.

Fish	Gills	Scales
Fins	Tails	World
Water	Surroundings	Ocean
Lake	Stream	Weeds
Stones	Reefs	Teeth
Coral	Grass	Bones
Eggs	Flapping	Shimmy
Scoot	Launch	Stretch
Glide	Pull	Stroll
Gulp	Breathe	Crawl

Slice	Move	Mate
Blend	Streaking	Spatter
Hide	Steer	Sweep
Wiggles	Swimming	Attracting
Laying	Construct	Pile
Scoops	Weaves	Lay
Hatch	Swivels	Wedge-shaped
Tapered	Brightly-hued	Brilliant
Purple	Golden	Thick
Bony	Rough	Flattened
Boneless	Spooky	White-spotted
Large	Rocky	Wing-like

Life Science: Features of a Fish

GRADE TWO, GRADE THREE:

Activity Directions: Divide the class into small groups and use the jigsaw protocol* to research features of a fish using the book and other additional resources. (Features to assign to small groups: reproduction, habitat, body parts, shapes, colors, patterns, size, senses, and protection.)

Have each group share what they've learned about their assigned feature with the rest of the class. Encourage each group to create a visual prop (poster, powerpoint, digital storyboard, etc.) to use while they present their feature.

**In a jigsaw protocol, small groups of students become experts in one section or text and hear oral summaries of the others. The protocol allows students to synthesize across texts and gain new understandings from their classmates about the topic as a whole.*

Writing Figurative Language "A Fish is Like a . . ."

GRADE TWO, GRADE THREE, GRADE FOUR:

Activity Directions: *All the Fish in the World* includes a variety of figurative language elements, particularly similes. Discuss similes with students. Provide a definition and describe how authors use figurative language to help the readers create a clearer picture in their minds of what the author is trying to describe. Some examples of similes from the book include:

"some fish may be shaped like dinner plates."

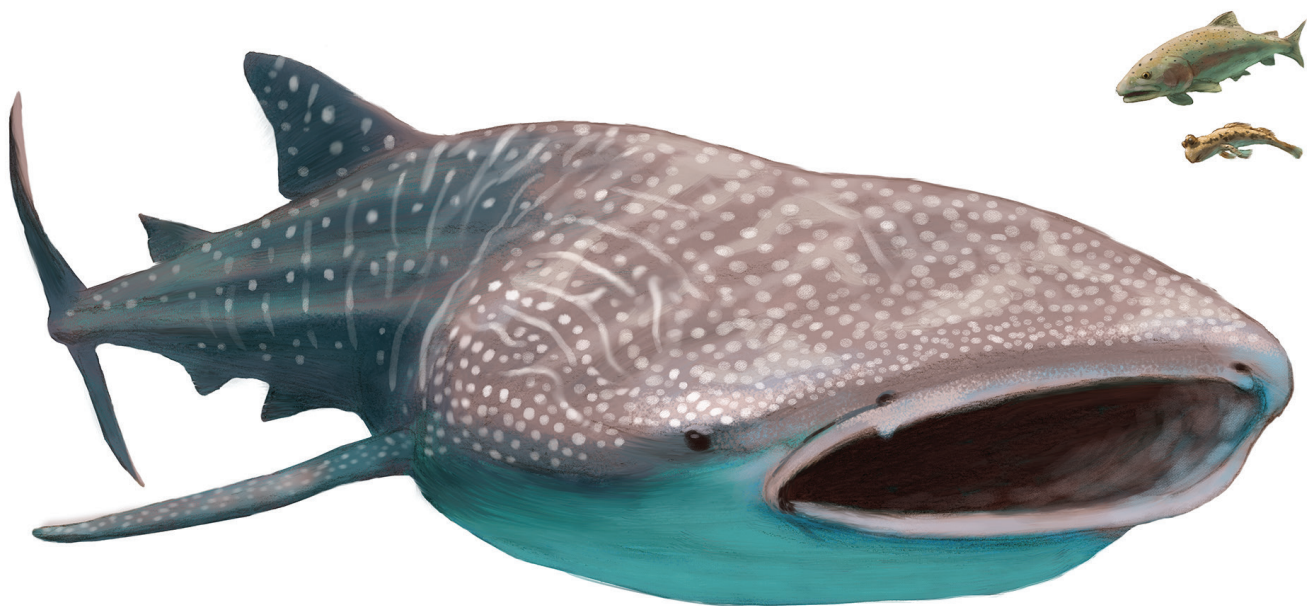
" . . . scales, those little overlapping discs, like chain mail protecting a knight."

