

by Ellen Lawrence





### by Ellen Lawrence

### **Consultants:**

Suzy Gazlay, MA

Recipient, Presidential Award for Excellence in Science Teaching

Kimberly Brenneman, PhD

National Institute for Early Education Research, Rutgers University New Brunswick, New Jersey



New York, New York

#### Credits

Cover, © AnetaPics/Shutterstock and © Eric Isselée/Shutterstock; 3, © Zeljko Radojko/Shutterstock; 4–5, © Ariadne Van Zandbergen/FLPA; 6, © Evgeny Tomeev/Shutterstock; 7T, © picturepartners/Shutterstock; 7, © MaszaS/Shutterstock; 8, © Sam Chadwick/Shutterstock; 9, © Wendy Dennis/FLPA; 10, © Christian Ziegler/Minden Pictures/FLPA; II, © Wild Arctic Pictures/Shutterstock; 12T, © Pete Oxford/Minden Pictures/FLPA; 12B, © Michael & Patricia Fogden/Minden Pictures/FLPA; 13, © Dr. Morley Read/Shutterstock; 14, © Arto Hakola/Shutterstock; 15, © Larry Minden/Minden Pictures/FLPA; 16, © Yva Momatiuk & John Eastcott/Minden Pictures/FLPA; 17T, © Cosmographics; 17, © Michio Hoshino/Minden Pictures/FLPA; 18T, © Gail Johnson/Shutterstock; 18B, © Lusoimages/Shutterstock; 19, © Vladitto/Shutterstock; 19BR, © leonid\_tit/Shutterstock; 20, © Jan Martin Will/Shutterstock; 21C, © Cosmographics; 21L, © Nataliya Hora/Shutterstock; 21T, © Patrick Poendl/Shutterstock; 21R, © EPA/Corbis; 21B, © Volodymyr Goinyk/Shutterstock; 22BL, © Sergey Smolin/Shutterstock; 22BC, © Eric Isselée/Shutterstock; 22BR, © Matt Jeppson/Shutterstock; 23TL, © Nataliya Hora/Shutterstock; 23TC, © Alexander Shadrin/Shutterstock; 23TR, © Stéphane Bidouze/Shutterstock; 23BL, © Gail Johnson/Shutterstock; 23BC, © Wild Arctic Pictures/Shutterstock; 23BR, © leonid\_tit/Shutterstock.

Publisher: Kenn Goin Senior Editor: Lisa Wiseman Creative Director: Spencer Brinker

Design: Emma Randall Editor: Mark J. Sachner

Photo Researcher: Ruby Tuesday Books Ltd.

Library of Congress Cataloging-in-Publication Data

Lawrence, Ellen, 1967What is climate? / by Ellen Lawrence.
p. cm. — (Weather wise)
Includes bibliographical references and index.
ISBN 978-1-61772-401-5 (library binding) — ISBN 1-61772-401-7 (library binding)
I. Climatology—Juvenile literature. I. Title.
QC981.3.L3955 2012
551.6—dc23

2011049583

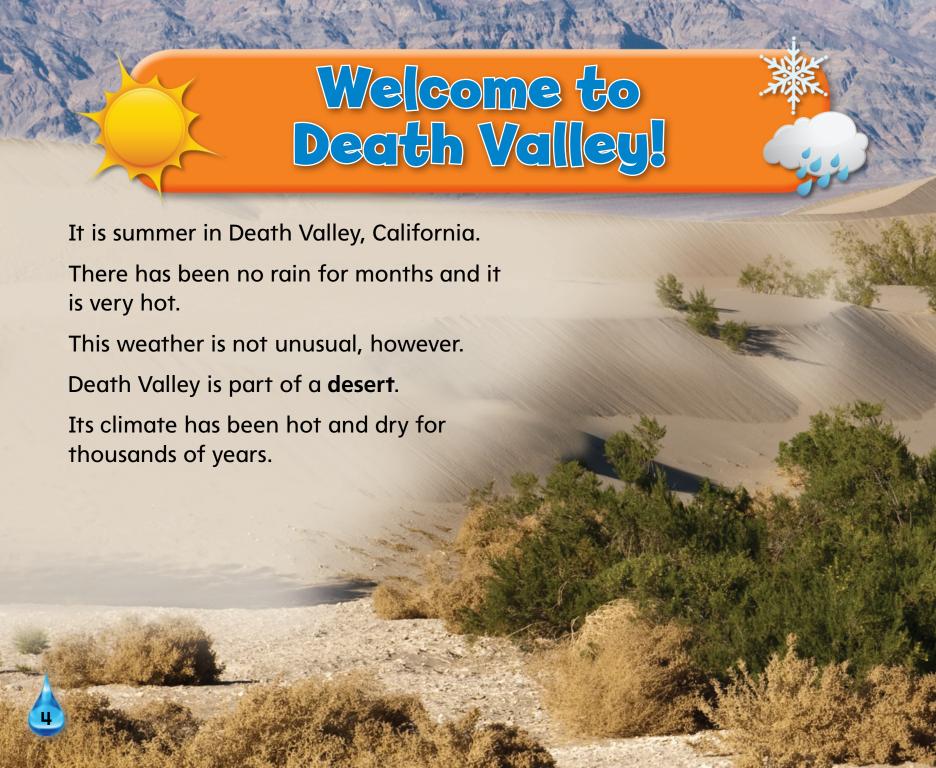
Copyright © 2012 Bearport Publishing Company, Inc. All rights reserved. No part of this publication may be reproduced in whole or in part, stored in any retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without written permission from the publisher.

