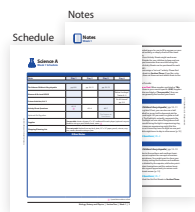


# Instructor's Guide Quick Start

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 children 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.



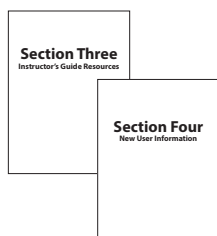
## 4-Day Schedule

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 (look for "Note to Mom or Dad").

**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]

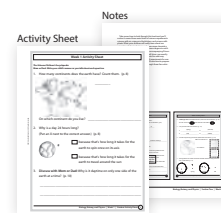


## Instructor's Guide Resources and New User Information

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.



# 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.


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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.



## Science A

### Week 1 Schedule

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

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**N** Special Note to Mom or Dad

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




# Science B

## Week 1 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
<b>The Usborne Children's Encyclopedia</b>	pp. 8-9	pp. 10-11	pp. 12-13		
<b>Activity Sheet Questions</b>	#1-2 	#3-4	#5-7		
<b>Optional: Do Together</b>			The Seasons at Your House		
<b>BookShark Science B Experiments Book</b>				#1 What Makes Day and Night? 	
<b>Supplies</b>	<b>We Provide (1SK):</b> Styrofoam ball, wooden skewer, rubber band, plastic thumbtack, flashlight, chalk (optional) <b>Paper Packet:</b> What Makes Day and Night? Experiment Sheet #1, Cardinal Direction Labels, Observation Notebook (Sun Movement pages) <b>You Provide:</b> sandwich-sized clear plastic bag, twist tie, yellow/orange/and red crayons or markers				
<b>Shopping/Planning List</b>	<b>For next week:</b> white paper, 2 drinking glasses, plate or shallow dish, table, measuring cup or small pitcher, water, colored pencils or crayons pencil, a room that can be darkened, camera (optional)				
Other Notes					

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 Special Note to Mom or Dad



# Notes

## Week 1

### Day 1

#### *The Usborne Children's Encyclopedia* | pp. 8–9

On the picture of the earth from space there is text that is difficult to read. It says, “Blue Seas and Oceans”. [pg. 8]

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 pages 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]

Please forgive the grammar error on the first line of the section about the atmosphere. It should read, “a large blanket”; not, “an large blanket”. [p. 9]

#### Activity Sheet Questions | #1–2

**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 children.
- If your children 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 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 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.

**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 #1SB1).

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 | You Provide

**Note:** When supplies are listed as “**We provide:**”, find them in your course-specific (**1SK**) Supplies Kit. When supplies are listed as “**You provide:**”, they are materials you can generally find around your home.

### Day 2

#### *The Usborne Children's Encyclopedia* | pp. 10–11

The path that the earth takes as it travels around the sun is called its orbit. [p. 10]

Do you own a globe? If not, you can also use a ball such as a basketball or soccer ball to demonstrate the concept of day and night. All you need is a globe or ball and a flashlight. The flashlight represents the sun. Shine the flashlight on one side of the globe or ball. The part of the world facing the light is experiencing day, while the other areas are experiencing night. But the world rotates, so as it turns day turns to night on one part of the globe, while night turns to day in other areas. [p. 10]

#### Activity Sheet Questions | #3–4

**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 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.

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.

## Day 3

**The Usborne Children’s Encyclopedia** | pp. 12–13

Under the section, “What Makes The Seasons Happen?”, the paragraphs explain the earth pointing toward the sun, away from the sun, and getting “more hot sunlight” when the earth is facing the sun. This description may be a bit misleading. The little descriptions on the diagram below this section talk about “direct sunlight”. This is a more accurate description. Direct sunlight means that the light from the sun is concentrated on a smaller area. Likewise, heat, which is one component of sunlight, is also focused on a smaller area. On the other hand, indirect sunlight is spread out over a larger area, and therefore the heat is also spread out. [p. 13]

The book refers to the northern and southern hemispheres, but does not explain the concepts of western and eastern hemispheres. You might want to show your children a world map, noting the northern and southern hemispheres, as divided by the equator, while also pointing out the western hemisphere and the eastern hemisphere. This is also a good opportunity to review continents and continent names. [p. 13]

If you live in a temperate zone where you do not receive four distinct seasons a year, take this opportunity to explain the seasons where you live as well, such as a rainy season or a dry season. Explain that when the northern or southern hemisphere is in “winter,” it does not mean it is snowing everywhere, but rather it means that indirect sunlight hitting the whole hemisphere, and “summer” is when the sunlight is more directly hitting your hemisphere.

