





# Science (5-Day)

Geology, Meteorology, and Mechanical Technology

By The Sonlight Team

"Then God said, 'Let us make man in our image, in our likeness, and let them rule over the fish of the sea and the birds of the air, over the livestock, over all the earth, and over all the creatures that move along the ground."

Genesis 1:26 (NIV)

Sonlight Curriculum® "Intro to the World: Cultures" (5-Day) Instructor's Guide and Notes, Twenty-Ninth Edition

Copyright © 1990, and annually 1992–2018 by Sonlight Curriculum, Ltd.

All Rights Reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means—electronic, mechanical, photocopy, recording, or any other—except for brief quotations embodied in critical articles or printed reviews, without prior written permission of the publisher. **However**, permission is hereby granted to the original Sonlight Curriculum Ltd. purchaser only to reproduce as many copies of the Schedule Pages; Evaluation Form and Certificate of Completion as necessary for his or her immediate family's use.

"Do to others what you would have them do to you" (Matthew 7:12).

"The worker is worth his keep" (Matthew 10:10).

Published by

Sonlight Curriculum, Ltd. 8042 South Grant Way Littleton, CO 80122-2705 USA

Phone (303) 730-6292 Fax (303) 795-8668

E-mail: main@sonlight.com

#### **NOTE TO PURCHASER**

Sonlight Curriculum, Ltd. is committed to providing the best homeschool resources on the market. This entails regular upgrades to our curriculum and to our Instructor's Guides. This guide is the 2018 Edition of the Sonlight Curriculum® "Intro to the World: Cultures" (5-Day) Instructor's Guide and Notes. If you purchased it from a source other than Sonlight Curriculum, Ltd., you should know that it may not be the latest edition available.

This guide is sold with the understanding that none of the Authors nor the Publisher is engaged in rendering educational services. Questions relevant to the specific educational or legal needs of the user should be addressed to practicing members of those professions.

The information, ideas, and suggestions contained herein have been developed from sources, including publications and research, that are considered and believed to be reliable but cannot be guaranteed insofar as they apply to any particular classroom or homeschooling situation.

The Authors and Publisher specifically disclaim any liability, loss, or risk, personal or otherwise, incurred as a consequence directly or indirectly of the use and application of any of the suggestions or contents of this guide.

Printed in the United States of America.

For the latest information about changes in this guide, please visit <a href="https://www.sonlight.com/curriculum-updates.html">www.sonlight.com/curriculum-updates.html</a>. Please notify us of any errors you find not listed on this site. E-mail corrections to <a href="https://www.googlested.com">GCOTTECTIONS (SON) IGNO (SON) (S

### **Table of Contents**

#### 1 Introduction to Your Instructor's Guide

· Table of Contents

## 2 Schedule, Notes and Activity Sheets

- · A Weekly SCHEDULE for Science
- ACTIVITY SHEET ANSWER KEYS

| Date:  | Day 1       | Day 2     | Day 3      | Day 4     | Day 5     |  |  |  |  |  |
|--|-------------|-----------|------------|-----------|-----------|--|--|--|--|--|
| The Usborne Book of<br>Knowledge                             | pp. 52–53   | pp. 54–55 | pp. 56–57  | pp. 58–59 | pp. 60-61 |  |  |  |  |  |
| Activity Sheet Questions                                     | #1-2        | #3-4      | #5-6       | #7-8      | #9–10     |  |  |  |  |  |
| Do Together  | Monkey Bars |           | Mocha Bear |           |           |  |  |  |  |  |
| Additional Subjects:   |             |           |            |           |           |  |  |  |  |  |
|  |             |           |            |           |           |  |  |  |  |  |
|  |             |           |            |           |           |  |  |  |  |  |
|  |             |           |            |           |           |  |  |  |  |  |
| The Usborne Book of Knowledge  Activity Sheet Questions #1-2 |             |           |            |           |           |  |  |  |  |  |

Week 1

Day 1 pp. 52-53

Are you or your children bothered by the phrase stating that chimpanzees "are the animals most like people"? It probably depends on what is meant. While the section is not explicit in stating that humans have evolved from apes, which is a typical macroevolutionary assumption, it does suggest the connection.

