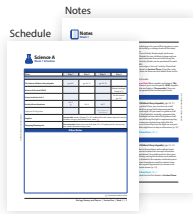
Instructor's Guide Quick Start

The BookShark™ Instructor's Guide (IG) is designed to make your educational experience as easy as possible. We have carefully organized the materials to help you and your students get the most out of the subjects covered. If you need help reading your schedule, see "How to Use the Schedule" in **Section Four**.

This IG includes a 36-week schedule, notes, assignments, readings, and other educational activities. For specific organizational tips, topics and skills addressed, and other suggestions for the parent/teacher, see **Section Three**. Here are some helpful features that you can expect from your IG.

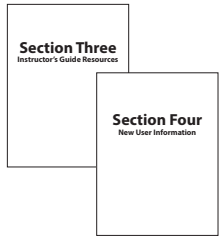


Easy to use
Everything you need is located right after the schedule each week. If a note appears about a concept in a book, it's easy to find it right after the schedule based on the day the relevant reading is scheduled.

4-Day Schedule
Designed to save one day a week for music lessons, sports, field trips, co-ops, or other extra-curricular activities.

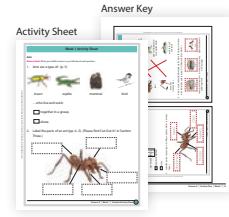
Notes
When relevant, you'll find notes about specific books to help you know why we've selected a particular resource and what we hope your children will learn from reading it. Keep an eye on these notes to also provide you with insights on more difficult concepts or content. **Notes** in pink indicate information a parent or teacher should read before beginning the lesson.

Note: What are the two kinds of poisonous lizards? The book only lists one – the Gila monster (*Heloderma suspectum*) native to the southwestern United States. The other kind is known as a beaded lizard (*Heloderma horridum*) and is found in Mexico and Guatemala. [p. 35]



Instructor's Guide Resources and **New User Information**
Don't forget to familiarize yourself with some of the great helps in **Section Three** and **Section Four** so you'll know what's there and can turn to it when needed.

Activity Sheets and **Answer Keys**
Activity Sheets follow each week's notes and are customized for each lesson to emphasize important points in fun ways. They are designed with different skills and interests in mind. You may want to file them in a separate binder for your student's use. Corresponding Answer Keys have been included within your weekly Notes.



Science C
Week 1 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
The Magic School Bus: Inside the Earth	pp. 6–17	pp. 18–29	pp. 30–39		
Activity Sheet Questions	#1–4 N	#5–9	#10–11		
Optional: Do Together	Digging to the Center of the Earth N		Rock'n Roll		
BookShark Science C Experiments Book				#1 How Does Water Make Caves? N	
Supplies	**We Provide (2SK):** 1 stick clay, 2 sugar cubes, 1 toothpick N **Paper Packet:** How Does Water Make Caves? Experiment Sheet **You Provide:** small plastic container about 2 inches high, dinner plate, aluminum pie tin, or other container that can collect water, water (warm, not hot), pitcher, glass, or measuring cup, towels, plastic knife or butter knife, flashlight				
Shopping/Planning List	**For Next Week:** 4-5 jagged rocks about the size of a quarter, 1 or 2 disposable containers with lids, timer, sheet of white paper				

Other Notes

N Special Note to Instructors

Notes
Week 1

Day 1

The Magic School Bus: Inside the Earth | pp. 6–17

Studies about the Earth and what's inside it fall under the broad category of geology. Another study that falls under the geology umbrella is the age and origin of the earth. This would be a good time to let your students know what you believe and why. [p. 8]

Activity Sheet Questions | #1–4

Note: Find each week's Activity Sheets immediately after the notes and answer the questions assigned on the schedule page. Each Activity Sheet has a corresponding Answer Key page at the end of each week's notes.

- 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 students.
- If your students can't answer a question, don't worry. 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.

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

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

Suggestion: Your Activity Sheets might work more easily in a small binder for your students to keep and use as assigned. If you have more than one student using this program, extra Activity Sheets can be purchased for each student (Item #2SB1).

Occasionally we assign a "cut-out" activity. Please find these separate sheets in **Section Three.** If you like, color the sheets first, then cut them out and attach them to the worksheet.

Supplies

Note: When supplies are listed as "**We provide:**", find them in your course-specific (**2SK**) Supplies Kit. When supplies are listed as "**You provide:**", they are materials you can generally find around your home.

Shipping Restrictions

Due to strict import regulations, it is illegal to ship biological matter to certain countries (including New Zealand, Mexico, South Africa and Australia). If you requested your science supplies shipped to a country with such restrictions, we may have removed that kit from your order and reduced your charge accordingly.

Optional: Do Together | Digging to the Center of the Earth

Each week throughout Science C, we will provide ideas for fun activities to do with your students. In general, we will try to make the activities actually "active": performing additional research on a particular topic, playing a game, getting outside, or some other type of "hands-on" activity that seeks to apply what your students have been learning in a meaningful way.

Take our ideas for what they are—mere suggestions—and don't feel enslaved to them. If your students don't want to do a particular activity or have a different, better idea, by all means ditch ours and go with theirs!

For today, get your shovels! Picks … axes …whatever you need. It's time to dig! Just like the kids in your book, your students need to get outside and dig. Find a suitably inconspicuous area and have your students dig a hole. How deep they want to dig is entirely up to you.

Note: Please be certain that you do not choose an area with utilities underground! If you have any questions or doubts about a particular area, don't dig! When you've dug your hole, examine it. What is the soil like? Does it change as it gets deeper? If so, how? Did you come across any rocks as you dug? If so, collect some as samples. When you get back inside, use the Internet to try to identify the types of rocks you found. Have fun!