**Activity Sheet Questions** | #5–7

**Optional: Do Together** | The Seasons at Your House

Using a large piece of poster board, draw a line down the middle in each direction so as to divide it into four equal parts. Label the upper left corner “Spring,” the upper right corner “Summer,” the lower left corner “Fall,” and the lower right corner “Winter.” Now ask your children to use crayons, markers, paint, colored pencils, etc. to draw a picture of what each of the seasons looks like where you live. As they draw, discuss the seasons and what’s different about each one. Ask them to think about how a stranger who just flew in from halfway around the world would be able to tell what season it is at any particular time. What clues would they find? Have fun with this activity, as your children learn more about how the seasons change in your particular area. When they’re done, proudly display their work of art on the refrigerator or a wall where everyone can see it.

## Day 4

**BookShark Science B Experiments Book** | #1  
What Makes Day and Night?

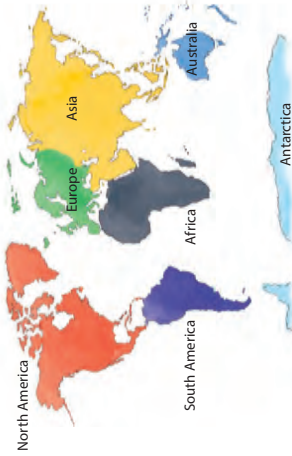
**Note:** You will keep the finished product of this experiment and keep it for subsequent experiments. ■

## Week 1 Activity Sheet

The Usborne 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.)*

Science B | Week 1 | Student Activity Sheet 1

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## Week 1 Activity Sheet

4. Challenge: Make the statement true. (Circle the correct answer.) (p. 10)

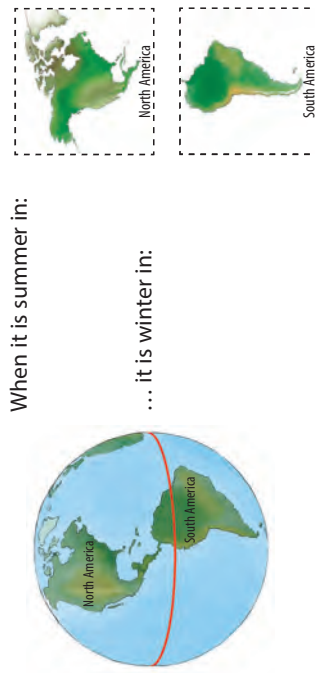
The sun rises in the **East** or **West** and sets in the **East** or **West**.

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

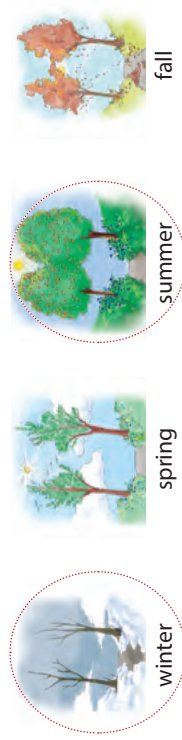
1) \_\_\_\_\_ 2) \_\_\_\_\_  
*(Spring)* *(Summer)*