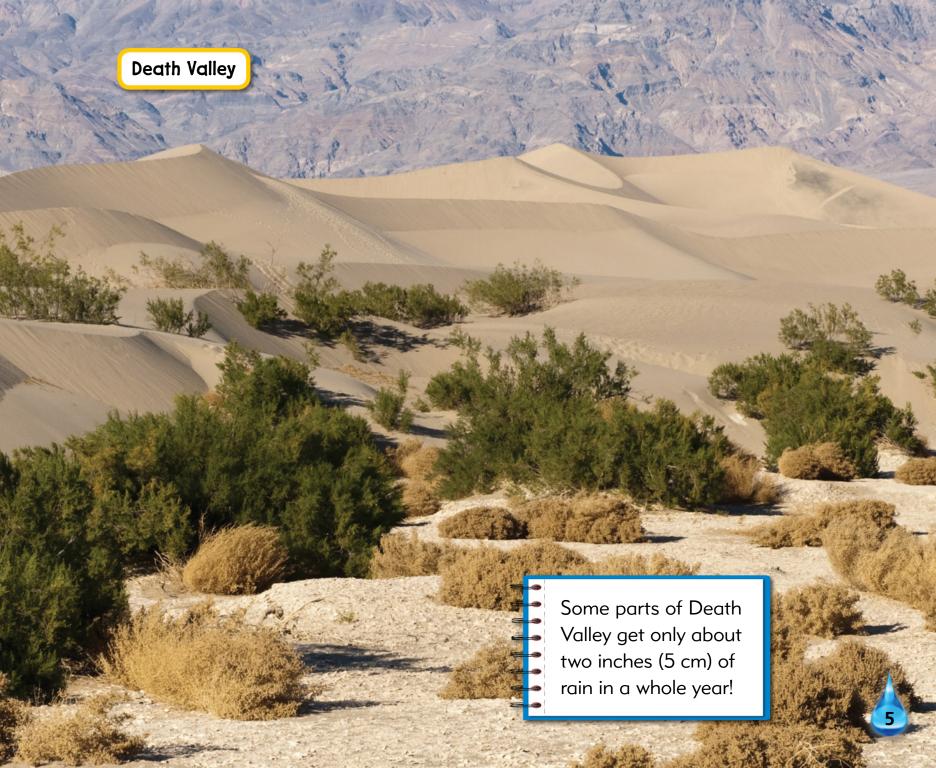
For more information, write to Bearport Publishing Company, Inc., 45 West 21st Street, Suite 3B, New York, New York 10010. Printed in the United States of America in North Mankato, Minnesota.

10987654321

# Contents

Welcome to Death Valley! 4
Weather and Climate 6
Figuring Out Climate 8
Cold, Hot, Wet, or Dry? 10
A Tropical Climate12
A Hot Desert Climate 14
A Super-Cold Climate16
Not Too Hot, Not Too Cold!18
Climate Record Breakers 20
Science Lab
Science Words
Index 24
Read More
Learn More Online 24
About the Author 24





## Weather and Climate

So is **weather** the same thing as climate?

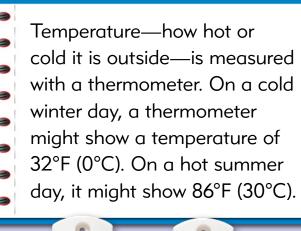
No, weather is what happens in one place on a single day, or over a few days or weeks.

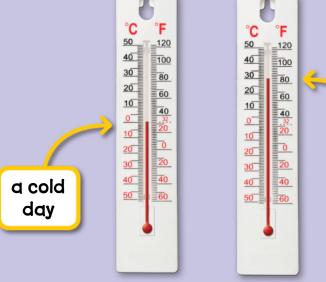
When it rains or snows, people say, "The weather is wet."

When it is very warm outside, people say, "The weather is hot."

Climate, on the other hand, is the type of weather a place has over 30 or more years.

For example, people say, "Death Valley has a desert climate."











### Index

climatologists 9
cold 6–7, 8, 10–11, 15, 16, 18,20, 22
deserts 4, 9, 10, 14–15, 16, 20, 22
dry climates 4–5, 9, 10, 14–15, 16, 20
heat 4, 6–7, 8–9, 10, 12, 14–15, 16, 18, 20, 22

plants 10, 12–13, 14, 16
rain 4–5, 6, 8, 10, 12, 14–15, 16, 19, 20, 22
rain forests 10, 12–13, 22
snow 6–7, 8, 15, 16, 19
temperature 6, 8, 12, 14, 16, 18, 20

tropical climates 12, 22 tundra 16–17 water 14, 16, 22 weather 4, 6–7, 8, 18, 21 wet climates 10, 12, 20

### Read More

Kalman, Bobbie, and Kelley MacAulay. Changing Seasons. New York: Crabtree Publishing (2005). Murphy, Julie. Desert Animal Adaptations. Mankato, MN: Capstone (2012).

## Learn More Online

To learn more about the climate, visit www.bearportpublishing.com/WeatherWise

### About the Author

Ellen Lawrence lives in the United Kingdom. Her favorite books to write are those about animals and nature. In fact, the first book Ellen bought for herself, when she was six years old, was the story of a gorilla named Patty Cake that was born in New York's Central Park Zoo.







Climate is the weather a place usually has year after year. Scientists study temperature and precipitation records over 30 or more years to determine an area's climate. Such records show, for example, that Death Valley in California has a desert climate. Most of the time, it gets little rain and has hot temperatures. Read *What Is Climate?* to learn about four other kinds of climates. Then figure out which kind of climate you live in! Forecast for this book: long-range fun.

How Are Rain, Snow, and Hail Alike?

What Are Clouds?

What Is Climate?

What Is the Water Cycle?



What Is Weather?