" . . . sharks have scales like rough, overlapping teeth."

" . . . they have glowing parts like fireflies in a summer field."

" . . . constructs a mound like a castle."

Using the **A Fish is Like a . . .** activity sheet provided, instruct students to create their own similes by filling in the prompts provided. Then encourage them to write their own sentences with a simile using the word provided.



Art Extension Activity

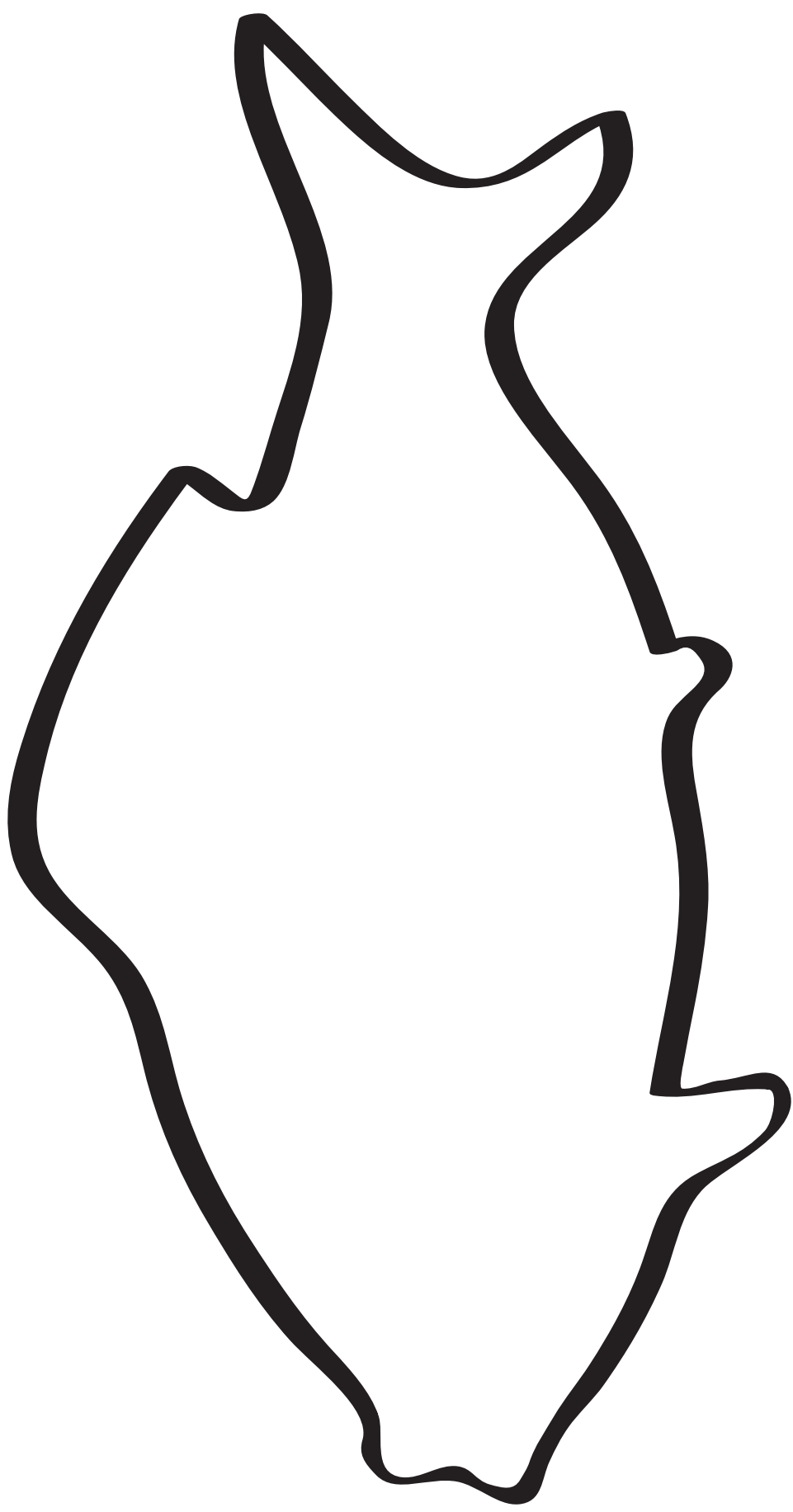
A SCHOOL OF FISH

KINDERGARDEN, GRADE ONE, GRADE TWO, GRADE THREE, GRADE FOUR:

Using the **Create a Fish** art activity sheet on the following page, have students use various art mediums (markers, paints, colored pencils, collage materials, tissue paper, etc.) to decorate the fish on the activity sheet. Students should be encouraged to use the information they learned throughout the book about patterns, colors, physical features, body parts, etc. to inspire their designs. If desired, cut each fish out and create a “School of Fish” community collage for your wall. Students could create museum plates in which they would name and describe their fish. The speech bubbles from the previous **What Did They Say?** activity sheet could be cut out and included with the collage.



CREATE A FISH



Common Core Standards Met in this Guide

LANGUAGE STANDARD 1

L.2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

READING LITERATURE STANDARD 1

RL. K.1 With prompting and support, ask and answer questions about key details in text.

RL. 1.1 Ask and answer questions about key details in a text.

RL. 2.1 Ask and answer such questions as *who*, *what*, *where*, *when*, *why* and *how* to demonstrate understanding of key details in a text.

RL. 3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as a basis for the answers.

READING INFORMATIONAL TEXT STANDARD 2

RI.1.2 Identify the main topic and retell key details of a text.

RI.3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea.

READING INFORMATIONAL TEXT STANDARD 3

RI.K.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

READING INFORMATIONAL TEXT STANDARD 5

RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.

READING INFORMATIONAL TEXT STANDARD 6

RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text.

RI.2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe.

READING INFORMATIONAL TEXT STANDARD 7

RI.1.7 Use the illustrations and details in a text to describe its key ideas.

RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.