3) \_\_\_\_\_ 4) \_\_\_\_\_  
*(Fall)* *(Winter)*

6. Use the map to help you answer. (Please find Cut-Out #1) (p. 13)



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



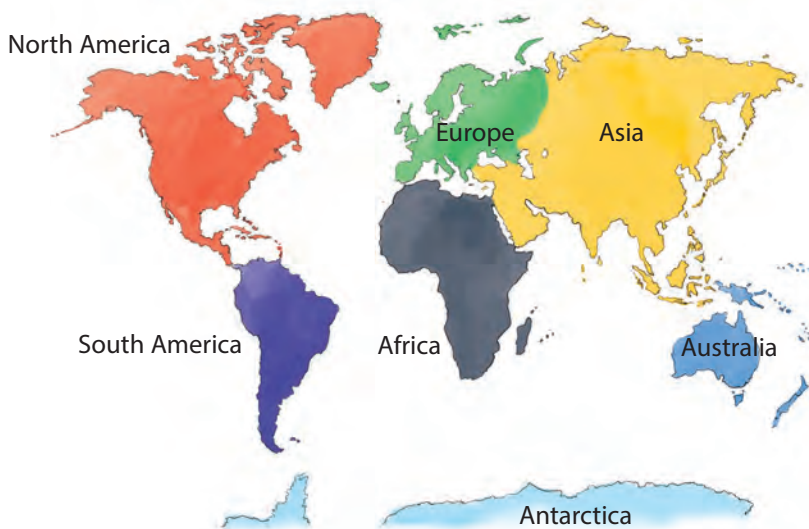
2 Student Activity Sheet | Week 1 | Science B

## Week 1 Activity Sheet

*The Usborne 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)



On which continent do you live? \_\_\_\_\_

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)

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## Week 1 Activity Sheet

4. **Challenge:** Make the statement true. (Circle the correct answer.) (p. 10)

The sun rises in the **East** or **West** and sets in the **East** or **West** .

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

1) \_\_\_\_\_ 2) \_\_\_\_\_

3) \_\_\_\_\_ 4) \_\_\_\_\_

6. Use the map to help you answer. (Please find Cut-Out #1) (p. 13)



When it is summer in:

... it is winter in:

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



winter



spring



summer



fall






# Science B

## Week 2 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
<b>The Usborne Children's Encyclopedia</b>	pp. 14–15	pp. 16–17	pp. 18–19		
<b>Activity Sheet Questions</b>	#1–3	#4–5	#6–7		
<b>Optional: Do Together</b>			Rock Star and Fossil Fun		
<b>BookShark Science B Experiments Book</b>				#2 What Causes Rainbows?	
<b>Supplies</b>	<p><b>We provide (1SK):</b> flashlight, small mirror</p> <p><b>Paper Packet:</b> What Causes Rainbows? Experiment Sheet #2</p> <p><b>You provide:</b> white paper, 2 drinking glasses, plate or shallow dish, table, measuring cup or small pitcher, water, colored pencils or crayons pencil, a room that can be darkened, camera (optional)</p>				
<b>Shopping/Planning List</b>	<p><b>For next week:</b> pencil, bowl or container, scissors, a partner, various items around the house (boxes, paper plates, colored paper, aluminum foil, hole punch), a second flashlight (optional) water bottle, snack, bandage, and a tool (optional)</p>				

### Other Notes

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 Special Note to Mom or Dad



# Notes

Week 2

## Day 1

**The Usborne Children's Encyclopedia** | pp. 14–15

Occasionally, you'll notice short experiment suggestions such as "Make a rainbow" on page 15. Please consider these activities as optional.

To explain how a rainbow forms, explain to your children that light is made up of a lot of colors. Specifically, the colors are red, orange, yellow, green, blue, indigo, and violet. When light passes through the water, it is broken up into the colors seen in a rainbow. [p. 15]

When the book describes wind at the top of page 15, it gives three examples with corresponding names for different strengths of wind. The third example uses the term "hurricane" as the strongest type of wind, when in actuality a hurricane is a type of storm with very strong winds. Additionally, the second example uses the term "gale". Gale is a nautical term that describes a strong, sustained wind over maritime areas, like the sea. Wind over land may not technically be a gale, but could still have the same wind strength. [p. 15]

### Activity Sheet Questions | #1–3

## Day 2

**The Usborne Children's Encyclopedia** | pp. 16–17

The photograph at the bottom of page 16 shows a hurricane. Earth is not the only planet to have storms. Jupiter, for example, has many huge storms, such as the Great Red Spot. If you look at images of Jupiter, the spot looks like part of the planet, but is actually an enormous storm that has been occurring for many years.