But, in looking at any data or information, scientists (and non-scientists) must be careful in how the information is evaluated. What explanation makes the most sense? Are there reasonable alternative explanations? Simply because some animals are similar in structure (homogeny) does not necessarily mean that the animals in question evolved rather than being created and designed. Doesn't it make sense that things with the same designer will sometimes show similar structures? If this is the case, then the fact that apes look somewhat like humans can be explained by saying that since God created all creatures, there are bound to be some similarities.

But, there are also significant differences that clearly separate humans from apes. Human beings are creative, sophisticated, communicating creatures with great intelligence, artistic sensibilities, broad emotions, critical thinking abilities, and religious tendencies. Clearly, we're vastly different from apes in many important respects. [p. 52]

Find the Activity Sheets after the notes. They are assigned on each schedule page. Each Activity Sheet has a corresponding Answer Key page following these schedule pages.

You do not have to do every question on the Activity Sheets. Feel free to adjust and/or omit activities to meet the needs of your children. We cover the same concepts repeatedly throughout the year (and years to come!) to enable students to learn "naturally" through repetition and practice.

Any question marked "Challenge:" will be just that—a challenge for your children. While we believe the material covered in the challenge questions is worthwhile for your children to know, it may not be specifically explained in their reading assignment. As always, if you think any question is too difficult for your children, please feel free to skip.

Please don't expect your children to write the answers until they gain considerable proficiency at handwriting. We have provided a variety of activities to interest and challenge your children. Feel free to let your children do those activities that they enjoy and simply talk through others.

We have provided space for you to fill in answers as your children respond verbally, or simply check off the items that you discuss.

**Remember:** This program is designed for you to use to meet your children's needs. It is not meant to use you!

**Suggestion:** Your Activity Sheets might work more easily in a small binder for your children to keep and use as assigned. If you have more than one child using this program, extra Activity Sheets can be purchased for each child (Item #CSG1).

playground with monkey bars, you can help them swing like a monkey from the branches of a tree at home. As you enjoy your time playing together, talk about what they've learned so far about apes and chimpanzees. Would they ever want one as a pet? Why or why not? Have fun engaging in a little monkey business. Mocha Bear

While the book is correct in noting that giraffes appear awkward when they need to take a drink, it fails to point out that the mechanisms involved in this process are pretty amazing. Why doesn't the blood rush to a giraffe's head and cause a hemorrhage when it takes a drink? Because special valves in the giraffe's head regulate the pressure. There are other interesting things at work inside a giraffe taking a drink, too, such as the need for a powerful heart and special tissue near the brain. To find out more about how incredible it is when a giraffe takes a drink, see the article, "Do drinking giraffes have headaches?" which can be found on our IG links web page \( \bigsige . [p. 54] \)

Help your children create a neat brown bear art project suitable for hanging on the refrigerator. All you'll need is the following: paper, crayons or markers, glue, and coffee grounds. Start with a blank piece of paper and draw the shape of a brown bear on it. If you can't draw very well, feel free to print a picture of a brown bear from the Internet that you can trace or use as a guide. When you're done, have your children cover the bear's shape with glue. While the glue is still wet, gently shake some coffee grounds onto the glue and let it dry. When their brown bear is dry, ask your children to use crayons or markers to color an interesting background behind it. As they work, discuss what they learned this week about brown bears.

# Do Together



#### **Monkey Bars**

Do you have a playground with monkey bars nearby? If so, take your children for some playtime. Help them swing on the monkey bars. Explain that monkey bars got their name because you have to swing from rung to rung just like a monkey (or an ape or a chimpanzee) swings from branch to branch in the jungle. If you can't get to a

