





Science (5-Day)

Geology, Physics, and Origins

By The Sonlight Team



"The heavens declare the glory of God; the skies proclaim the work of his hands."

Psalm 19:1 (NIV)

Sonlight Curriculum® Science G "Geology, Physics, and Origins" (5-Day) Instructor's Guide and Notes, Twenty-Seventh 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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Week 1							
Date:	Day 1	Day 2	Day 3	Day 4	Day 5		
What's Science All About?	рр. 94-101	pp. 102-105	pp. 106-107		pp. 108-109		
Activity Sheet Questions	#1-3	#4–6	#7		#8–11		
Chemically Active	See the list below for supplies you will need on Thursday			pp. 3–6, Chap. 1, pp. 7–11			
Do Together					Hot or Cold?		
We provide: GSK—soap flake . You provide: 1 small red cabbage, grater, stainless steel or enamel saucepan, water, strainer, mixing bowl, measuring cup, large clean mayonnaise jar, teaspoon, white vinegar, cream of tartar, baking soda, chlorine bleach. ▶							
Shopping/Planning List For next week: No items needed next week.							
Additional Subjects:							

What's Science All About?



pp. 94-101

The little sidebar on the bottom of page 99 has some interesting wording: "What about all those substances on alien planets?" Instead of the words "alien planets," the authors could have simply said, "other planets." The word "alien" can mean all kinds of things, but is most commonly associated with speculation about alien life (i.e. little green men or space aliens). [pp. 98-99]

Activity Sheet Questions



#1-3

Activity Sheet Questions

Activity Sheets are included after the notes and 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 over time.

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

and study (b, 56) (They study justicence —what they can do what in index production in the pictures below, then label each as either study and they can do what in index production in the carry matches? (p, 100) (the study can what they can do what in the pictures below, then label each as a substance can what is the difference between the chree states of matter? (p, 100) (the study can be properties of an element is called what? (p, 104) (margon) (then a spoop of the carry or called unknown order or more are called what? (p, 104) (margon) (the suppopulate column to classify each substance as a mature, element, or a compound.) The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element, or a compound. The appropriate column to classify each substance as a mature, element or a compound. The appropriate column to classify each substance as a mature, element or a compound. The appropriate column to classify each substance as a mature, element or a compound. The appropriate column to classify each substance as a mature, element or a compound. The app	sts study, (p. 98) (They study can change.) roblem with early matches? (p. 101)	they (y,)	C C C C C C C C C C C C C C C C C C C	molecules in the pictures below, then label e	(solid) (fiquid) (fiq
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9. Whi	was the biggest problem with early matches? (p. 100) They caught fire to see the biggest problem with early matches? (p. 100) (It doesn't become sticky w	ets hot.)	Wh. Wh.	fference between the three states of matter? In particles in the substance are moving around aperature affect the three states of matter? ((plecules have. The more energy molecules have ilequid.) Ze using the terms in the box. (pp. 108–109)	(solid) (i) 108) Id and how tightly packed together they are) (b. 108) (c) 108) (d) (Temperature helps determine how much re, the less tightly they pack together, so molecules in a gas coid, and the same comparison is true for molecules in a gas coid, and the same comparison is true for molecules in a gas coid.
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a solid to a liquid				binnil a as bilas a many	

What's Science All About?

- 1. Summarize what chemists study. (p. 98)
- 2. What was the biggest problem with early matches? (p. 100)



- 3. How is Teflon® unique as a substance? (p. 101)
- 4. The smallest particle that can have the properties of an element is called what? (p. 104) ______.

 Atoms that stick together in groups of two or more are called ______.
- 5. Oxygen gas is an element because... (pp. 104–105)
- 6. Do reactions always happen when you mix substances together? Explain. (p. 105)
- 7. **Challenge!** Draw an "X" in the appropriate column to classify each substance as a mixture, element, or a compound. Feel free to use the Periodic Table of Elements on pp. 124–125 if you get stuck. (pp. 106–107)

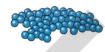
	Mixture	Compound	Element
hydrogen			
water			
table salt (sodium chloride)			
granola			
nitrogen			
hydrogen peroxide			

Science G: Week 1 Activity Sheet

8. Compare the molecules in the pictures below, then label each as either **solid**, **liquid** or **gas**. (p. 108)







9. What is the difference between the three states of matter? (p. 108)

10. How does temperature affect the three states of matter? (p. 108)

11. Solve the puzzle using the terms in the box. (pp. 108–109)

condense	boil	solidify
evaporate	melt	sublimate

Across

- 3) to change state from a liquid to a solid
- 5) to change state from a liquid to a gas
- 6) to change state from a gas to a liquid

Down

- 1) to change state directly from a gas to a solid, or from a solid to a gas
- the agitated state of a liquid when it is at the temperature where it changes from a liquid to a gas
- 4) to change state from a solid to a liquid

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4							
5							
		6					