### Activity Sheet Questions | #4–5

## Day 3

**The Usborne Children's Encyclopedia** | pp. 18–19

The section that talks about the hot, sticky rock that moves refers to magma when it is inside the earth. Once the magma reaches the surface of the earth, it is called lava. Both magma and lava are essentially the same thing, but the name is determined by its location (i.e., inside the earth versus on the surface). When the authors use the word "sticky", they are describing that the rock is so hot that it has melted into a liquid form. [p. 18]

## Activity Sheet Questions | #6–7

**Optional: Do Together** | Rock Star

Have your children ever wanted to be a rock stars? Well, now they can be one! A star at collecting and analyzing rocks, that is. Grab a pad of paper, something to write with, perhaps some colored pencils, a magnifying glass, and a jackhammer. OK, forget the jackhammer, but grab the rest of the stuff and head outside to collect some rocks. Look around your house and your neighborhood. How many different types of rocks can you and your children find? After they collect several samples of different types of rocks, make notes about each one. What your children see? What do the rocks feel like? Do they have similar or different smells? What sounds do the rocks make when your children drop them? Have your children draw a picture of each of the rock samples. When they're done, have them show off their work to another family member and discuss the discoveries with them.

**Optional: Do Together** | Fossil Fun

Help your children create their own fossil. First, make some fossil dough. You'll need: ½-cup cornstarch, 1 cup baking soda, and ½-cup cold water. Put the ingredients in a saucepan and stir over medium heat for four minutes until the mixture thickens to look like moist mashed potatoes. Then place the mixture on a plate and cover with a damp cloth until cool. Knead it like dough, and then shape it into 1-inch balls. Provide each student with a square of wax paper. For the remainder of this activity, you will need: wax paper, materials to make an imprint (leaves, acorns, shells, etc.), and possibly some paints. Give your children a 1-inch ball of fossil dough. On the wax paper, press the dough ball into a disc the size of a half-dollar. Then use a leaf, acorn, shell, etc. to make an imprint in the dough. Set the future fossil aside to dry and repeat the steps to make additional fossils. When the fossils are dry, let your children paint them or decorate them.

## Day 4

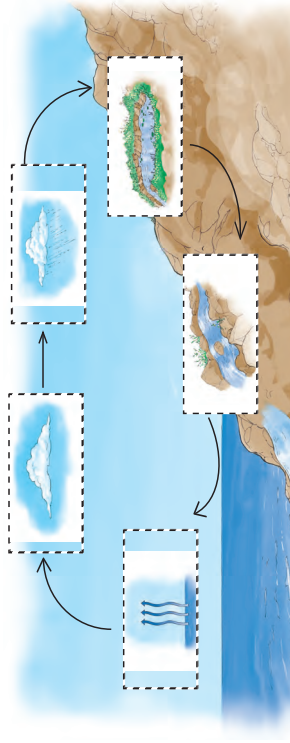
**BookShark Science B Experiments Book** | #2

What Causes Rainbows? ■

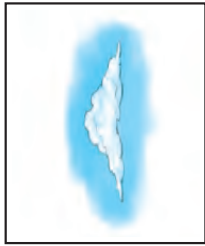
**Week 2 Activity Sheet**

*The Usborne Children's Encyclopedia*

- Describe the water cycle. (Please find Cut-Out #2.)  
Then add arrows to show which way the water moves. (p. 14)



- Draw a picture to record the weather each day this week. (pp. 14-15)



Day 1

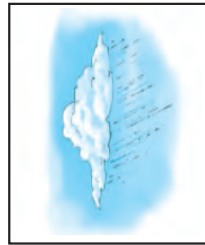
(Possible Answers)



Day 3



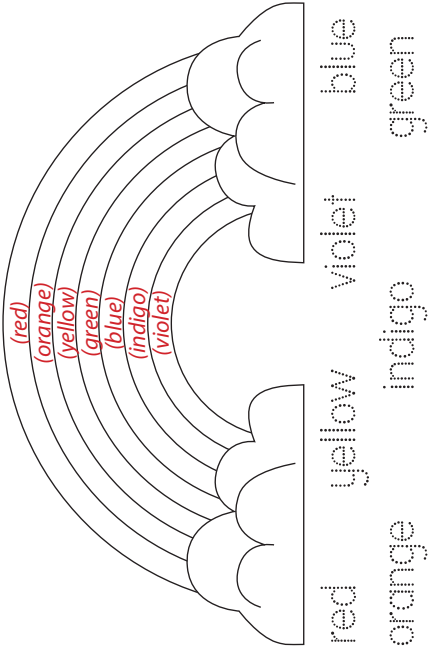
Day 2



Day 4

**Week 2 Activity Sheet**

- Label and color the correct colors on the rainbow. (p. 15)



