



SONLIGHT

Science A

4-DAY



INSTRUCTOR'S GUIDE

Science (4-Day)

Biology, Botany, and Physics

by The Sonlight Team

*“The heavens declare the glory of God; the skies
proclaim the work of his hands.”*

Psalms 19:1 (NIV)

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

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

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

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2 Schedule, Notes and Activity Sheets

- A Weekly SCHEDULE for Science
- ACTIVITY SHEET ANSWER KEYS

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Week 1

Date:	Day 1	Day 2	Day 3	Day 4
<i>Children's Encyclopedia</i>	pp. 8–9	pp. 10–11	pp. 12–13	
Activity Sheet Questions	#1–2 	#3–4	#5–7	
<i>Discover & Do Level K DVD</i>				"Before You Begin" Tracks #1–3
Do Together			The Seasons at Your House	
<i>Science Activities, Vol. 2</i>				"Air All Around" pp. 2–3
Supplies	You provide: sheets of paper, 8" x 10" cardboard for each player (optional: crayons, thread or string or yarn) bottle, bowl, water. 			
Shopping/Planning List	For next week: feather from any bird, plate, 10" x 10" paper, pencil, scissors, crayons, needle, thread or string or yarn.			
Additional Subjects:				

Children's Encyclopedia

Day
1

pp. 8–9

Let your children know how amazing it is that so many things have to work just right in order for our world to support life. For example, if we were too close to the sun, our world would be too hot to support life. If we were too far, it would be too cold. Isn't amazing what God has done in His creation? He's made things just right to support life on Earth.

The book mentions continents, but doesn't list them. The seven continents are North America, South America, Europe, Asia, Africa, Australia, and Antarctica. Find a map at the back of the book on page 286–287 and show your children the continents. [p. 8]

Notice the "Internet links" box at the top of the page. It is not necessary to visit all these links as part of your reading, but if you'd like to, just follow the link listed in the book for supplemental online material.


The book mentions what the Earth is made of, but doesn't properly label the layers: The outer layer is called the crust; next there is the mantle; then in the center is the core. One idea to help your children visualize the layers of the Earth is to compare the Earth to an egg. The shell is the crust, the white part is the mantle, and the yolk is the core. For a hands-on visual, hard-boil an egg and talk about each part. To see the "mantle" and the "core," you'll need to peel away the "crust" first, but then cut the egg in half lengthwise for a nice cross-section of the "Earth"! Of course, the Earth is not shaped exactly like an egg, but neither is it perfectly round (there are flatter parts on the top and bottom). [p. 9]

If you remember school science experiments as boring demonstrations without making much of a point, it's time for you and your children to try *The Usborne Book of Science Activities, Vol. 2*. Packed with simple activities and experiments, this book will be your guide to the practical application of science throughout all 36 weeks of this curriculum.

Take some time to look through this book and you'll notice it covers three main kinds of science experiments: science with air, science in the kitchen, and science with plants. What your children will really learn about are principles of physics, botany, and even some chemistry. But you won't need an advanced science degree to work through these activities. In fact, our accompanying *Discover & Do DVD*, described previously, will show you exactly what to do to make these experiments fun and easy.

Note, too, that we've scheduled all experiments for one day during the week. That way, you'll have time to prepare and take your time as you work through these fun activities.


Note to Mom or Dad: When supplies are listed as "**We provide:**" they are materials found in your course-specific (ASK) Supplies Kit. When supplies are listed as "**You provide:**" they are materials you can generally find around your home. ■

Science A: Week 1 Activity Sheet 

Children's Encyclopedia
Mom or Dad: Write your child's answer as you talk about each question.

1. How many continents does the Earth have? Count them. (p. 8)

(7)




On which continent do you live? (Answers will vary.)

2. Why is a day 24 hours long?
(Put an X next to the correct answer.) (p. 8)

☒ Because that's how long it takes for the Earth to spin once on its axis

☐ Because that's how long it takes for the Earth to travel around the Sun.




3. **Discuss with Mom or Dad:** Why is it daytime on only one side of the Earth at a time? (p. 10)

(As the Earth turns, only one side faces the Sun; one side of the Earth is in light while the other side is in shadow.)

1

Biology, Botany, and Physics | 4-Day | Week 1 Activity Sheet

Science A: Week 1 Activity Sheet 

4. **Challenge:** Make the statement true. (Please find Cut-Out #1 in the Appendix.) (p. 10)

The Sun rises in the East and sets in the West.


5. Can you name the four seasons? (p. 12)

1) (spring) 2) (summer)
3) (fall) 4) (winter)


6. Use the map to help you answer. (Please find Cut-Out #2) (p. 13)

North America

When it is summer in:

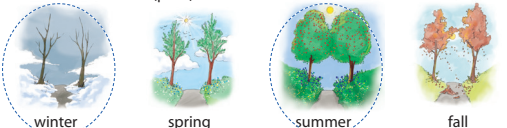


...it is winter in:



South America

7. During which two seasons does the Earth tilt toward or away from the Sun? Circle them. (p. 13)



winter spring summer fall

2

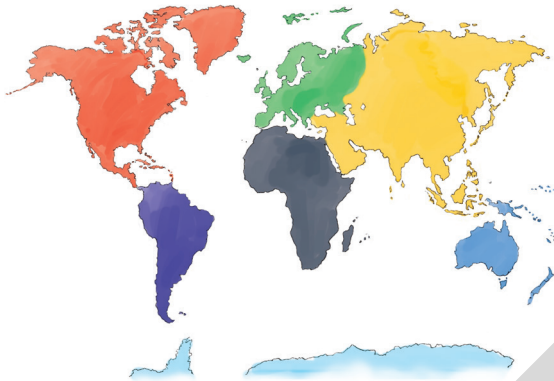
Week 1 Activity Sheet | 4-Day | Biology, Botany, and Physics



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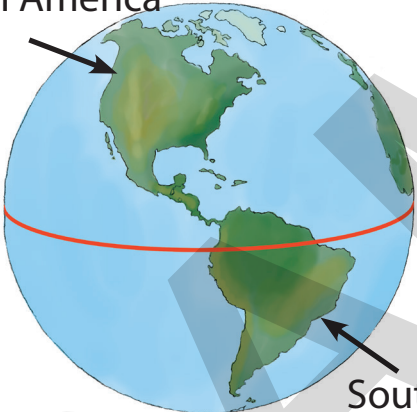
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North America

When it is summer in:

...it is winter in:

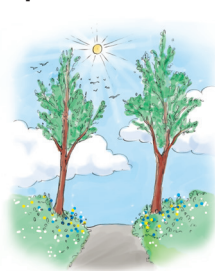
South America



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winter



spring



summer



fall