Day 2

The Magic School Bus: Inside the Earth | pp. 18–29

Later this year, you and your students will learn more about the rock cycle. As Ms. Frizzle explains the three types of rock in the book, you can introduce the concept of this cycle to your students and familiarize them with the words so it's easier to understand the cycle later. You'll learn about sedimentary rocks on page 18, metamorphic rocks on page 24, and igneous rocks on page 26. Finally, note that page 28 shows each type of rock within the different layers of the earth. Minerals that make up rocks go through the cycle and, as a result, continue transforming into different kinds of rocks. [pp. 18–28]

Activity Sheet Questions | #5–9

Day 3

The Magic School Bus: Inside the Earth | pp. 30–39

Your students may know that Hawaii is made up of many volcanoes—five to be exact. Over time, these volcanoes, which are shield volcanoes, erupted over and over. These many eruptions eventually created the island chain that we call Hawaii. [pp. 30–33]

Activity Sheet Questions | #10–11

Optional: Do Together | Rock 'n Roll

Using your book as a guide, especially the rock collection on p. 37, try to find as many different types of rock as you can. Do you know of any nearby statues made of marble? What about a countertop made of granite? A building made of limestone? A house roof made of slate? A building exterior made of sandstone? Feel free to identify and discuss other types of rock not discussed in your book. Are there specific types of rock common to your area? What are they? Help your students to understand the amazing number of ways we use rock every day.

Day 4

BookShark Science C Experiments Book | #1
How Does Water Make Caves?

Note: Use the full stick of clay in this experiment. Be sure to dry and store the clay, it will be used again.

Science Notebook

Scientists keep diaries and journals. In these journals they record their theories, the procedures of their experiments, and their observations as their experiments progress. Their hope is that the results they observe will lead to new discoveries. Skills of observation and data collection are therefore fundamental to scientific research. These are important skills and habits for all students to learn.

Help your students learn this discipline by working with them to record their experiments and observations in their own personal Science Notebooks.

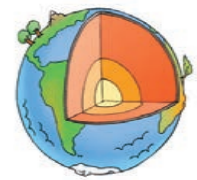
You can either make your own notebook by tying together sheets of paper with yarn or use a spiral-bound notebook. We recommend the bound ruled notebooks that college students use because they are durable and stack so nicely on bookshelves. Don't worry about making it too complicated. Just provide a vehicle for recording drawings, questions, and observations. Make a special heading for each new experiment or field trip.

Perhaps someday when your students are grown and working as medical doctors keeping logs on their patients, or researchers keeping records of their experiments, you can smile to yourself and remember how you helped get them started. ■

Week 1 Activity Sheet

Magic School Bus: Inside the Earth

1. Name two things that make up the Earth's crust. (p. 14)



1) *(Hard rock)*

2) *(Soil)*

2. Color the rocks that list things found in soil. (p. 15)


Rock


Birds


Clay


Bits of dead leaves


Cars


Sticks


Pencils


Pebbles

3. Circle all of the statements that are true about the Earth. (pp. 9–15)

The solid part of the Earth is made up of frozen water.

If there were no rock, there would be no soil.

The shell on the outside of the Earth is called the crust.

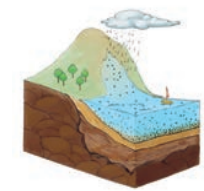
The tiny specks of color that can be seen in rocks are minerals.

Week 1 Activity Sheet

4. No matter where you are standing on the Earth, what is under you? (p. 16) _____

Shells Clay Rock Leaves

5. How does sedimentary rock form? Number the steps in the correct order. (p. 18)



(1) Dust and sand blow into lakes and oceans.

(3) Over time the sediment hardens into rock.

(2) The dust and sand settle on the bottom of the lake or ocean in layers of sediment.

6. How is a fossil formed? (p. 19)

(an animal (or plant) is buried in layers of mud, sand, or crushed shells.

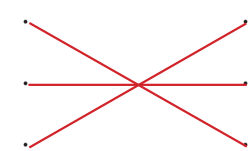
Then it turns to rock along with the layers and becomes a fossil)

7. Match the rock type with its description. (pp. 18–19)

This rock is made of mud and clay which are all pressed together.

This rock is made of shells that are all pressed together.

This grainy rock is made of grains of sand that are all pressed together.



Sandstone

Limestone

Shale

Week 1 Activity Sheet

8. What three things do you need to change limestone into marble? (p. 25)

H *(eat)*

P *(ressure)*

T *(ime)*

9. Name three types of rock based on the descriptions given. Use the words in the box.

Sedimentary	Igneous	Metamorphic

1) *(Igneous)*: cooled rock that was once melted; this name comes from a word that means "fire" (p. 26)

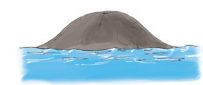
2) *(Sedimentary)*: rock that hardened as layers; this name comes from a word that means "to settle" (p. 18)

3) *(Metamorphic)*: rock that was changed from one kind to another by heat and pressure; this name comes from a word that means "to change" (p. 24)

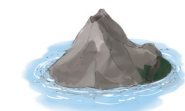
Week 1 Activity Sheet

10. Using the word bank, write the name of the volcano below its picture. (p. 30)

Cindercone	Shield	Composite



(Shield)



(Composite)

(Cindercone)

11. On each line, write whether each rock is metamorphic (M), sedimentary (S), or igneous (I). (p. 37)

(I) **Basalt**

(M) **Slate**

(S) **Shale**

(S) **Limestone**

(M) **Quartzite**

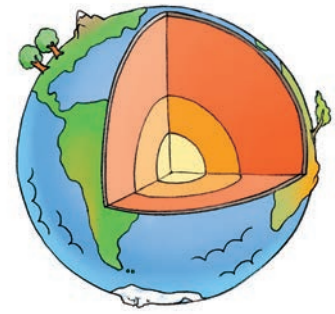
(I) **Obsidian**

This page intentionally left blank.