- Draw lines to match each storm feature to the picture that shows what each is like. (p. 16)

	spark		wind and rain		sucks things up		tornado
	hurricane		lightning				

Week 2 Activity Sheet

5. Why do floods happen? Talk through these causes with your children. (p. 17)



*(too much rain falls in a short time)*

\_\_\_\_\_

*(undersea volcanoes or earthquakes send huge waves to shore)*



*(ice and snow melt when the ground is too frozen to absorb it)*



*(monsoon winds bring heavy rain from the ocean)*



6. How are the two types of rock formed? (p. 18)

Sedimentary: *(layers of sediment build up slowly and get*



*squeezed together to become rock)*

Igneous:

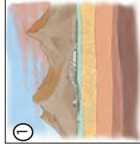


*(hot sticky rock pours out of a volcano, when it*

*hardens, it becomes igneous rock)*

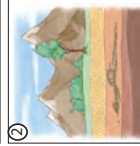
Week 2 Activity Sheet

7. How do fossils form? Use the pictures to help you describe the process to Mom or Dad. (p. 19)



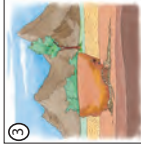
*(Possible: The soft parts of dead animals rot away, but the*

*bones may sink into the mud and get covered with sediment.*



*After time passes, the mud hardens into rock but keeps the*

