Sunny Days, Starry Nights

by Corinn Kintz

© Center for the Collaborative Classroom

Sunny Days, Starry Nights

by Corinn Kintz

Text and illustrations copyright © 2016 by Center for the Collaborative Classroom

All rights reserved. Except where otherwise noted, no part of this publication may be reproduced in whole or in part, or stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the written permission of the publisher. For information regarding permissions, write to the Publishing Services department at Center for the Collaborative Classroom.

First edition published 2016.

Photographs: cover, title page, page 14: © iStockphoto.com/piskunov; page 1: © iStockphoto.com/velkol; pages 2–3: © iStockphoto.com/rhyman007; pages 4–5: Courtesy NASA.gov; pages 8–9: Courtesy NASA.gov.

Illustrations by Gail Guth Book design by Garry Williams

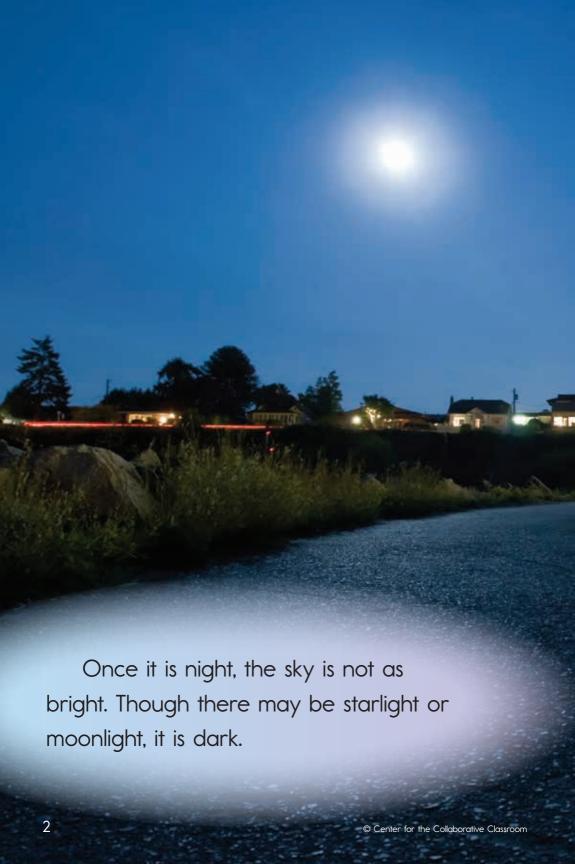
Center for the Collaborative Classroom 1250 53rd Street, Suite 3 Emeryville, CA 94608-2965 (800) 666-7270 * fax: (510) 464-3670 collaborative classroom.org

ISBN 978-1-61003-630-6

Printed in China
1 2 3 4 5 6 7 8 9 10 RRD 24 23 22 21 20 19 18 17 16 15

Look outside. How can you tell it is daytime? Can you see the sun high in the sky? You can see it on a sunny day. But even on a rainy day, it is light outside. It is light on foggy and snowy days, too. The sun is there.









So why do we have day and night? Once nighttime comes, does the sun stop shining?



No, though the sky gets dark, the sun never stops shining. We have day and night because Earth is turning.

Try this to see how it works:

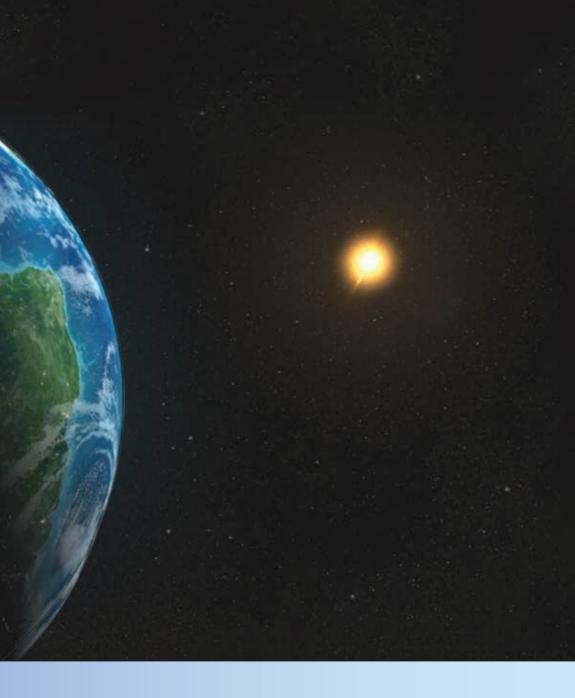
Take a globe and a flashlight into a dark room. Turn the flashlight toward the globe.