Week 1 Activity Sheet

Magic School Bus: Inside the Earth

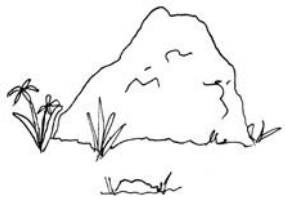
1. Name two things that make up the Earth's crust. (p. 14)



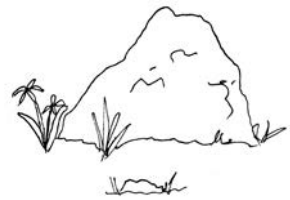
   1) _____

   2) _____

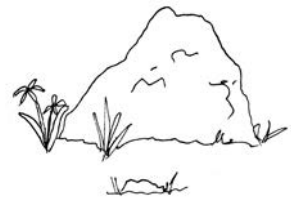
2. Color the rocks that list things found in soil. (p. 15)



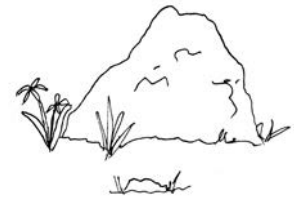
Rock



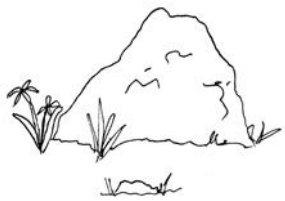
Birds



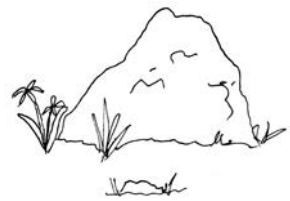
Clay



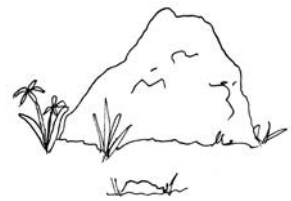
Bits of dead leaves



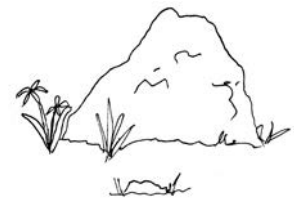
Cars



Sticks

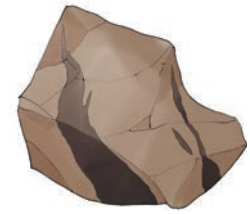


Pencils



Pebbles

3. Circle all of the statements that are true about the Earth. (pp. 9–15)



   The solid part of the Earth is made up of frozen water.

   If there were no rock, there would be no soil.

   The shell on the outside of the Earth is called the crust.

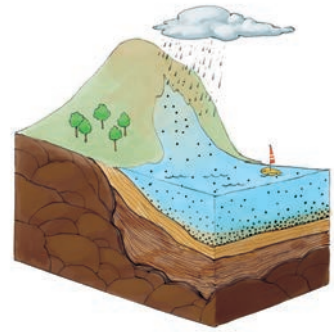
   The tiny specks of color that can be seen in rocks are minerals.

Week 1 Activity Sheet

4. No matter where you are standing on the Earth, what is under you? (p. 16) _____

Shells **Clay** **Rock** **Leaves**

5. How does sedimentary rock form? Number the steps in the correct order. (p. 18)

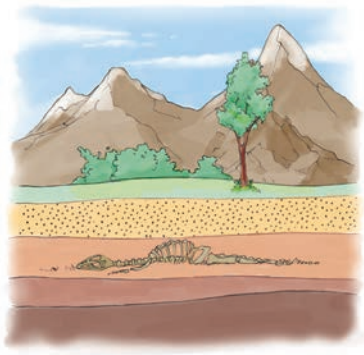


_____ Dust and sand blow into lakes and oceans.

_____ Over time the sediment hardens into rock.

_____ The dust and sand settle on the bottom of the lake or ocean in layers of sediment.

6. How is a fossil formed? (p. 19)



_____

_____

_____

_____

7. Match the rock type with its description. (pp. 18–19)

This rock is made of mud and clay which are all pressed together.	•	• **Sandstone**
This rock is made of shells that are all pressed together.	•	• **Limestone**
This grainy rock is made of grains of sand that are all pressed together.	•	• **Shale**

Week 1 Activity Sheet

8. What three things do you need to change limestone into marble? (p. 25)

H _____

P _____

T _____

9. Name three types of rock based on the descriptions given. Use the words in the box.

Sedimentary	Igneous	Metamorphic

1) _____: cooled rock that was once melted; this name comes from a word that means "fire" (p. 26)

2) _____: rock that hardened as layers; this name comes from a word that means "to settle" (p. 18)

3) _____: rock that was changed from one kind to another by heat and pressure; this name comes from a word that means "to change" (p. 24)