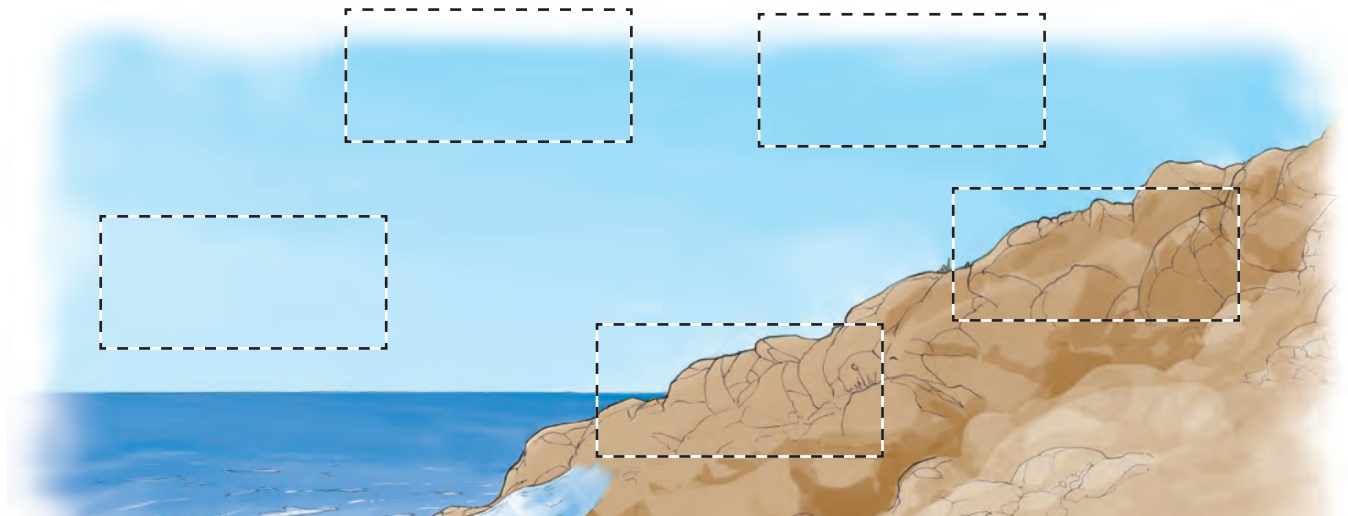
*shape of the animal bones.)*



## Week 2 Activity Sheet

*The Usborne Children's Encyclopedia*

1. Describe the water cycle. (Please find Cut-Out #2.)  
Then add arrows to show which way the water moves. (p. 14)



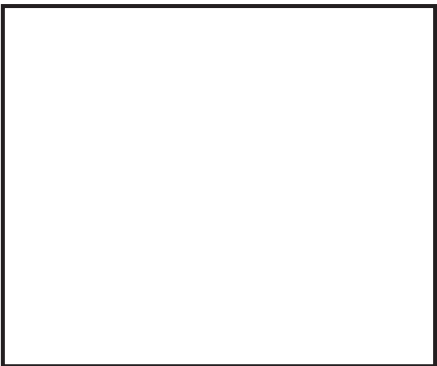
2. Draw a picture to record the weather each day this week. (pp. 14–15)



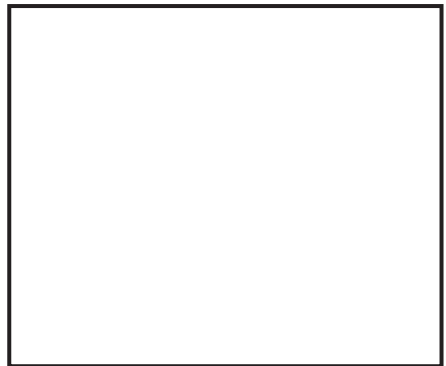
Day 1



Day 2



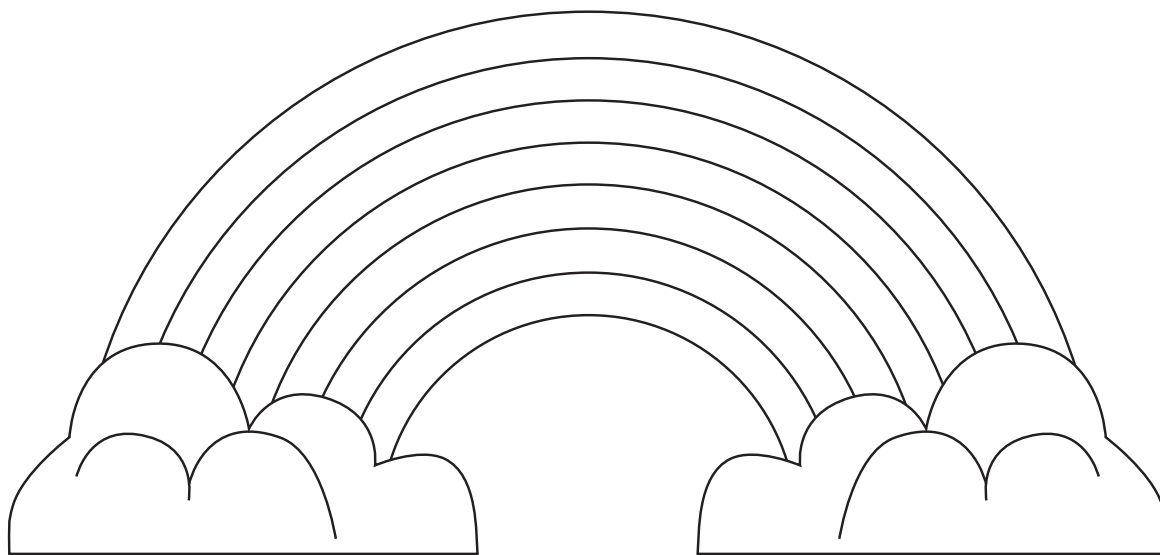
Day 3



Day 4

## Week 2 Activity Sheet

3. Label and color the correct colors on the rainbow. (p. 15)



red      yellow      violet      blue  
orange      indigo      green

4. Draw lines to match each storm feature to the picture that shows what each is like. (p. 16)



spark

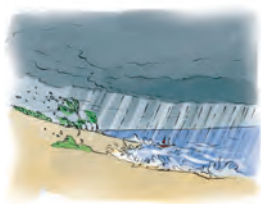


wind and rain



sucks things up

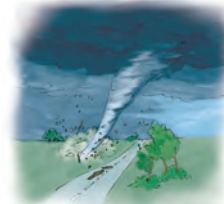
hurricane



lightning



tornado





## Week 2 Activity Sheet

5. Why do floods happen? Talk through these causes with your children.  
(p. 17)



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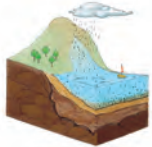
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6. How are the two types of rock formed? (p. 18)