Once the flashlight is turned on, light shines on one side of the globe.

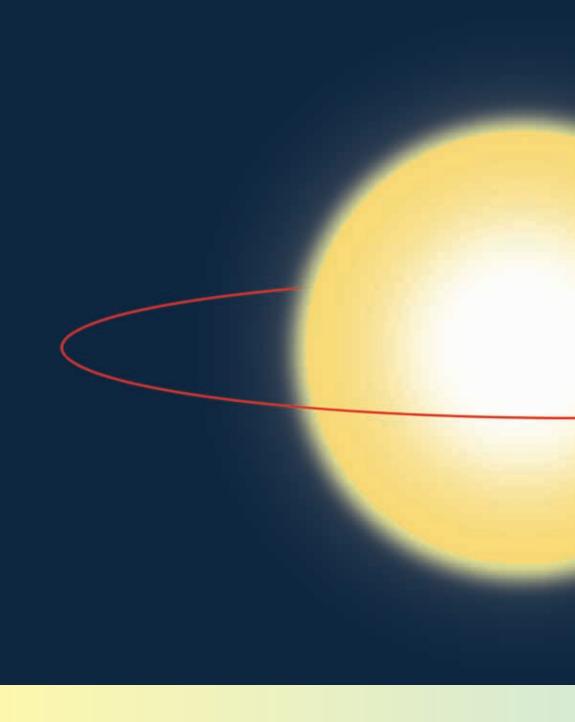
Where the light hits the globe, it is like daytime on Earth. The light does not reach the other side, though. This dark side is like Earth at night.



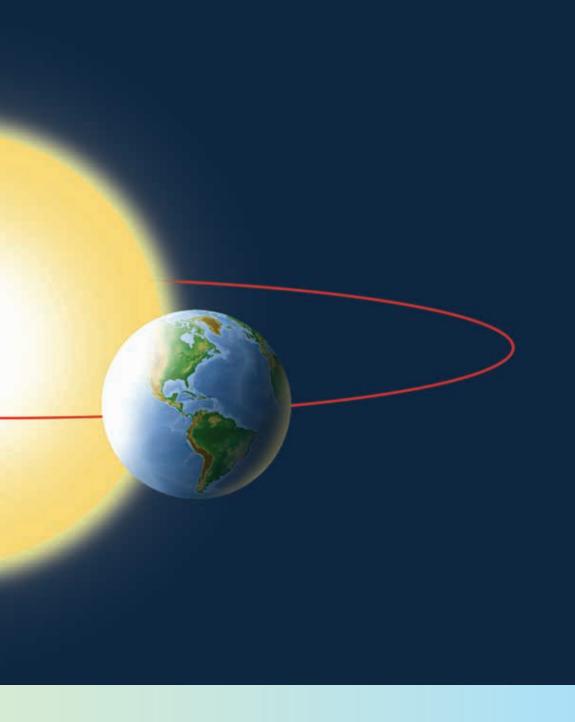




The sun is like the flashlight. Even though the sun keeps shining, one side of Earth is dark. On the dark side of Earth, it is night. On the light side, it is day.



How does day turn into night, and night into day?



Try turning the globe once, slowly.

Keep the flashlight still.



As Earth turns, some parts of Earth move into the light.
This is sunrise.

At the same time, some parts of Earth move into the dark. This is sunset.



Earth turns once each day. The sun, like the flashlight, stays in one place.

Because Earth turns we can have bright, sunny days and dark, starry nights.