Week 1 Activity Sheet

10. Using the word bank, write the name of the volcano below its picture. (p. 30)

Cindercone	Shield	Composite

_____ _____ _____

11. On each line, write whether each rock is metamorphic (M), sedimentary (S), or igneous (I). (p. 37)

_____ **Basalt**

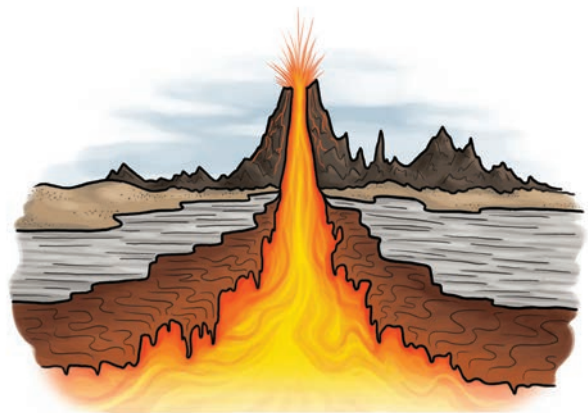
_____ **Slate**

_____ **Shale**

_____ **Limestone**

_____ **Quartzite**

_____ **Obsidian**



Science C
Week 2 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
Find Out! Earth	pp. 4–5 N	pp. 6–7	pp. 8–9		
Activity Sheet Questions	#1–4	#5–6	#7–11		
Optional: Do Together			Layers Upon Layers		
BookShark Science C Experiments Book				#2 How Does Weathering Change Rocks?	
Supplies	**We Provide (2SK):** magnifying glass, 1 Tablespoon fine play sand, 5 sugar cubes **Paper Packet:** How Does Weathering Change Rocks? Experiment Sheet **You Provide:** 4-5 jagged rocks about the size of a quarter, 1 or 2 disposable containers with lids, timer, sheet of white paper				
Shopping/Planning List	**For Next Week:** 1 cup flour, 1/2 cup salt, 1-2 cups water, large mixing bowl, sturdy spoon, resealable bag (optional), tissue, paper towels, glue, permanent marker, dinner plate (optional)				

Other Notes

N Special Note to Instructors

Notes
Week 2

Day 1

Find Out! Earth | pp. 4–5

Note: Page 4 says the age of the earth and the solar system is about 4.6 billion years. It should be noted that no one really knows how old the Earth is. If you have a different belief, you could say, "A long time ago." This may be a good time to let your students know what you believe, and why.

Page 5 says that the earth and other planets were formed "as gravity forced material in clouds of gas and dust together." Again, use this as a transition to talk with your student about what people believe and what your family believes about the origin of the Earth.

Activity Sheet Questions | #1–4

Day 2

Find Out! Earth | pp. 6–7

The earth's atmosphere is the only one in our solar system suitable for humans. Each layer is made of different gases. The troposphere, the layer that is closest to the earth and where people live, is made up of 78% nitrogen. There is also a significant amount of oxygen present (21%) which is great since humans need oxygen to survive. [pp. 6–7]

Activity Sheet Questions | #5–6

Day 3

Find Out! Earth | pp. 8–9

Land makes up just 29% of the earth's surface and the land is divided into continents. There are seven continents: North America, South America, Europe, Asia, Australia, Africa, and Antarctica. Asia is the largest and Australia is the smallest. [pp. 8–9]

Activity Sheet Questions | #7–11

Optional: Do Together | Layers Upon Layers

Today, you and your students learned that the Earth is made up of layers. Make a fun-layered food. You could make a layered dip such as a 7-Layered Southwestern Dip, a layered salad, a layered main dish such as lasagna, or a tasty layered dessert like a trifle. Be as creative as you want. As you cook, review the layers of the Earth and compare it to the food you are making. Is there a crust? Is one layer more solid or liquid than another? Enjoy your time in the kitchen together and then around the table as you eat your culinary masterpiece.

Day 4

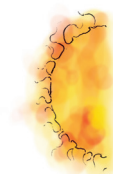
BookShark Science C Experiments Book | #2 How Does Weathering Change Rocks? ■

Week 2 Activity Sheet

Find Out! Earth

1. The Earth is the only planet where water is found on its surface. (p. 4) **True** **False**

2. Explain what is happening with the Earth and the Sun when it is nighttime? (p. 5) *(an area of the Earth is turned away from the sun, so it is dark)*

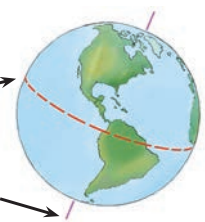


3. How many days does it take for the earth to orbit all the way around the sun? (p. 5) *(365)*

4. Label the imaginary that goes through the middle of the Earth. Then label the line which shows the Earth is slightly tilted when it spins (p. 5)

(Equator)

(Axis)

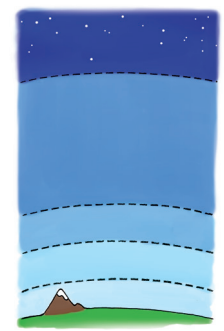


5. What is true of the Earth's atmosphere, the thick layer of gases? Check all that apply. (pp. 6–7)

- [x] Protects Earth from the Sun's rays.
- [ ] The uppermost layer has a clear boundary.
- [x] Maintains Earth's temperature at a comfortable level.
- [x] Exists in distinct levels.

Week 2 Activity Sheet

6. Write the number of the statement that matches the correct layer of the atmosphere. (pp. 6-7)



(4) **Exosphere:** highest layer, merges into space.

(4) **Thermosphere:** the hottest layer.

(2) **Mesosphere:** the coldest section with thick gases.

(1) **Stratosphere:** holds the Ozone layer.

(3) and *(5)* **Troposphere:** controls the air we breathe.

Statement #1: Protects life from dangerous ultraviolet rays.

Statement #2: Thick gases here cause meteors to burn up.

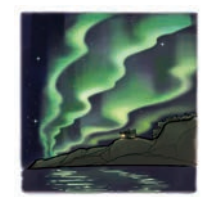
Statement #3: Life occurs here.

Statement #4: Satellites travel in this layer. (Hint: This statement is used twice.)

Statement #5: Weather occurs here.

7. Seas and oceans cover most of our planet. What percent of the Earth's surface is covered by water? (p. 8) *(71)*%

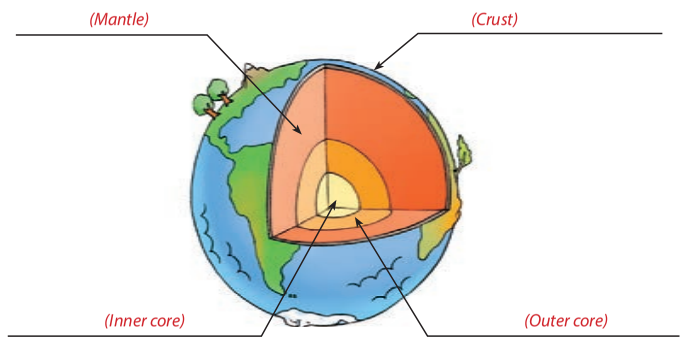
8. What is the name of the beautiful bright lights that appear in the thermosphere when particles from the Sun fall into the Earth's atmosphere? (p. 6) *(Aurora)*