|   |  | Science C: Week 1 Activity Sheet  |                           |  |  |  |
|---|--|---|---------------------------|--|--|--|
| 1 | he Usborne Book of Knowled   | dge   |                           |  |  |  |
| 1 | 1. Label each animal as an <b>ape</b> or a <b>monkey</b> . (p. 52)   |   |                           |  |  |  |
|   |  | F &   |                           |  |  |  |
|   |  | (monkey) (ape)  |                           |  |  |  |
| 2 | . How do chimps use to   | ools? (p. 53)   |                           |  |  |  |
|   | (they get insects to clim  | b on blades of grass and then they eat them; also   | o, sometimes they fight w |  |  |  |
|   | sticks—they throw then   | m at or hit an enemy with them)   |                           |  |  |  |
| 3 | . Giraffes can run for lon   | ng distances. (p. 54) <b>True</b> False   |                           |  |  |  |
| 3 | . How do the following   | ng distances. (p. 54) True False  characteristics help giraffes survive? (pp. 54-5)   | <b>A</b>                  |  |  |  |
|   | . How do the following long neck: (he  | characteristics help giraffes survive? (pp. 54-5  | 5)                        |  |  |  |
| 3 | long neck: (he heavy hooves: (bo)  | characteristics help giraffes survive? (pp. 54-5:   | 5)                        |  |  |  |
| 3 | long neck: (he   | characteristics help giraffes survive? (pp. 54-5)<br>tolp them reach high in the trees for food)<br>efend themselves from predators)                                      | 55                        |  |  |  |
|   | long neck: (he heavy hooves: (de   | characteristics help giraffes survive? (pp. 54-5)<br>tolp them reach high in the trees for food)<br>efend themselves from predators)                                      | 5)                        |  |  |  |
|   | long neck: (he heavy hooves: (de   | characteristics help giraffes survive? (pp. 54-5<br>elp them reach high in the trees for food)<br>efend themselves from predators)<br>elp them strip leaves from trees)   | South America             |  |  |  |
| 4 | long neck: the heavy hooves: long tongue: the long tongue the long tongu | characteristics help giraffes survive? (pp. 54-5-<br>lef) them reach high in the trees for food)<br>efend themselves from predators)<br>elp them strip leaves from trees) |                           |  |  |  |

| <u>@</u> | Science C: Week 1 Activity Sheet  |
|----------|---|
| 5. C     | Describe three ways bears obtain food. (pp. 56-57)  |
| 1        | (Possible: fishing, dig honey out of trees, pounce on seals as they sleep,  |
| 2        | pull seals from the water when they come up for air, forage for berries,  |
| 3        | eat ants, etc.)   |
|          |   |
| 7. (     | Circle the biggest cat in the world. (p. 58)  |
|          |   |
|          |   |
|          | S S S S S S S S S S S S S S S S S S S   |
|          | leopard tiger house cat   |
|          | leopard tiger house cat  Why is a tiger's coat good camouflage? (p. 58) (because the stripes make it difficult to see the tiger in long grass, shady places, and moonlight) |
| 3. V     | Why is a tiger's coat good camouflage? (p. 58)  (because the stripes make it difficult to see the tiger in long grass, shady  |
| -        | places, and moonlight)  |
| -        | pace, and mooning it  |
| 9. V     | Why is the white rhino's neck longer than the black rhino's? (Hint: Think about what they eat.)   |
|          | p. 60) (the white rhino eats grass and must reach down farther to get his food; the   |
| _        | black rhino eats leaves, which are easier to get to)  |
|          |   |
| 0. V     | Why do rhinos wallow in the mud? Give two reasons. (p. 60)  |
| 1        | ) (to keep cool)  |
| 2        | (to get rid of insects)   |
|          | 271   |

# The Usborne Book of Knowledge

1. Label each animal as an **ape** or a **monkey**. (p. 52)





2. How do chimps use tools? (p. 53)

3. Giraffes can run for long distances. (p. 54)

True

**False** 



4. How do the following characteristics help giraffes survive? (pp. 54-55)

long neck:

heavy hooves:

long tongue:

5. Where do bears live? Circle all that apply. (pp. 56-57)

Asia

**Europe** 

**South America** 

**Africa** 

**North America** 

**Australia** 

Hawaii

**Antarctica** 

The Arctic



7. Circle the biggest cat in the world. (p. 58)



leopard



tiger



house cat

8. Why is a tiger's coat good camouflage? (p. 58)



9. Why is the white rhino's neck longer than the black rhino's? (Hint: Think about what they eat.)

(p. 60)

10. Why do rhinos wallow in the mud? Give two reasons. (p. 60)

1) \_\_\_\_\_

2)