Sedimentary: \_\_\_\_\_



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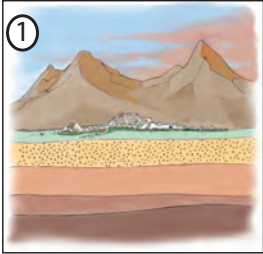
Igneous: \_\_\_\_\_



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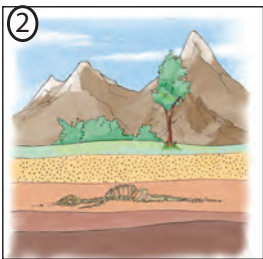
## Week 2 Activity Sheet

7. How do fossils form? Use the pictures to help you describe the process to Mom or Dad. (p. 19)



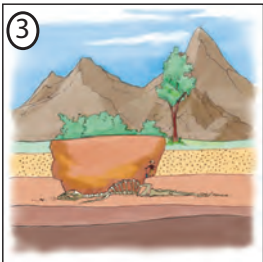
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# Science B

## Week 3 Schedule

Date:	Day 1	Day 2	Day 3	Day 4	Day 5
<b>The Usborne Children's Encyclopedia</b>	pp. 20–21 	pp. 22–23	pp. 24–25		
<b>Activity Sheet Questions</b>	#1–2	#3–5	#6–8		
<b>Optional: Do Together</b>	My Fault	Volcano Eruption			
<b>BookShark Science B Experiments Book</b>				#3 Can I Send a Message with a Light?	
<b>Supplies</b>	<p><b>We provide (1SK):</b> flashlight</p> <p><b>Paper Packet:</b> Can I Send a Message with Light? Design Planning Sheet #3, Code Design Chart, Situation Challenge Sheet</p> <p><b>You provide:</b> pencil, bowl or container, scissors, a partner, various items around the house (boxes, paper plates, colored paper, aluminum foil, hole punch), a second flashlight (optional) water bottle, snack, bandage, and a tool (optional)</p>				
<b>Shopping/Planning List</b>	<b>For next week:</b> table lamp, measuring tape, pencil, permanent marker, alarm (optional)				
Other Notes					

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 Special Note to Mom or Dad



## Day 1

**The Usborne Children's Encyclopedia** | pp. 20–21

**Note:** Earthquakes and tsunamis are very scary natural disasters which can be unnerving to certain students. You may want to preview the information in today's reading as well as any additional information through your own research so you can effectively answer any questions your students may have.

To expand your knowledge of earthquakes, you may want to research the different types of earthquakes. There are some where the shift in the earth produces waves like you might expect to feel in the ocean, and others that are more like a shaking movement.

### Activity Sheet Questions | #1–2

#### Optional: Do Together | My Fault

Do you live in an area prone to earthquakes? When was the last time an earthquake occurred in your area? As you talk about these questions, discuss earthquake preparedness with your children. Do they know what to do in case of an earthquake?

## Day 2

**The Usborne Children's Encyclopedia** | pp. 22–23

The largest volcano on earth is Mauna Loa, which makes up about half the island of Hawaii. The name of the volcano means "long mountain." The largest volcano in the solar system is Olympus Mons on Mars. It is about sixteen miles high. The book makes no mention of the famous volcano eruption of Pompeii, which erupted in 79 CE. You can learn more about this eruption in *Pompeii ... Buried Alive!* by Edith Kunhardt, included in BookShark™ Level 2 Readers program.