Week 2 Activity Sheet

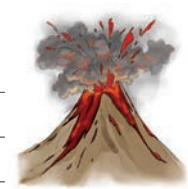
9. Label the layers of the earth using the terms in the box. (pp. 8–9)

Mantle	Outer core	Crust	Inner core



10. How do volcanoes occur? (p. 9)

(liquid rock, called magma, rises up through the cracks in the Earth's crust)



11. Circle the correct answer. The continental crust is **Younger** **Older** than oceanic crust. (p. 9)

Week 2 Activity Sheet

Find Out! Earth

1. The Earth is the only planet where water is found on its surface. (p. 4) **True** **False**

2. Explain what is happening with the Earth and the Sun when it is nighttime? (p. 5) _____

_____

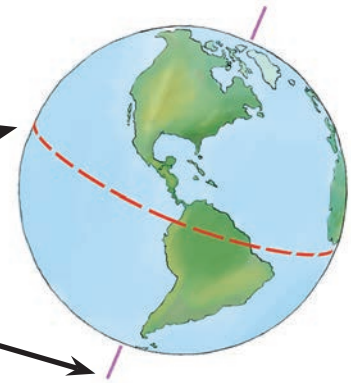
_____

3. How many days does it take for the earth to orbit all the way around the sun? (p. 5) _____

4. Label the imaginary that goes through the middle of the Earth. Then label the line which shows the Earth is slightly tilted when it spins (p. 5)

_____

_____

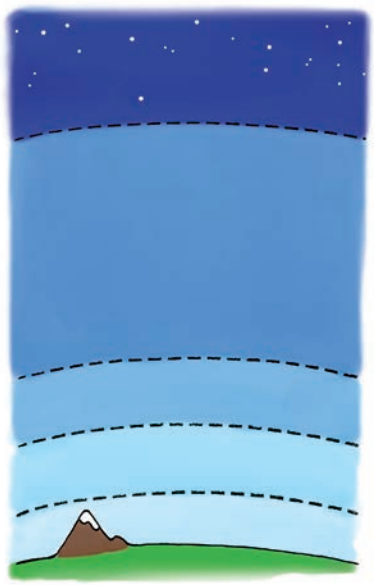


5. What is true of the Earth's atmosphere, the thick layer of gases? Check all that apply. (pp. 6–7)

- ☐ Protects Earth from the Sun's rays.
- ☐ The uppermost layer has a clear boundary.
- ☐ Maintains Earth's temperature at a comfortable level.
- ☐ Exists in distinct levels.

Week 2 Activity Sheet

6. Write the number of the statement that matches the correct layer of the atmosphere. (pp. 6-7)



_____ **Exosphere:** highest layer, merges into space.

_____ **Thermosphere:** the hottest layer.

_____ **Mesophere:** the coldest section with thick gases.

_____ **Stratosphere:** holds the Ozone layer.

_____ and _____ **Troposphere:** controls the air we breathe.

Statement #1: Protects life from dangerous ultraviolet rays.

Statement #2: Thick gases here cause meteors to burn up.

Statement #3: Life occurs here.

Statement #4: Satellites travel in this layer. (Hint: This statement is used twice.)

Statement #5: Weather occurs here.

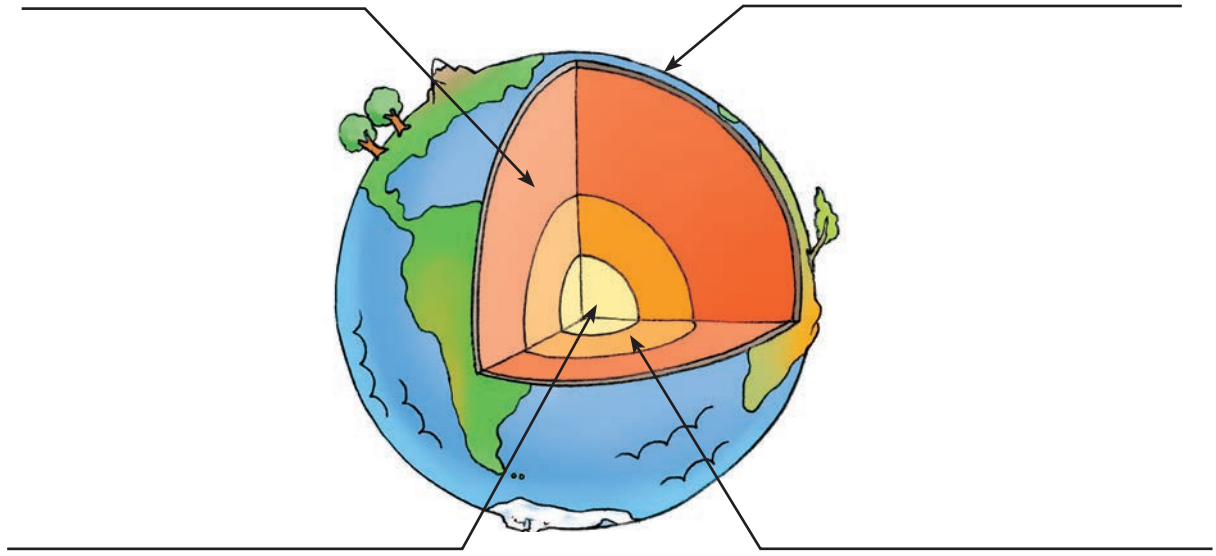
7. Seas and oceans cover most of our planet. What percent of the Earth's surface is covered by water? (p. 8) _____%

8. What is the name of the beautiful bright lights that appear in the thermosphere when particles from the Sun fall into the Earth's atmosphere? (p. 6) _____

Week 2 Activity Sheet

9. Label the layers of the earth using the terms in the box. (pp. 8–9)

Mantle	Outer core	Crust	Inner core



10. How do volcanoes occur? (p. 9)

_____

_____

_____

11. Circle the correct answer. The continental crust is **Younger** **Older** than oceanic crust. (p. 9)

This page intentionally left blank.