RI.3.7 Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).

READING INFORMATIONAL TEXT STANDARD 8

RI. 2.8 Describe how reasons support specific points the author makes in a text.

SPEAKING AND LISTENING STANDARD 2

SL.2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.

SPEAKING AND LISTENING STANDARD 5

SL.K.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.

WRITING STANDARD 2

W K.2 Use a combination of drawing, dictating and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.

W 1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.

W 3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

W 3.2.A Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.

WRITING STANDARD 3

W.3.3.B Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of character to situations.

WRITING STANDARD 7

W K.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).

W 1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions).

W 2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations).

WRITING STANDARD 8

W 2.8 Recall information from experiences or gather information from provided sources to answer a question.

Next Generation Science Standards Met in this Guide

FROM MOLECULES TO ORGANISMS: STRUCTURE AND PROCESSES

K-LS1-1 Use observations to describe patterns of what plants and animals (including humans) need to survive.

1-LS1-1A Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow and meet their needs. All animals have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find and take in food water and air.

EARTH'S SYSTEMS

K-ESS2-2 Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs.

EARTH AND HUMAN ACTIVITY

K-ESS3-1 Use a model to represent the relationship between the needs of different plants or animals and the places they live.

MATTER AND ITS INTERACTIONS

2-PS1-1 Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.

ABOUT THE AUTHOR/ILLUSTRATOR



DAVID OPIE holds a BFA in illustration from the Rhode Island School of Design and an MFA in illustration from the School of Visual Arts in New York City. He lives within steps of Norwalk's Maritime Aquarium, which he has visited many times to study the thousands of fish and sea life that inspired him in the making of this book. He was also able to do research at the Mote Marine Laboratory & Aquarium in Sarasota, Florida, where he was particularly awestruck by the goliath grouper, seahorses, and lionfish that swam their way through the waters, into his pencils, and onto these pages. David lives with his wife and their dog in Norwalk, CT.