### Activity Sheet Questions | #3–5

#### Optional: Do Together | Volcano Eruption

If you're in the mood for a really messy experiment (and, really, who isn't?), then this volcano simulation is for you! Here's what you'll need: an aluminum pie tin (or paper plate), newspaper, baking soda (3–4 Tablespoons), vinegar (½-cup), liquid dishwashing detergent, a small plastic bottle (a soda bottle will work fine), modeling clay (or any type of clay—use our recipe provided below or check the Internet for homemade clay recipes), a funnel, measuring spoons and cups, and food coloring. Put the bottle on the pie plate (or paper plate). Using the clay, make a volcano around the bottle. Leave the area around the top of the bottle open and don't get any clay inside the bottle. Feel free to decorate the volcano any way you'd like. Using the funnel (make sure it's dry), put 3–4 Tablespoons of baking soda into the bottle. Then add a few drops of liquid dishwashing detergent and about a half-cup of water. Put a few drops of food coloring into a half-cup of vinegar. Using the funnel, pour the vinegar mixture into the bottle. Quickly remove the funnel, as the volcano will erupt immediately! When the vinegar reacts with the baking soda, carbon dioxide gas is formed and the bubbles push the "lava" out of the "volcano." Be prepared for a mess! This is one of those experiments best done outside. Have fun!

**Recipe for clay:** mix 1 cup salt, 2 cups flour; slowly add 1 cup of water. Knead seven to ten minutes.

## Day 3

**The Usborne Children's Encyclopedia** | pp. 24–25

As you discuss the path from the river to the ocean, number 6 in the book may sound a bit confusing. At the end of a river, it is true that rivers typically get wider, but it is also true that the outer edge of the bend of a river at the end of its course is typically deeper. [p. 25]

### Activity Sheet Questions | #6–8

## Day 4

**BookShark Science B Experiments Book** | #3

Can I Send a Message with Light? ■

Week 3 Activity Sheet

The Usborne Children's Encyclopedia

- What causes an earthquake? (p. 20)
  - Huge animals make the ground shake.
  - When trees fall, it causes the earth to shake violently.
  - Huge rocks deep under the earth slip and push against each other, which causes the ground above to shake.
- Why are tsunamis (or giant waves) dangerous? (p. 21)
  - Because they are like a bad earthquake.
  - Because if the enormous wave reaches the shore, it will cause a lot of damage.

- A tall and steep volcano forms because ... (p. 22)
 

*(the lava is thick and sticky and does not flow far before it hardens.)*



- A flatter volcano forms when ... (p. 22)
 

*(the lava is thin and runny and spreads out quickly before it hardens.)*



Week 3 Activity Sheet

- Label the activity of each volcano below. (Please find Cut-Out #3.) (p. 23)



active

alive



dormant

asleep



extinct

dead

- The place where a river begins and gathers lots of its water is called its source. (p. 24)



- Circle the correct answers to complete the sentence. When a river goes over a waterfall, the water travels very fast slow, and when the river begins to loop through meanders, it travels fast slow. (pp. 24-25)



- How does a waterfall form? (p. 25) A river wears the soft rock away faster than hard rock, creating a step to fall over.

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## Week 3 Activity Sheet

*The Usborne Children's Encyclopedia*

1. What causes an earthquake? (p. 20)

- Huge animals make the ground shake.
- When trees fall, it causes the earth to shake violently.
- Huge rocks deep under the earth slip and push against each other, which causes the ground above to shake.



2. Why are tsunamis (or giant waves) dangerous? (p. 21)

- Because they are like a bad earthquake.
- Because if the enormous wave reaches the shore, it will cause a lot of damage.



3. A tall and steep volcano forms because ... (p. 22)



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4. A flatter volcano forms when ... (p. 22)



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## Week 3 Activity Sheet

5. Label the activity of each volcano below. (Please find Cut-Out #3.)  
(p. 23)



\_\_\_\_\_

\_\_\_\_\_



\_\_\_\_\_

\_\_\_\_\_



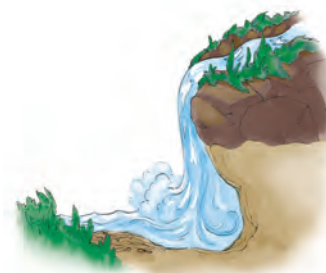
\_\_\_\_\_

\_\_\_\_\_

6. The place where a river begins and gathers lots of its water is called its \_\_\_\_\_ (p. 24)



7. Circle the correct answers to complete the sentence. When a river goes over a waterfall, the water travels very **fast** **slow** , and when the river begins to loop through meanders, it travels **fast** **slow** . (pp. 24-25)



8. How does a waterfall form? (p. 25) \_\_\_\_\_

\_\_\_\_\_