Science C
Week 3 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
Find Out! Earth	pp. 10–11	pp. 12–13	pp. 14–15		
Activity Sheet Questions	#1–2	#3–4	#5–9 N		
Optional: Do Together			Eruption!		
BookShark Science C Experiments Book				#3 How do Landforms and Water Relate?	
Supplies	**We Provide (2SK):** 7 inch Styrofoam plate, 9 inch paper plate, pipette, 1/4 cup sand, 10 toothpicks, masking tape **Paper Packet:** How Do Landforms and Water Relate? Experiment Sheet **You Provide:** 1 cup flour, 1/2 cup salt, 1-2 cups water, large mixing bowl, sturdy spoon, resealable bag (optional), tissue, paper towels, glue, permanent marker, dinner plate (optional)				
Shopping/Planning List	**For Next Week:** warm and cold water to make gelatin, glass or metal pan for gelatin (about 9" x 9"), 1 bag of miniature marshmallows				

Other Notes

N Special Note to Instructors

Notes
Week 3

Day 1

Find Out! Earth | pp. 10–11

There are more than 450 volcanoes located in the Ring of Fire which is a path along the rim of the Pacific Ocean which extends approximately 24,900 miles. That's about 75% of all of the Earth's volcanoes. Mount St. Helens is located in the state of Washington. When it erupted in May of 1980, it became the deadliest and most economically destructive volcanic event in the history of the United States. [pp. 10–11]

Activity Sheet Questions | #1–2

Day 2

Find Out! Earth | pp. 12–13

What is the difference between magma and lava? Scientists classify molten rock under the surface of the Earth as magma. Once the liquid rock breaks through the Earth's surface, it is called lava. [pp. 12–13]

Activity Sheet Questions | #3–4

Day 3

Find Out! Earth | pp. 14–15

The eruptions from shield volcanoes can last for years. The longest lasting eruption started in 1983 from the Kīlauea volcano located on the island of Hawai'i. This volcano has several vents, or places, where the lava erupts. Since it is a shield volcano, the lava tends to ooze out rather than shoot out into the air. Even though the lava is moving slowly, dangerous conditions can still exist due to the gases that are emitted from the volcano. [pp. 14–15]

Activity Sheet Questions | #5–9

Note: Throughout the year, you will see some Activity Sheet questions marked as **Challenge** or as **Critical Thinking**. These are questions whose answers are not necessarily in the book. While we believe the material covered in the challenge questions is worthwhile for your students to know, it may not be specifically explained in their reading assignment. As always, if you think any question is too difficult for your students, please feel free to skip.

For **Challenge** questions, you and your student will need to complete outside research to answer the question. If you choose to do your research online, please review "Tips When Using the Internet" found in **Section Four** of our guide for precautions on surfing the web.

For **Critical Thinking** questions, the answer may be inspired by information that you learned that day or may be a statement of opinion. Encourage your student to take some time to write their best answer.

Optional: Do Together | Eruption!

Today, you and your student read about volcanoes around the world. Now you can make a volcano right in your own backyard. You will need a spot that has some sand, dirt or gravel, a plastic cup, water, 4-6 Tablespoons of baking soda, a teaspoon of dish soap, ½ ounce to 2 ounces of washable paint (if you want your lava to be colored), and about a cup of vinegar. Vinegar can harm plants, so make sure to do this away from your yard! If you prefer to do this activity indoors, you can use clay in a sink or large bowl to make your volcano. To make your volcano, put everything but the vinegar in your cup. Mix the ingredients well. It should be about 2/3 of the way full. Use the sand, dirt, or gravel to build the volcano structure around the cup. Once you are happy with your volcano, slowly pour in the vinegar until it starts to erupt. As the eruption slows, you can add more vinegar to keep it going.

Day 4

BookShark Science C Experiments Book | #3
How do Landforms and Water Relate? ■

Week 3 Activity Sheet

Find Out! Earth

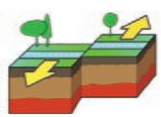
1. Earth's crust is divided into tectonic plates. What can occur when these plates meet together? (p. 10)

(Volcanoes)

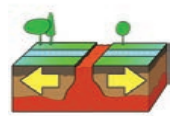
(Mountains)

(Earthquakes)

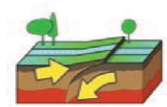
2. There are three main types of plate boundaries. Label them below. (pp. 10–11)



(Transform)



(Divergent)



(Convergent)

3. What is the most common type of mountains, and what causes them to form? (p. 13) *(the most common type of mountains are fold mountains and they are formed when two or more tectonic plates are pushed together)*

Week 3 Activity Sheet

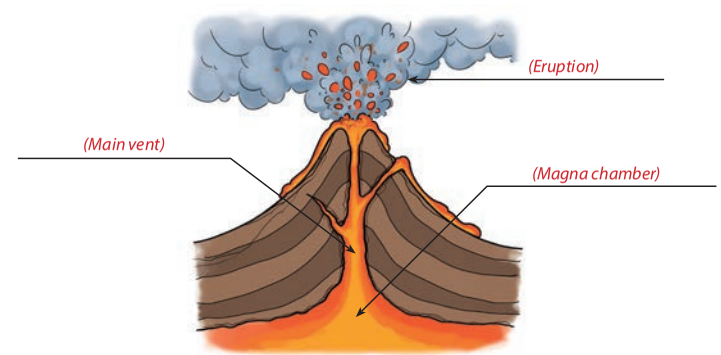
4. Match each word to the correct description. (pp. 12–13)

Fold Mountains	Cracks in the Earth's crust create massive blocks of rock.
Volcano Mountains	Large amounts of magma bubble up toward the surface and form these mountains.
Fault Mountains	These mountains form when two or more tectonic plates are pushed together.
Dome Mountains	Lava flows over the land and before it hardens, the volcano erupts again building up more layers.

5. Where can most of the Earth's volcanoes be found? (p. 14) *(under the ocean)*

6. Label the volcano using the words in the box. (p. 14)

Main vent	Magma chamber	Eruption



Week 3 Activity Sheet

7. Check off all true statements about volcanoes. (p. 14)

- [x] Magma can erupt from smaller vents.
- [x] The force of the eruption can blow the top of the volcano.
- [ ] Magma is forced up because the temperature gets too high. *(The pressure gets too high.)*
- [x] Melted rock or lava flows and hardens.
- [ ] Volcanoes can be active or dormant but never extinct. *(They can become extinct.)*

8. Match the name of the type of volcano with the description. (pp. 14–15)

The smallest and most common type of volcano.	**Shield**
Have large, circular hollows that appear like a bowl.	**Stratovolcano**
Tall and cone-shaped volcanoes with steep sides.	**Cinder cone**
Volcanoes with gently sloping sides.	**Caldera**

9. **Critical Thinking:** What type of volcano does the picture show? Explain why you made that choice.

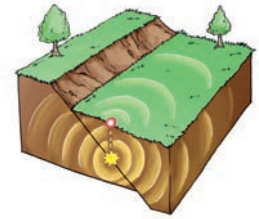
(Stratovolcano: it is tall and cone-shaped with steep sides, like Mt. Fuji)

Week 3 Activity Sheet

Find Out! Earth

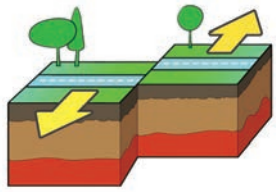
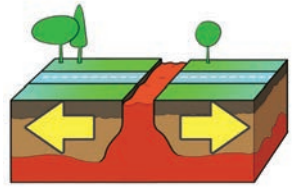
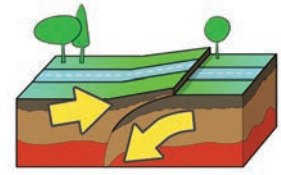
1. Earth's crust is divided into tectonic plates. What can occur when these plates meet together? (p. 10)





_____ _____ _____

2. There are three main types of plate boundaries. Label them below. (pp. 10–11)

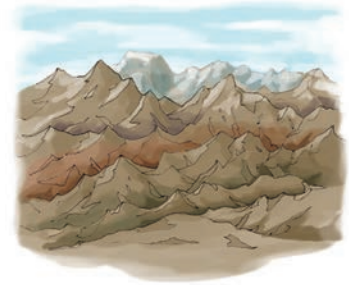
_____ _____ _____

3. What is the most common type of mountains, and what causes them to form? (p. 13) _____

_____

_____

_____



Week 3 Activity Sheet

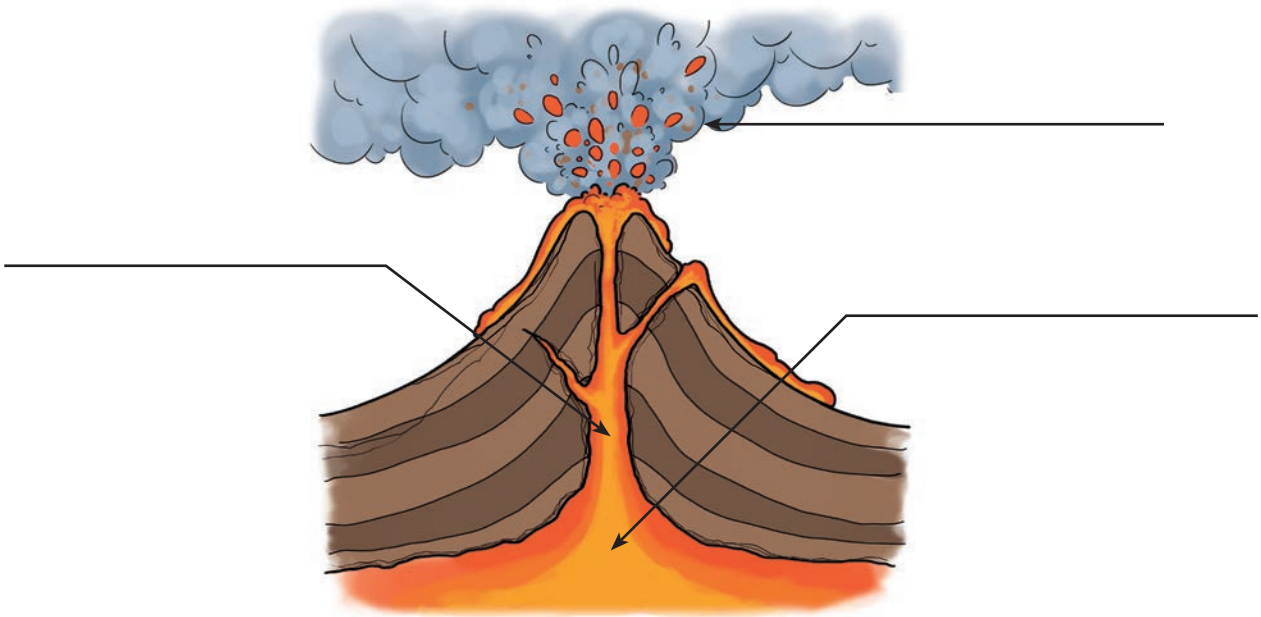
4. Match each word to the correct description. (pp. 12–13)

Fold Mountains	•	• Cracks in the Earth's crust create massive blocks of rock.
Volcano Mountains	•	• Large amounts of magma bubble up toward the surface and form these mountains.
Fault Mountains	•	• These mountains form when two or more tectonic plates are pushed together.
Dome Mountains	•	• Lava flows over the land and before it hardens, the volcano erupts again building up more layers.

5. Where can most of the Earth's volcanoes be found? (p. 14) _____

6. Label the volcano using the words in the box. (p. 14)

Main vent	Magma chamber	Eruption



Week 3 Activity Sheet

7. Check off all true statements about volcanoes. (p. 14)

- ☐ Magma can erupt from smaller vents.
- ☐ The force of the eruption can blow the top of the volcano.
- ☐ Magma is forced up because the temperature gets too high.
- ☐ Melted rock or lava flows and hardens.
- ☐ Volcanoes can be active or dormant but never extinct.

8. Match the name of the type of volcano with the description. (pp. 14–15)

The smallest and most common type of volcano.	•	• **Shield**
Have large, circular hollows that appear like a bowl.	•	• **Stratovolcano**
Tall and cone-shaped volcanoes with steep sides.	•	• **Cinder cone**
Volcanoes with gently sloping sides.	•	• **Caldera**

9. **Critical Thinking:** What type of volcano does the picture show?

Explain why you made that choice.

_____

_____

_____

This page intentionally left blank.

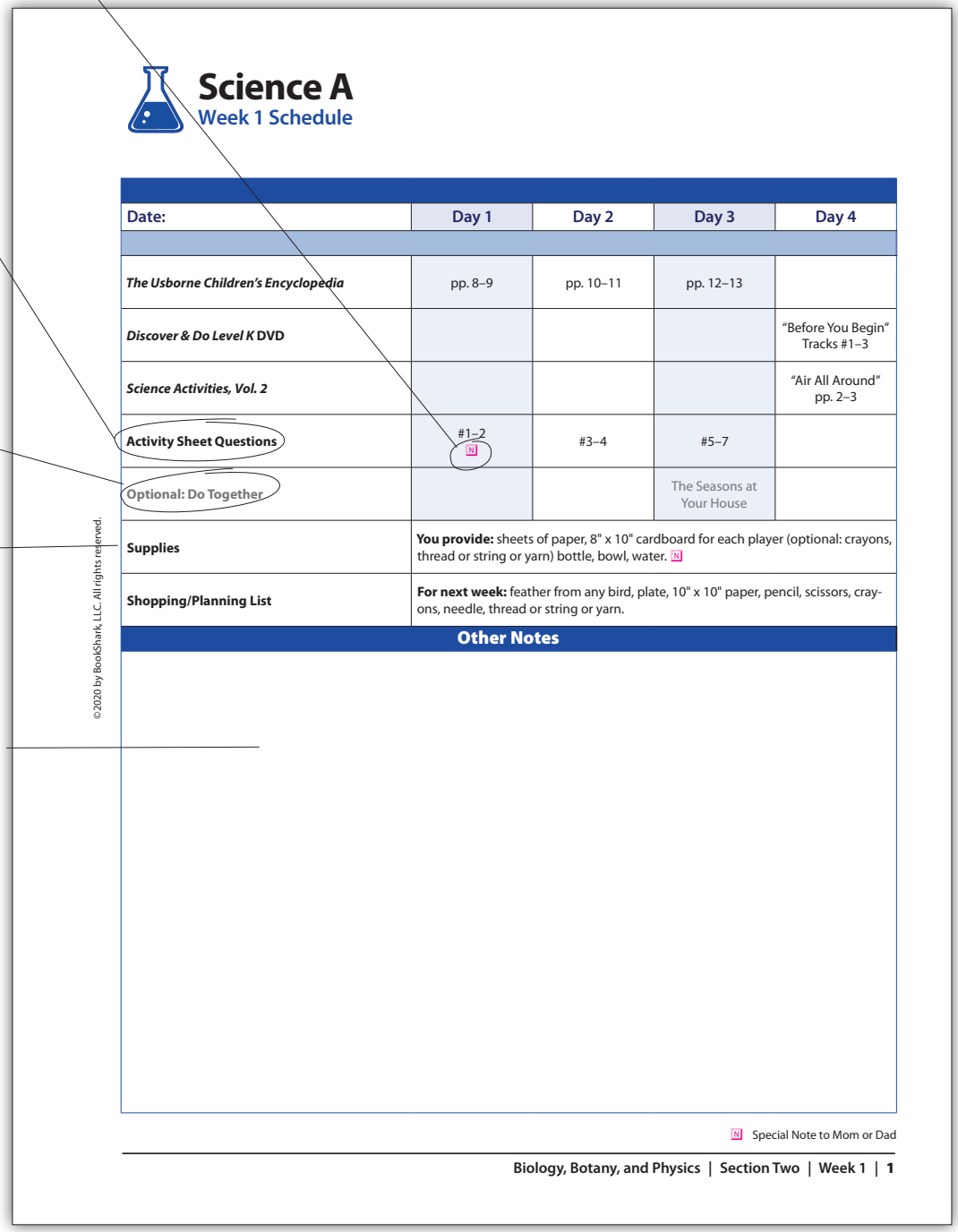
How to Use the Schedule

More notes with important information about specific books.

The N symbol provides you with a heads-up about difficult content. We tell you what to expect and often suggest how to talk about it with your kids.

4-Day Schedule:

This entire schedule is for a 4-Day program. Designed to save one day a week for music lessons, sports, field trips, co-ops and other activities.



Science A
Week 1 Schedule

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

Other Notes

N Special Note to Mom or Dad

Biology, Botany, and Physics | Section Two | Week 1 | 1

Find the **Activity Sheets** for students directly after the Notes. Students should complete only the questions assigned.

We schedule **optional assignments** to be used if desired.

Find all the supplies needed for this week as well as the supplies needed for next week here.

Additional space for writing extra assignments, activities, or notes.